

Citi From the Outside In

Simulation Instructions

Developed for Citi Learning by:



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OVERVIEW

The *Citi From the Outside In* simulation has been developed to improve your understanding of the external factors that influence Citi's business and financial performance.

In this simulation, you and your team will assume the role of senior management for a fictional bank modeled after Citi. You and your team will compete against other teams in the simulation to maximize your bank's market value by:



- Allocating your capital across different business units
- Establishing your bank's credit criteria
- Setting your bank's dividend payout ratio

...as economic and market conditions change.

Upon completing this simulation and the other elements of the *Citi From the Outside In* program, you will be able to:

- Identify the interconnectedness of economic and market drivers
- Discuss the impact of economic and market drivers on Citi's performance
- Explain the viewpoints of Citi's external stakeholders, including analysts
- Prepare financial analyses for internal business partners that incorporate economic/market opportunities and external viewpoints

Getting Started

There are four rounds of activity in the simulation:

- Each team starts in the same position
- Your team will make Round One <u>decisions</u>, and these decisions will be combined with the decisions from the other teams you are competing against (and Year 1 <u>economic and market</u> <u>data</u>) to generate Year 1 results
- Your team will then review your Year 1 results and make Round Two decisions, which will generate Year 2 results

- Your team will then review your Year 2 results and make Round Three decisions, which will generate Year 3 results
- Lastly, your team will review your Year 3 results and make Round Four decisions, which will generate the final year (Year 4) of results

The starting position of the bank you are inheriting is known as *SimStart*, and the reports showing your SimStart position are shown in the <u>SimStart Reports</u> section of these Instructions. The decisions the previous management team made generated these SimStart results, and these SimStart decisions are shown in the <u>Decision Entry</u> section of these Instructions.

Going forward, you may adjust or continue with these decisions to reflect your bank's particular strategy and response to changing market and economic conditions. A detailed explanation of <u>decisions</u> is provided later in these instructions.

To support your decision-making, you will be provided with:

- These detailed Instructions to help you understand the impacts of your decisions
- Updated Management Reports reflecting your team's results at the end of each round of activity
- Updated Economic Forecasts detailing historical and projected economic and market data

Calculating Simulation Results

To begin the simulation, the Simulation Instructor enters the <u>economic and market data</u> for your specific simulation experience into the simulation model.



The calculation of each round's results begins when the <u>decisions</u> from all teams are entered into the simulation model.

The simulation then calculates the baseline performance of each <u>business unit</u> based on the economic and market conditions for that round. For example if <u>unemployment rates</u> in the US exceed a specific level, net credit losses, delinquent loans and the credit reserve builds for US Retail Banking and US Cards will be higher than expected.

The <u>impacts of economic and market conditions</u> on specific business units are detailed later in these Instructions.

The simulation then adjusts the baseline performance of each business unit based on <u>competitive conditions</u>. In other words, if several teams aggressively target a specific business (such as International Global Markets), the profitability and growth of that business unit will slow (or decline) due to increasing competition.

The simulation then determines the performance of the business units of individual teams by evaluating the amount of capital teams have allocated to each business unit.

The simulation then adjusts the results of your business units based on your team's <u>credit quality criteria</u>.

Lastly, the simulation assesses your <u>dividend payout ratio</u> to determine what percentage of your net income is distributed to your shareholders in the form of dividends.

The final performance of your business units are then used to generate your team's financial performance and reports.

Reporting Results

The results for each round of the simulation are provided on updated <u>Management Reports</u> that you receive after each round is completed. Your team will receive the following reports:

- Scoring and Key Metrics
- Market Share reports:
 - Global Consumer Banking
 - Institutional Clients Group
- Consolidated financial reports:
 - Summary of Selected Financial Data
 - Consolidated Statement of Income
 - Consolidated Balance Sheet
 - Segment Detail
- Global Consumer Banking reports:
 - US Page 1
 - US Page 2
 - International Page 1
 - International Page 2
- Institutional Clients Group reports
 - US
 - US Revenue Details
 - International
 - International Revenue Details
- Allowance for Credit Losses

Team Scoring



Your goal in this simulation is to maximize your bank's market value (or *market capitalization*). The team with the highest market value at the end of Year 4 is the winner.

A bank's market value is equal to its stock price (or *share price*) multiplied by the number of shares outstanding. At SimStart, your bank's market capitalization is \$150 billion (\$50 stock price multiplied by 3 billion shares outstanding).

Since the number of shares issued by each team in the simulation is the same (and will not change during the simulation), each team's market capitalization is driven by its stock price. The team with the highest stock price is the team with the highest market capitalization.

Your stock price at the end of each round is determined by taking your stock price from the previous round and adjusting that stock price based on your team's performance across five financial ratios:

- Return on equity (ROE)
- Efficiency ratio
- Revenue growth
- Earnings per share (EPS)
- Book value per common share

These ratios are displayed on the Scoring and Key Metrics reports at the end of each round and are calculated as follows:

- Return on equity (ROE)
 - Net Income divided by Average Total Stockholders' Equity
 - Average Total Stockholders' Equity is calculated by taking the average of your Total Stockholders' Equity at the beginning of the round and your Total Stockholders' Equity at the end of the round
 - The industry benchmark for ROE is 15%
- Efficiency Ratio
 - Total Operating Expenses divided by Total Revenues
 - Total Revenues is the sum of Net Interest Revenue and Total Non-Interest Revenues
 - Most large banks today are targeting efficiency ratios under 55%
- Revenue Growth
 - Current year's Total Revenues divided by previous year's Total Revenues
- Earnings per Share
 - Net Income divided by Weighted Average Common Shares Outstanding
 - The number of Weighted Average Common Shares Outstanding will remain 3 billion throughout the simulation

- Book Value per Common Share
 - Total Stockholders' Equity divided by Weighted Average Common Shares Outstanding

Your bank's performance across each of these ratios is compared to the market average of all banks:

- If your bank's performance in a ratio is better than the market average, it will drive your stock price up
- If your bank's performance in a ratio is worse than the market average, it will drive your stock price down

The impact of your performance on your stock price is 25% of your deviation from the market average.

For example:

- If your ROE is 7.2% and the market average for ROE is 6.0%:
 - Your ROE is 20% above the market average
 - This will cause your stock price to increase 5% (25% of the 20% above market average)
- If your Efficiency Ratio is 58% and the market average is 50%:
 - Your Efficiency Ratio is 16% above the market average
 - This will cause your stock price to decrease 4% (since a lower Efficiency Ratio is better than a high ratio and 4% is 25% of the 16% above market average)

Lastly, the amount of dividends you pay to shareholders can also impact your stock price:

- If the amount of dividends you pay per share is higher than the market average, it will drive your stock price up
- If the amount of dividends you pay per share is lower than the market average, it will drive your stock price down

The impact of your dividends on your stock price is 25% of your deviation from the market average. For example:

- Assume the market average for dividends paid is \$0.20 per share
- If your EPS is \$4.00 and your <u>dividend payout ratio</u> is 8%:
 - You will pay \$0.32 in dividends per share
 - This is 60% above the market average
 - This will increase your stock price by 15% (25% of the 60% above market average)

However, paying higher dividends to shareholders lowers the amount of capital you have available to invest in your business units in the next round.

SimStart Analysis Exercise

To begin the simulation, it is helpful to gain a better understanding of the bank you are inheriting as the simulation begins. We refer to this starting point as *SimStart* or *Year 0*. Please:

- Read the Background Information below on the bank you are inheriting
- Review the <u>SimStart reports</u> (starting on page 32)
- Answer the questions that follow

Be prepared to share your answers in your scheduled *Citi From the Outside In* workshop.

Background Information

You are now a member of senior management at a leading, global bank (modeled after Citi). Your bank has eight business units organized by lines of business and geography:

- Global Consumer Banking
 - Retail Banking (US)
 - Retail Banking (International)
 - Cards (US)
 - Cards (International)
- Institutional Clients Group
 - Global Banking (US)
 - Global Banking (International)
 - Global Markets (US)
 - Global Markets (International)

SimStart Analysis Questions

| 1. | How much did total assets grow in Year 0? (Hint: review the Consolidated Balance Sheet) |
|----|--|
| 2. | What percentage of Year 0 assets comes from net loans? (Hint: review the Consolidated Balance Sheet) |
| | How much did net loans grow in Year 0? |
| 3. | Which of your bank's four lines of business (Retail Banking, Cards, Global Banking and/or Global Markets) do you think provide loans to customers? |
| | |

| 4. | What percentage of Year 0 assets comes from trading account assets? (Hint: review the Consolidated Balance Sheet) | | | | | | |
|-----|--|--|--|--|--|--|--|
| | How much did trading account assets grow in Year 0? | | | | | | |
| 5. | Which of your bank's four lines of business (Retail Banking, Cards, Global Banking and/or Global Markets) do you think generate trading account assets for the bank? | | | | | | |
| 6. | How much did total liabilities grow in Year 0? (Hint: review the Consolidated Balance Sheet) | | | | | | |
| 7. | What percentage of Year 0 liabilities comes from deposits? (Hint: review the Consolidated Balance Sheet) | | | | | | |
| | How much did deposits grow in Year 0? | | | | | | |
| | What percentage of deposits comes from offices outside the US? | | | | | | |
| 8. | Which of your bank's four lines of business (Retail Banking, Cards, Global Banking and/or Global Markets) do you think gather deposits for the bank? | | | | | | |
| 9. | How much did total stockholders' equity increase in Year 0? (Hint: review the Consolidated Balance Sheet) | | | | | | |
| | Where did this growth come from? | | | | | | |
| 10 | How much did net income grow in Year 0? (Hint: review the Consolidated Statement of Income) | | | | | | |
| 11. | How much did revenue grow in Year 0? (Hint: review the Consolidated Statement of Income) | | | | | | |
| | | | | | | | |

| | How much did net interest revenue grow in Year 0? |
|-------------|--|
| l 3. | Which of your bank's four lines of business (Retail Banking, Cards, Global Banking and/or Global Markets) do you think generate net interest revenue for the bank? |
| 4. | What percentage of the bank's Year 0 revenue came from non-interest revenues? (Hint: review the Consolidated Statement of Income) |
| | How much did non-interest revenues grow in Year 0? |
| 5. | What percentage of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail report) |
| | Global Consumer Banking? |
| | Institutional Clients Group? |
| | Which grew faster in Year 0: GCB revenue or ICG revenue? |
| 6. | What percentage of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 0 revenue was generated by: (Hint: review the Segment Detail reportused of the bank's Year 1 review the Segment Detail reportused of the bank's Year 1 review the Segment Detail reportused of the Segment Detail reportused of the bank's Year 1 review the Segment Detail reportused of the Segment |
| | International operations? |
| | Which grew faster in Year 0: US revenue or International revenue? |
| l 7. | What percentage of the bank's Year 0 revenue was used to cover the provision for credit losses? (Hint: review the Consolidated Statement of Income) |
| | How much did the provision for credit losses grow in Year 0? |
| | How much did net credit losses (NCLs) grow in Year 0? (Hint: review the Allowance for Credit Losses report) |

| 18. | What was the bank's ROE for Year 0? (Hint: review the Summary of Selected Financial Data) | | | | | | |
|-----|---|--|--|--|--|--|--|
| | How does this compare to the year before? | | | | | | |
| 19. | What was the bank's ROA for Year 0? (Hint: review the Summary of Selected Financial Data) | | | | | | |
| | How does this compare to the year before? | | | | | | |
| 20. | What was the bank's efficiency ratio for Year 0? (Hint: review the Summary of Selected Financial Data) | | | | | | |
| | How does this compare to the year before? | | | | | | |
| | How much did operating expenses grow in Year 0? | | | | | | |
| 21. | How would you describe the bank's capital position? (Hint: review the Summary of Selected Financial Data) | | | | | | |
| | | | | | | | |
| | | | | | | | |

To prepare for the *Citi From the Outside In* workshop (and simulation), you were asked to complete the *BEST (Banking and Economics Support Tool)* on-line program. This program addresses six primary economic and market drivers that play important roles in this simulation:

- Economic growth (measured by GDP)
- Inflation
- Unemployment
- Interest rates and yield curves
- Equity market rates
- Real estate prices

Based on the information you learned in BEST, which of these six drivers do you think have the largest impact on your bank's:

| Loan growth? |
|---|
| m li di |
| Trading account asset growth? |
| Deposit growth? |
| Not and dielocate and and die account hail 12 |
| Net credit losses and credit reserve build? |
| Non-interest revenue growth? |
| Operating expenses? |

You are encouraged to use BEST to support your decision-making during the simulation.

As you work through the simulation, please don't hesitate to ask the Simulation Instructor questions. It's the role of the Instructor to help you understand how the simulation works and how the simulation relates to the "real world".

Good luck!

SIMULATION DECISIONS

In each round of the *Citi From the Outside In* simulation, your team makes decisions across three areas:

- Allocating your capital across different business units
- Establishing your bank's credit criteria
- Setting your bank's dividend payout ratio

Let's take a closer look at each of these...

Allocating Capital Across Business Units

In each round of the simulation, you will allocate capital across your eight business units:

- Global Consumer
 Banking
 - Retail Banking (US)
 - Retail Banking (International)
 - Cards (US)
 - <u>Cards</u>(International)
- Institutional Clients Group
 - Global Banking (US)
 - Global Banking (International)
 - Global Markets (US)
 - Global Markets (International)

Citi From the Outside In Home About Help Teams Rounds Reports - Log Out Capital Allocation Decision Entry cate your bank's capital across the business units below. The relative pro-inge. Your goal in this simulation is to maximize your bank's overall profits button to save your work before continuing Global Consumer Banking US International Total 22.9% Retail Banking 7.9% 15.0% 20.5% 6.6% 27.1% Cards 50% 25.5% 24.5% 9.5% 47.9%

You set your capital allocations by entering a percentage of capital for each of these eight business units. Your total capital allocations must equal 100%.

You cannot increase or decrease percentage of capital for a specific business unit by more than 3% in a single round. For example, at SimStart your bank allocated 15.5% of its capital to the Global Banking (International) business unit. In Round One, you must invest 12.5% to 18.5% (15.5% +/- 3%) of your bank's capital in the Global Banking (International) business unit. If you decide to invest 16% of your capital in this business unit for Round One, then in Round Two you must invest 13% to 19% (16% +/- 3%) of your capital in Global Banking (International).

The amount of capital actually invested in each business unit is a function of your decisions and the amount of capital your bank has available. In this simulation, your capital is equal to your bank's total stockholders' equity at the end of the previous year.

For example:

- In Year 1 of the simulation, all teams have \$220.03 billion in capital to invest in their business units
- If you allocate 15% of your capital to Global Markets (International), you are allocating \$33 billion in capital to this business (15% of \$220.03 billion)

The amount of capital you have available in Years 2 through 4 is primarily a result of your financial performance in previous years. For example:

- At the end of Year 0, you have \$220.03 billion in total stockholders' equity (or capital)
- Assume that in Year 1:
 - Your bank generates \$10 billion in net income
 - Your bank pays \$500 million in dividends to shareholders (driven by your team's decision to set your <u>dividend payout ratio</u> at 5%)
- Your stockholders' equity will increase by \$9.5 billion in Year 1 (\$10 billion \$500 million)
 - This increase is represented in your retained earnings

Other categories contributing to your equity (preferred stock, common stock and additional paid-in capital) will not change during the course of the simulation. However, your *accumulated other comprehensive income (loss)* or *AOCI* can change. This line item represents the difference between the current market value and original purchase price of investments held in your bank's investment portfolio. As the interest rate environment changes over the course of the simulation, so will the market value of these securities (and your AOCI):

- As interest rates rise, the market value of your investment portfolio (which are primarily fixed income securities) will drop
 - This will lower your AOCI, which will lower your total stockholders' equity
- Conversely, as interest rates drop the market value of your investment portfolio (which are primarily fixed income securities) will increase
 - This will increase your AOCI, which will increase your total stockholders' equity

The amount of capital you invest in each business unit has a direct impact on the performance of that business unit. For example:

- Assume the simulation model calculates that US Corporate Lending should generate \$1 billion in interest revenue (based on economic and market conditions)
- The simulation model expects teams to invest \$22 billion of capital in their US Global Banking businesses
- If your team only allocates \$20 billion in capital to US Global Banking (or 90.9% of the expected capital), your US Corporate Lending business will only generate \$909 million in interest revenue (or 90.9% of the expected \$1 billion in interest revenue)

The amount of capital the simulation model "expects" teams to invest in each business unit each year is as follows:

| Expected Capital Allocations | | | | | |
|------------------------------|----------------|----------------|--|--|--|
| Business Unit | US | International | | | |
| Retail Banking | \$17.4 billion | \$33 billion | | | |
| Cards | \$45.2 billion | \$14.5 billion | | | |
| Global Banking | \$22 billion | \$34 billion | | | |
| Global Markets | \$21 billion | \$33 billion | | | |

Impact of Competition

The performance of each <u>business unit</u> is also impacted by competitive conditions. In other words, if several teams aggressively target a specific business (such as US Global Banking), the profitability and growth of that business unit will slow (or decline) due to increasing competition.

For example:

- The simulation model expects teams to invest \$22 billion of capital in their US Global Banking business each year
- The "competitive threshold" for US Global Banking is 50%
 - This means that teams (on average) can spend up to 50% more of their capital in this business (or \$33 billion) without competition directly impact their financial performance in this business unit
 - If teams invest \$35 billion of capital in their US Global Banking businesses (on average), all teams will see their financial performance diminished in this business (because of increased competition)

The "competitive threshold" of each business unit is as follows:

| Competitive Thresholds | | | | | |
|--------------------------------|-----|------|--|--|--|
| Business Unit US International | | | | | |
| Retail Banking | 50% | 75% | | | |
| Cards | 50% | 100% | | | |
| Global Banking | 50% | 50% | | | |
| Global Markets | 50% | 50% | | | |

Economic and Market Drivers

In this simulation, the performance of your individual business units is driven largely by changes in economic and market conditions. More specifically, there are six primary economic and market drivers that play a role in this simulation:

- Economic growth (measured by GDP)
- Inflation
- <u>Unemployment</u>
- Interest rates and yield curves
- Equity market prices
- Real estate prices

Some of these drivers impact every business unit, while others only impact specific business units.

Each round you will receive a copy of the *Economic Forecasts report*. This report details historical economic data and economic forecasts for coming years for both the US and the International markets.

The forecasts you receive each round are just that...forecasts. The two dotted lines associated with each economic driver represent the range of forecasts provided by various economists. Sometimes these ranges will be narrow and other times these ranges will be quite broad. While the actual changes in economic data you can expect in future simulation years is usually somewhere within these ranges, there may be times when they are not.

Let's take a closer look at each economic and market driver...

Economic Growth (GDP)

Economic growth in the simulation is measured by changes in the *gross domestic product (GDP)*.

Economic growth plays an important role in influencing the performance of your business units. When changes in GDP exceed a specific level:

- Loans (and related net interest revenue) grow more quickly in:
 - Retail Banking
 - Cards
 - Global Banking
- Trading account assets (and related net interest and non-interest revenue) grow more quickly in:
 - Global Markets
- Deposits (and related net interest revenue) grow more quickly in:
 - Retail Banking
 - Global Banking
 - Global Markets

- Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Retail Banking
 - Cards
 - Global Banking
- Transaction volumes (and non-interest revenue) related to treasury management services, trade finance solutions, trading activity, investment banking services, private banking services, securities services and investment sales all grow, leading to more business in:
 - Retail Banking
 - Global Banking
 - Global Markets

Of course, the opposite is also true. When changes in GDP fail to reach a specific level:

- Loans (and related net interest revenue) grow slowly (or decline)
- Trading account assets (and related net interest and non-interest revenue) grow slowly (or decline)
- Deposits (and related net interest revenue) grow slowly (or decline)
- Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
- Transaction volumes (and non-interest revenue) related to treasury management services, trade finance solutions, trading activity, investment banking services, private banking services, securities services and investment sales grow slowly (or decline)

The specific levels of GDP growth used by the simulation to calculate the impact of economic growth on the performance of individual business units are:

- 3% for the US
- 5% for International

Inflation

Inflation in the simulation is measured by the *inflation rate*.

Inflation has two primary impacts on your business. When the inflation rate in a market exceeds a specific level:

- Operating expenses increase more quickly as your bank has to pay more for:
 - Compensation and benefits
 - Premises and equipment
 - Technology and communications costs
 - Advertising and marketing costs

- These higher operating expenses lowers the profitability of all your business units:
 - Retail Banking
 - Cards
 - Global Banking
 - Global Markets
- Deposits (and related net interest revenue) grow more quickly in:
 - Retail Banking
 - Global Banking
 - Global Markets

Of course, the opposite is also true. When inflation rates stay below a specific level:

- Operating expenses increase slowly (or decline)
- Deposits (and related net interest revenue) grow slowly (or decline)

The specific levels of inflation used by the simulation to calculate the impact of inflation on the performance of individual business units are:

- 2% for the US
- 3% for International

Unemployment

Unemployment in the simulation is measured by the *unemployment rate*.

In the simulation, unemployment primarily impacts your Global Consumer Banking businesses. More specifically, when the unemployment rate in a market exceeds a specific level:

- Loans (and related net interest revenue) grow slowly (or decline) in:
 - Retail Banking
 - Cards
- Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Retail Banking
 - Cards

However, higher levels of unemployment also makes it easier for your bank to attract and retain employees. More specifically, when the unemployment rate in a market exceeds a specific level:

- Operating expenses (specifically compensation and benefits) increase slowly (or decline), improving the profitability of all your business units:
 - Retail Banking
 - Cards
 - Global Banking
 - Global Markets

Of course, the opposite is also true. When unemployment rates stay below a specific level:

- Consumer and real estate loans (and related net interest revenue) grow more quickly
- Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in consumer and real estate lending
- Operating expenses grow more quickly

The specific levels of unemployment used by the simulation to calculate the impact of unemployment on the performance of individual business units are:

- 5% for the US
- 4% for International

Interest Rates (and Yield Curves)

Changes in the interest rate environment have a significant impact on your bank's performance in the simulation.

In the Economic Forecasts report, you will see the yield curve for the previous year and yield curve forecasts for the next two years for both the US and International markets. In the simulation, the yield curve consists of benchmark interest rates for:

- 1-month rates
- 6-month rates
- 1-year rates
- 5-vear rates
- 10-year rates
- 30-year rates

As with the other economic drivers, these forecasts are just forecasts. While the actual yield curve you can expect in future simulation years is usually somewhere within these ranges, there may be times when they are not.

The impact of changes in specific benchmark rates varies by business unit. More specifically, as interest rates rise:

- Loans grow slowly (or decline) as the cost of borrowing increases for customers
 - Retail Banking and Private Bank customers are primarily sensitive to changes in 5-year and 30-year rates
 - <u>Cards</u> customers are primarily sensitive to changes in 1-year rates
 - Treasury and Trade Solutions customers (part of <u>Global Banking</u>) are primarily sensitive to changes in 1-month rates
 - Corporate Lending customers (part of <u>Global Banking</u>) are primarily sensitive to changes in 1-month and 5-year rates

- Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Retail Banking
 - Cards
 - Global Banking
- The net interest revenue on deposits grows as your bank is able to increase the spread associated with deposits, directly impacting your deposit-gathering businesses in:
 - Retail Banking
 - Treasury and Trade Solutions (part of Global Banking)
 - Private Bank (part of <u>Global Banking</u>)
 - Securities Services (part of <u>Global Markets</u>)
- Equity trading volumes decline as investors move out of equities in anticipation of an economic slowdown, directly impacting the revenue associated with:
 - Equity Markets (part of <u>Global Markets</u>)

Of course, the opposite is also true. As interest rates fall:

- Loans grow more quickly as the cost of borrowing decreases for customers
- Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
- The net interest revenue on deposits falls as your bank is forced to lower the spread associated with deposits
- Equity trading volumes grow as investors move into equities in anticipation of economic growth

Equity Prices

Equity prices in the simulation are measured by changes in an equity market index.

Changes in equity prices have different impacts on different business units. More specifically, when changes in equity prices exceeds a specific level:

- Equity trading volumes grow, leading to:
 - Higher growth in equity-related trading account assets (and related non-interest revenue) in your bank's Equity Markets group (part of <u>Global Markets</u>)
 - Lower growth (or declines) in fixed income-related trading account assets (and related noninterest revenue) in your bank's Fixed Income Markets group as investors shift to equity trading
- Equity underwriting grows as corporations issue more stock to take advantage of higher prices associated with their shares, leading to:
 - Higher underwriting volumes (and related non-interest revenue) in your advisory and equity underwriting businesses in Investment Banking (part of <u>Global Banking</u>)
 - Lower underwriting volumes (and related non-interest revenue) in your debt underwriting business in Investment Banking as corporations issue more stock (and fewer bonds)

- Investment sales, client assets under management and equity transaction volumes all increase, leading to higher non-interest revenue in:
 - Retail Banking
 - Private Bank (part of <u>Global Banking</u>)
 - Securities Services (part of <u>Global Markets</u>)
- Corporate loans (and related net interest revenue) grow slowly (or decline) as corporations shift from bank loans to equities as a source of funding, directly impacting:
 - Corporate Lending (part of <u>Global Banking</u>)

Of course, the opposite is also true. When changes in equity prices fall below a specific level (or decline):

- Equity trading volumes fall, leading to:
 - Lower growth (or declines) in equity-related trading account assets (and related noninterest revenue) in your bank's Equity Markets group
 - Higher growth in fixed income-related trading account assets (and related non-interest revenue) in your bank's Fixed Income Markets group
- Equity underwriting declines, leading to:
 - Lower underwriting volumes (and related non-interest revenue) in your advisory and equity underwriting businesses
 - Higher underwriting volumes (and related non-interest revenue) in your debt underwriting business
- Investment sales, client assets under management and equity transaction volumes all grow more slowly (or decline), leading to lower non-interest revenue in:
 - Retail Banking
 - Private Bank
 - Securities Services
- Corporate loans (and related net interest revenue) grow more quickly as corporations shift from equities to bank loans as a source of funding, directly impacting:
 - Corporate Lending

The specific levels of changes in equity prices used by the simulation to calculate the impact of equity prices on the performance of individual business units are:

- 5% for the US
- 7% for International

The *volatility of equity prices* also has a direct impact on some business units. In the simulation, volatility is measured by the Equities Volatility Index (EVI). When the EVI for a market exceeds a specific level:

- Equity trading volumes grow, leading to:
 - Higher growth in equity-related trading account assets (and related non-interest revenue) in your bank's Equity Markets group (part of <u>Global Markets</u>)
- Investment sales, client assets under management and equity transaction volumes all increase, leading to higher non-interest revenue in:

- Retail Banking
- Private Bank (part of Global Banking)
- Securities Services (part of <u>Global Markets</u>)

Of course, the opposite is also true. When the EVI for a market falls below a specific level:

- Equity trading volumes fall, leading to:
 - Lower growth (or declines) in equity-related trading account assets (and related non-interest revenue) in your bank's Equity Markets group
- Investment sales, client assets under management and equity transaction volumes all grow more slowly (or decline), leading to lower non-interest revenue in:
 - Retail Banking
 - Private Bank
 - Securities Services

The specific levels of EVI used by the simulation to calculate the impact of volatility on the performance of individual business units are:

- 20 for the US
- 25 for International

Real Estate Prices

Real estate prices in the simulation are measured by changes in a real estate pricing index.

Real estate prices do not have as much influence as some of the other factors in the simulation, although they do have an impact. More specifically, when changes in real estate prices exceed a specific level:

- Residential mortgage loans grow more quickly, leading to high loan volumes (and related net interest revenue) in:
 - Retail Banking
 - Private Bank (part of Global Banking)
- Commercial real estate loans grow more quickly, leading to high loan volumes (and related net interest revenue) in:
 - Corporate Lending (part of <u>Global Banking</u>)
- Loan quality related to residential and commercial real estate loans improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Retail Banking
 - Private Bank
 - Corporate Lending

Of course, the opposite is also true. When changes in real estate prices are below a specific level:

- Residential mortgage loans and commercial real estate loans grow slowly (or decline)
- Loan quality related to residential and commercial real estate loans deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Retail Banking
 - Private Banking
 - Corporate Lending

The specific levels of changes in real estate prices used by the simulation to calculate the impact of real estate prices on the performance of individual business units are:

- 2% for the US
- 4% for International

Business Units

As you saw in the previous section, the performance of your individual business units is driven largely by changes in economic and market conditions. In this section we look at the impacts business unit by business unit.

Retail Banking

Your Retail Banking business units encompass your bank's:

- Branch operations
- Consumer deposits
- Investment sales
- Real estate, personal and commercial markets lending

In the simulation, the performance of your Retail Banking business units is influenced by changes in the following economic and market drivers:

- When changes in <u>GDP</u> exceed a specific level:
 - Loans (and related net interest revenue) grow more quickly
 - Deposits (and related net interest revenue) grow more quickly
 - Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
 - Transaction volumes (and non-interest revenue) related to investment sales grow
- When the <u>inflation rate</u> in a market exceeds a specific level:
 - Operating expenses increase more quickly
 - Deposits (and related net interest revenue) grow more quickly

- When the <u>unemployment rate</u> in a market exceeds a specific level:
 - Loans (and related net interest revenue) grow slowly (or decline)
 - Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
 - Operating expenses (specifically compensation and benefits) increase slowly (or decline)
- When <u>interest rates</u> rise in general:
 - Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
- When 5-year and/or 30-year interest rates rise:
 - Loans grow slowly (or decline) in Retail Banking
- When 1-month and/or 1-year interest rates rise
 - The net interest revenue on Retail Banking deposits grows
- When changes in <u>equity prices</u> exceeds a specific level:
 - Investment sales increase, leading to high non-interest revenue
- When changes in <u>real estate prices</u> exceed a specific level:
 - Residential mortgage loans grow more quickly, leading to high loan volumes (and related net interest revenue)
 - Loan quality related to residential mortgage loans improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses

The opposite of these impacts is also true.

Cards

Your Cards business units encompass your bank's credit card operations, which include:

- Bank-branded cards in the US and International markets
- Retail services in the US (private label and co-branded credit cards for retailers)

In the simulation, the performance of your Cards business units is influenced by changes in the following economic and market drivers:

- When changes in GDP exceed a specific level:
 - Loans (and related net interest revenue) grow more quickly
 - Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
- When the <u>inflation rate</u> in a market exceeds a specific level:
 - Operating expenses increase more quickly

- When the <u>unemployment rate</u> in a market exceeds a specific level:
 - Loans (and related net interest revenue) grow slowly (or decline)
 - Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
 - Operating expenses (specifically compensation and benefits) increase slowly (or decline)
- When <u>interest rates</u> rise in general:
 - Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses
- When 1-year interest rates rise:
 - Loans grow slowly (or decline) as the cost of borrowing increases for customers

The opposite of these impacts is also true.

Global Banking

Your Global Banking business units provide corporate, institutional, public sector and high net-worth clients with a range of banking services. Your Global Banking business units include:

- Investment Banking
- Treasury and Trade Solutions (TTS)
- Corporate Lending
- Private Bank

In the simulation, the performance of your Global Banking business units is influenced by changes in the following economic and market drivers:

- When changes in **GDP** exceed a specific level:
 - Loans (and related net interest revenue) grow more quickly in:
 - Corporate Lending
 - Private Bank
 - Deposits (and related net interest revenue) grow more quickly in:
 - Treasury and Trade Solutions
 - Private Bank
 - Loan quality improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Corporate Lending
 - Private Bank
 - Transaction volumes (and non-interest revenue) related to treasury management services, trade finance solutions, investment banking services and private banking services all grow, leading to more business in:
 - Investment Banking
 - Treasury and Trade Solutions
 - Private Bank

- When the <u>inflation rate</u> in a market exceeds a specific level:
 - Operating expenses increase more quickly
 - Deposits (and related net interest revenue) grow more quickly in:
 - Treasury and Trade Solutions
 - Private Bank
- When <u>interest rates</u> rise in general:
 - Loan quality deteriorates, leading to higher net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Corporate Lending
 - Private Bank
 - The net interest revenue on deposits grows as your bank is able to increase the spread associated with deposits, directly impacting your deposit-gathering businesses in:
 - Treasury and Trade Solutions
 - Private Bank
- When 1-month and/or 5-year interest rates rise:
 - Loans grow slowly (or decline) in Corporate Lending
- When 5-year and/or 30-year interest rates rise:
 - Loans grow slowly (or decline) in Private Bank
- When changes in equity prices exceeds a specific level:
 - Equity underwriting grows as corporations issue more stock to take advantage of higher prices associated with their shares, leading to:
 - Higher underwriting volumes (and related non-interest revenue) in your advisory and equity underwriting businesses in Investment Banking
 - Lower underwriting volumes (and related non-interest revenue) in your debt underwriting business in Investment Banking as corporations issue more stock (and fewer bonds)
 - Client assets under management and equity transaction volumes all increase, leading to higher non-interest revenue in:
 - Private Bank
 - Corporate loans (and related net interest revenue) grow slowly (or decline) as corporations shift from bank loans to equities as a source of funding, directly impacting:
 - Corporate Lending
- When changes in <u>real estate prices</u> exceed a specific level:
 - Commercial real estate loans grow more quickly, leading to high loan volumes (and related net interest revenue) in Corporate Lending
 - Loan quality related to residential and commercial real estate loans improves, leading to lower net credit losses, delinquent loans, nonperforming loans, credit reserve builds and provisions for credit losses in:
 - Corporate Lending
 - Private Bank

The opposite of these impacts is also true.

Global Markets

Your Global Markets business units provide sales, trading and securities services. Your Global Markets business units include:

- Fixed Income Markets
- Equity Markets
- Securities Services

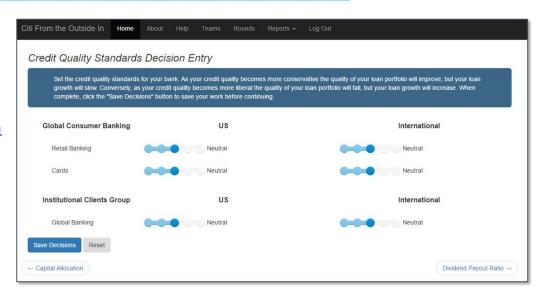
In the simulation, the performance of your Global Markets business units is influenced by changes in the following economic and market drivers:

- When changes in GDP exceed a specific level:
 - Trading account assets (and related net interest and non-interest revenue) grow more quickly in:
 - Fixed Income Markets
 - Equity Markets
 - Deposits (and related net interest revenue) grow more quickly in:
 - Securities Services
 - Transaction volumes (and non-interest revenue) related to trading activity and securities services grow, leading to more business in:
 - Fixed Income Markets
 - Equity Markets
 - Securities Services
- When the <u>inflation rate</u> in a market exceeds a specific level:
 - Operating expenses increase more quickly
 - Deposits (and related net interest revenue) grow more quickly in:
 - Securities Services
- When <u>interest rates</u> rise in general:
 - The net interest revenue on deposits grows as your bank is able to increase the spread associated with deposits, directly impacting your deposit-gathering businesses in:
 - Securities Services
 - Equity trading volumes decline as investors move out of equities in anticipation of an economic slowdown, directly impacting the revenue associated with:
 - Equity Markets
- When changes in <u>equity prices</u> exceeds a specific level:
 - Equity trading volumes grow, leading to:
 - Higher growth in equity-related trading account assets (and related non-interest revenue) in your bank's Equity Markets group
 - Lower growth (or declines) in fixed income-related trading account assets (and related non-interest revenue) in your bank's Fixed Income Markets group as investors shift to equity trading
 - Equity transaction volumes increase, leading to higher non-interest revenue in Securities Services

Credit Criteria

In the simulation you can adjust your bank's credit quality standards for your six business units active in lending:

- Retail Banking (US)
- <u>Retail Banking</u> (<u>International</u>)
- Cards (US)
- <u>Cards</u><u>(International)</u>
- Global Banking (US)
- Global Banking (International)



When the simulation begins, your credit quality standards are set to Neutral. Going forward, your five choices for credit quality standards in each business unit are:

- Very Liberal
- Liberal
- Neutral
- Conservative
- Very Conservative

In general:

- As you loosen your credit quality standards (in other words, as your credit quality standards become more liberal):
 - Your loan growth will accelerate as you accept more loans
 - The quality of your loan portfolio will deteriorate, leading to higher net credit losses, delinquent loans, credit reserve builds and provisions for credit losses
- Conversely, as you tighten your credit standards (in other words, as your credit quality standards become more conservative):
 - Your loan growth will decelerate (or decline) as you accept fewer loans
 - The quality of your loan portfolio will improve, leading to lower net credit losses, delinquent loans, credit reserve builds and provisions for credit losses

The specific impact of these decisions are as follows:

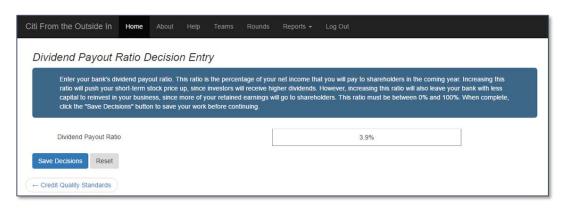
| Retail Banking | | | | | | |
|----------------------------|-----------------------------------|---|-----------------------------------|---|--|--|
| Credit Quality Standard | | US | International | | | |
| | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | | |
| Very Liberal | 5% increase | 35% increase | 8% increase | 50% increase | | |
| Liberal | 2% increase | 10% increase | 3% increase | 15% increase | | |
| Neutral | No impact | No impact | No impact | No impact | | |
| Conservative | 2% decrease | 8% decrease | 3% decrease | 12% decrease | | |
| Very Conservative | 5% decrease | 25% decrease | 8% decrease | 37% decrease | | |

| Cards | | | | | | |
|----------------------------|-----------------------------------|---|-----------------------------------|---|--|--|
| Credit Quality Standard | | US | Int | nternational | | |
| | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | | |
| Very Liberal | 7% increase | 35% increase | 11% increase | 50% increase | | |
| Liberal | 4% increase | ncrease 10% increase 6% increase | | 15% increase | | |
| Neutral | No impact | No impact | No impact | No impact | | |
| Conservative | 4% decrease | 8% decrease | 6% decrease | 12% decrease | | |
| Very Conservative | 7% decrease | 25% decrease | 10% decrease | 37% decrease | | |

| Global Banking | | | | | | |
|----------------------------|-----------------------------------|---|-----------------------------------|---|--|--|
| Credit Quality Standard | | US | Int | International | | |
| | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | Impact on Loans Outstanding | Impact on NCLs, delinquent loans, credit reserve build and provision | | |
| Very Liberal | 5% increase | 35% increase | 8% increase | 50% increase | | |
| Liberal | 2% increase | 10% increase | 3% increase | 15% increase | | |
| Neutral | No impact | No impact | No impact | No impact | | |
| Conservative | 2% decrease | 8% decrease | 3% decrease | 12% decrease | | |
| Very Conservative | 5% decrease | 25% decrease | 8% decrease | 37% decrease | | |

Dividend Payout Ratio

In the simulation you determine what percentage of your net income will be distributed to your shareholders in the form of dividends. We refer to this decision as the *dividend payout* ratio. At SimStart, the dividend payout ratio is 3.9%.



In general:

- Increasing your dividend payout ratio will push your short-term stock price up, since investors will receive higher dividends
- However increasing this ratio will also leave your bank with less capital to reinvest in your business units, since more of your retained earnings will go to shareholders

The impact of this decision on your stock price depends upon the actual amount of dividends you pay as compared to your competitors. More specifically:

- If the amount of dividends you pay per share is higher than the market average, it will drive your stock price up
- If the amount of dividends you pay per share is lower than the market average, it will drive your stock price down

The impact of your dividends on your stock price is 25% of your deviation from the market average.

For example:

- Assume the market average for dividends paid is \$0.20 per share
- If your EPS is \$4.00 and your dividend payout ratio is 8%:
 - You will pay \$0.32 in dividends per share
 - This is 60% above the market average
 - This will increase your stock price by 15% (25% of the 60% above market average)

However, paying higher dividends to shareholders lowers the amount of capital you have available to invest in your <u>business units</u> in the next round. For example:

Assume your bank earns \$12 billion in net income (or \$4.00 per share)

- If your dividend payout ratio is 8%:
 - You will pay \$960 billion to shareholders through dividends
 - This leaves your bank with \$11.04 billion to reinvest in your business units in the next round
- If your dividend payout ratio is only 4%:
 - You will only pay \$480 million to shareholders through dividends
 - This leaves your bank with \$11.52 billion to reinvest in your business units in the next round

Your ability to pay dividends is also limited by your regulatory capital positions. If your bank fails to meet regulatory minimums for any capital ratio in a given year, you will not be able to pay dividends in the following year.

The regulatory minimums for the capital ratios tracked in the simulation are:

- 7% for the Common Equity Tier 1 Capital ratio
- 8.5% for the Tier 1 Capital ratio
- 10.5% for the Total Capital ratio
- 6% for Supplementary Leverage ratio

Your current regulatory capital positions at the end of each round are shown on the Summary of Selected Financial Data report.

SIMSTART REPORTS

The following pages show the position of the bank you have inherited as the simulation begins. This position is referred to as *SimStart*.

SimStart SUMMARY OF SELECTED FINANCIAL DATA

| | | | | | | % Change |
|---|--------|--------|--------|-------------|-------------|----------------------|
| In millions of dollars, except for per-share amounts, ratios and direct staff | Year 4 | Year 3 | Year 2 | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Net interest revenue | | | | \$36,220 | \$34,650 | 5% |
| Non-interest revenue | | | | 24,963 | 23,960 | 4% |
| Revenues, net of interest expense | | | | \$61,183 | \$58,610 | 4% |
| Operating expenses | | | | 36,045 | 35,256 | 2% |
| Provisions for credit losses | | | | 6,664 | 6,387 | 4% |
| Income from continuing operations before income taxes | | | | \$18,474 | \$16,967 | 9% |
| Income taxes | | | | 7,626 | 7,192 | 6% |
| Net income | | | | \$10,848 | \$9,775 | 11% |
| Earnings per share | | | | 3.62 | 3.26 | 11% |
| Dividends declared per common share | | | | 0.14 | 0.13 | 8% |
| Balance sheet data | | | | | | |
| Total assets | | | | \$1,562,288 | \$1,499,417 | 4% |
| Total deposits | | | | 928,600 | 880,100 | 6% |
| Total stockholders' equity | | | | 220,030 | 212,000 | 4% |
| Direct staff (in thousands) | | | | 222,800 | 222,800 | 0% |
| Performance metrics | | | | | | |
| Return on average assets | | | | 0.71% | 0.67% | 7% |
| Return on average stockholders' equity | | | | 5.0% | 4.7% | 7% |
| Efficiency ratio (Total operating expenses/Total revenues) | | | | 59 | 60 | (2%) |
| Basel III ratios - full implementation | | | | | | |
| Common Equity Tier 1 Capital | | | | 11.89% | 11.39% | 4% |
| Tier 1 Capital | | | | 13.02% | 12.57% | 4% |
| Total Capital | | | | 15.56% | 15.07% | 3% |
| Supplementary Leverage ratio | | | | 7.36% | 7.14% | 3% |
| Total stockholders equity to assets | | | | 14.1% | 14.1% | (0%) |
| Dividend payout ratio | | | | 3.9% | 4.0% | (3%) |
| Book value per common share | | | | 73.34 | 70.67 | 4% |

SimStart CONSOLIDATED STATEMENT OF INCOME

| In millions of dollars, except for per-share amounts | Year 0 | Year (-1) | % Change Year 0 vs. Year (-1) |
|---|----------|-----------|----------------------------------|
| Revenues | Teal o | icai (1) | 1 car 0 voi 1 car (1) |
| Interest revenue | \$49,664 | \$47,248 | 5% |
| Interest expense | 13,444 | 12,598 | 7% |
| Net interest revenue | \$36,220 | \$34,650 | 5% |
| Commissions and fees | \$15,379 | \$14,744 | 4% |
| Principal transactions | 5,823 | 5,590 | 4% |
| Administration and other fiduciary fees | 2,424 | 2,346 | 3% |
| Realized gains on sales investments, net | 0 | 0 | |
| Other revenue | 1,337 | 1,280 | 4% |
| Total non-interest revenues | \$24,963 | \$23,960 | 4% |
| Total revenues, net of interest expense | \$61,183 | \$58,610 | 4% |
| Provision for credit losses | \$6,664 | \$6,387 | 4% |
| Operating expenses | | | |
| Compensation and benefits | \$17,985 | \$17,591 | 2% |
| Premises and equipment | 2,380 | 2,328 | 2% |
| Technology/communication | 5,442 | 5,322 | 2% |
| Advertising and marketing | 1,278 | 1,250 | 2% |
| Other operating | 8,961 | 8,765 | 2% |
| Total operating expenses | \$36,045 | \$35,256 | 2% |
| Income from continuing operations before income taxes | | | |
| Provision for income taxes | \$7,626 | \$7,192 | 6% |
| Net income | \$10,848 | \$9,775 | 11% |
| Earnings per share | 3.62 | 3.26 | 11% |
| Weighted average common shares outstanding | 3,000 | 3,000 | 0% |

SimStart CONSOLIDATED BALANCE SHEET

| | | | % Change |
|---|----------------|----------------|----------------------|
| In millions of dollars | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Assets | | | |
| Cash and due from banks | \$22,427 | \$21,653 | 4% |
| Deposits with banks | 100,923 | 97,439 | 4% |
| Interbank loans | 261,499 | 243,531 | 7% |
| Trading account assets | 244,305 | 238,000 | 3% |
| Investments | 280,343 | 270,665 | 4% |
| Loans, net of unearned income | | | |
| Consumer | 277,300 | 267,400 | 4% |
| Corporate | 248,400 | 237,700 | 5% |
| Loans, net of unearned income | \$525,700 | \$505,100 | 4% |
| Allowance for loan losses | 22,425 | 21,326 | 5% |
| Total loans, Net | \$503,275 | \$483,774 | 4% |
| Other assets | 149,516 | 144,355 | 4% |
| Total assets | \$1,562,288 | \$1,499,417 | 4% |
| | | | |
| Liabilities | | | |
| Non-interest-bearing deposits in US offices | \$139,458 | \$134,970 | 3% |
| Interest-bearing deposits in US offices | 283,142 | 274,030 | 3% |
| Non-interest-bearing deposits in offices outside the US | 75,900 | 70,665 | 7% |
| Interest-bearing deposits in offices outside the US | 430,100 | 400,435 | 7% |
| Total deposits | \$928,600 | \$880,100 | 6% |
| Interbank borrowings | 0 | 0 | |
| Trading account liabilities | 118,715 | 115,652 | 3% |
| Short-term borrowings | 33,641 | 32,480 | 4% |
| Long-term debt | 200,000 | 200,000 | 0% |
| Other liabilities | 61,302 | 59,185 | 4% |
| Total liabilities | \$1,342,258 | \$1,287,417 | 4% |
| Stockholders' equity | | | |
| Preferred stock | \$10,000 | \$10,000 | 0% |
| Common stock | \$10,000 30 | \$10,000 30 | 0% |
| | | | |
| Additional paid-in capital | 105,000 | 105,000 | 0% |
| Retained earnings | 135,000 | 124,572 | 8% |
| Accumulated other comprehensive income (loss) | (30,000) | (27,602) | 9% |
| Total stockholders' equity | \$220,030 | \$212,000 | 4% |
| Total liabilities and equity | \$1,562,288 | \$1,499,417 | 4% |

SimStart SEGMENT DETAIL

| | | | % Change | |
|-----------------------------------|----------|-----------|----------------------|--|
| In millions of dollars | Year 0 | Year (-1) | Year 0 vs. Year (-1) | |
| REVENUES | | | | |
| Global Consumer Banking | | | | |
| US | \$18,952 | \$18,404 | 3% | |
| International | 14,786 | 14,325 | 3% | |
| Total | \$33,738 | \$32,730 | 3% | |
| Institutional Clients Group | | | | |
| US | \$13,112 | \$12,673 | 3% | |
| International | 21,038 | 19,948 | 5% | |
| Total | \$34,150 | \$32,621 | 5% | |
| Corporate/Other | \$318 | \$305 | 4% | |
| Total net revenues | \$68,206 | \$65,656 | 4% | |
| INCOME FROM CONTINUING OPERATIONS | | | | |
| Global Consumer Banking | | | | |
| US | \$6,178 | \$5,994 | 3% | |
| International | 4,672 | 4,522 | 3% | |
| Total | • | \$10,517 | 3% | |
| Institutional Clients Group | . , | <u> </u> | | |
| US | \$5,381 | \$5,092 | 6% | |
| International | 8,948 | 8,098 | 10% | |
| Total | \$14,329 | \$13,190 | 9% | |
| Corporate/Other | \$96 | \$88 | 9% | |
| Net income | \$25,275 | \$23,795 | 6% | |

SimStart GLOBAL CONSUMER BANKING US - PAGE 1

| | | | % Change |
|--|----------|------------------|----------------------|
| In millions of dollars, except as noted otherwise | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Net interest revenue | \$16,985 | \$16,494 | 3% |
| Non-interest revenue | 1,967 | 1,910 | 3% |
| Total revenues, net of interest expense | \$18,952 | 18,404 | 3% |
| Total operating expenses | \$8,727 | \$8,555 | 2% |
| Net credit losses | \$3,753 | \$3 <i>,</i> 575 | 5% |
| Credit reserve build (release) | 294 | 280 | 5% |
| Provisions for credit losses | \$4,047 | \$3,855 | 5% |
| Income from continuing operations before taxes | \$6,178 | \$5,994 | 3% |
| Income taxes | 2,039 | 1,978 | 3% |
| Net income | \$4,139 | \$4,016 | 3% |
| Balance Sheet data (in billions of dollars) | | | |
| Average assets | \$208 | \$204 | 2% |
| Return on average assets | 1.99% | 1.97% | 1% |
| Efficiency ratio | 46 | 46 | (1%) |
| Average deposits | \$171.8 | \$166.9 | 3% |
| Net credit losses as a percentage of average loans | 2.31% | 2.21% | 4% |
| Revenue by business | | | |
| Retail Banking | \$4,758 | 4,623 | 3% |
| Cards | 14,194 | 13,781 | 3% |
| Total | \$18,952 | \$18,404 | 3% |
| Income from continuing operations by business | | | |
| Retail Banking | \$659 | 623 | 6% |
| Cards | 3,480 | 3,393 | 3% |
| Total | \$4,139 | \$4,016 | 3% |

SimStart GLOBAL CONSUMER BANKING US - PAGE 2

| | | | % Change |
|---|----------|-----------|----------------------|
| In billions of dollars, except as noted otherwise | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Retail Banking Key Indicators | | | |
| Branches (actual) | 780 | 768 | 2% |
| Accounts (in millions) | 10.9 | 10.7 | 2% |
| Average deposits | \$171.8 | \$166.9 | 3% |
| Investment sales | \$3.6 | \$3.5 | 3% |
| Investment AUMs | \$36.2 | \$35.2 | 3% |
| Average loans | \$51.1 | \$49.6 | 3% |
| EOP loans: | | | |
| Real Estate Lending | \$41.9 | \$40.6 | 3% |
| Commercial Markets | 7.8 | 7.6 | 3% |
| Personal and Other | 2.1 | 2.1 | 0% |
| Total EOP Loans | \$51.8 | \$50.3 | 3% |
| Net interest revenue on loans | \$1,813 | \$1,761 | 3% |
| As a % of average loans | 3.55% | 3.55% | 0% |
| Net credit losses | \$153 | \$146 | 5% |
| As a % of average loans | 0.30% | 0.29% | 2% |
| Loans 90+ days past due | \$170 | \$162 | 5% |
| As a % of EOP loans | 0.33% | 0.32% | 2% |
| Loans 30-89 days past due | \$230 | \$219 | 5% |
| As a % of EOP loans | 0.44% | 0.44% | 2% |
| Cards Key Indicators | | | |
| EOP open accounts (in millions) | 113.4 | 110.4 | 3% |
| Purchase sales | \$262.6 | \$255.5 | 3% |
| Average loans | \$111.8 | \$112.4 | (1%) |
| EOP loans | \$113.3 | \$110.2 | 3% |
| Average yield | 13.21% | 12.75% | 4% |
| Net interest revenue | \$14,194 | \$13,781 | 3% |
| As a % of average loans | 12.70% | 12.26% | 4% |
| Net credit losses | \$3,600 | \$3,429 | 5% |
| As a % of average loans | 3.22% | 3.05% | 6% |
| Loans 90+ days past due | \$1,243 | \$1,186 | 5% |
| As a % of EOP loans | 1.10% | 1.08% | 2% |
| Loans 30-89 days past due | \$1,296 | \$1,237 | 5% |
| As a % of EOP loans | 1.14% | 1.12% | 2% |

SimStart GLOBAL CONSUMER BANKING INTERNATIONAL - PAGE 1

| | | | % Change |
|--|--------------|-----------|----------------------|
| In millions of dollars, except as noted otherwise | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Net interest revenue | \$9,772 | \$9,550 | 2% |
| Non-interest revenue | 5,014 | 4,775 | 5% |
| Total revenues, net of interest expense | \$14,786 | \$14,325 | 3% |
| Total operating expenses | \$8,331 | \$8,088 | 3% |
| Net credit losses | \$1,605 | \$1,543 | 4% |
| Credit reserve build (release) | 178 | 172 | 3% |
| Provisions for credit losses | \$1,783 | \$1,715 | 4% |
| Income from continuing operations before taxes | \$4,672 | \$4,522 | 3% |
| Income taxes | 1,308 | 1,266 | 3% |
| Net income | \$3,364 | \$3,256 | 3% |
| Balance Sheet data (in billions of dollars) | | | |
| Average assets | \$186 | \$178 | 5% |
| Return on average assets | 1.81% | 1.83% | (2%) |
| Efficiency ratio | 56 | 56 | (0%) |
| Average deposits | \$116.5 | \$110.5 | 5% |
| Net credit losses as a percentage of average loans | 1.47% | 1.46% | 0% |
| Revenue by business | | | |
| Retail Banking | \$11,636 | \$11,267 | 3% |
| Cards | 3,150 | 3,058 | 3% |
| Total | \$14,786 | \$14,325 | 3% |
| Total | \$14,700 | 714,323 | 370 |
| Income from continuing operations by business | | | |
| Retail Banking | \$2,941 | \$2,839 | 4% |
| Cards | 423 | 417 | 1% |
| Total | \$3,364 | \$3,256 | 3% |
| FX translation impact | | | |
| Total revenues - as reported | \$14,786 | \$14,325 | 3% |
| Impact of FX translation | - | - | |
| Total revenues - ex-FX | \$14,786 | \$14,325 | 3% |
| Total operating expenses - as reported | \$8,331 | \$8,088 | 3% |
| Impact of FX translation | - | - | ÷,* |
| Total operating expenses - ex-FX | \$8,331 | \$8,088 | 3% |
| Provisions - as reported | \$1,783 | \$1,715 | 4% |
| Impact of FX translation | γ1,/05 | 1,/15 | 4/0 |
| Provisions - ex-FX | - \$1,783 | \$1,715 | 4% |
| | | | |
| Net income - as reported | \$3,364 | \$3,256 | 3% |
| Impact of FX translation | | | |
| Net income - ex-FX | \$3,364 | \$3,256 | 3% |

SimStart GLOBAL CONSUMER BANKING INTERNATIONAL - PAGE 2

| | | | % Change |
|---|---------|-----------|----------------------|
| In millions of dollars, except as noted otherwise | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Retail Banking Key Indicators | 2 24 4 | 2 427 | 40/ |
| Branches (actual) | 2,214 | 2,127 | 4% |
| Accounts (in millions) | 49.4 | 47.5 | 4% |
| Average deposits | \$116.5 | \$110.5 | 5% |
| Investment sales | \$15.0 | \$14.3 | 5% |
| Investment AUMs | \$116.7 | \$111.1 | 5% |
| Average loans | \$85.0 | \$82.0 | 4% |
| EOP loans: | | | |
| Real Estate Lending | \$35.0 | \$33.5 | 4% |
| Commercial Markets | 26.0 | 24.7 | 5% |
| Personal and Other | 26.0 | 24.7 | 5% |
| Total EOP Loans | \$87.0 | \$82.9 | 5% |
| Net interest revenue | \$5,390 | \$5,233 | 3% |
| As a % of average loans | 6.34% | 6.38% | (1%) |
| Net credit losses | \$720 | \$692 | 4% |
| As a % of average loans | 0.85% | 0.84% | 0% |
| Loans 90+ days past due | \$361 | \$347 | 4% |
| As a % of EOP loans | 0.41% | 0.42% | (1%) |
| Loans 30-89 days past due | \$478 | \$460 | 4% |
| As a % of EOP loans | 0.55% | 0.55% | (1%) |
| | | | |
| Cards Key Indicators | | | |
| EOP open accounts (in millions) | 25.5 | 24.2 | 5% |
| Purchase sales | \$101.3 | \$96.3 | 5% |
| Average loans | \$24.6 | \$23.4 | 5% |
| EOP loans | \$25.2 | \$24.0 | 5% |
| Average yield | 15.37% | 15.68% | (2%) |
| Net interest revenue | \$3,150 | \$3,058 | 3% |
| As a % of average loans | 12.80% | 13.07% | (2%) |
| Net credit losses | \$885 | \$851 | 4% |
| As a % of average loans | 3.60% | 3.64% | -1% |
| Loans 90+ days past due | \$294 | \$283 | 4% |
| As a % of EOP loans | 1.17% | 1.18% | (1%) |
| Loans 30-89 days past due | \$315 | \$303 | 4% |
| As a % of EOP loans | 1.25% | 1.26% | (1%) |

SimStart INSTITUTIONAL CLIENTS GROUP US

% Change Year 0 vs. Year (-1) In millions of dollars, except as noted otherwise Year (-1) Year 0 Commissions and fees \$1,497 \$1,453 3% Administration and other fiduciary fees 941 914 3% Investment banking 1,764 1,713 3% **Principal transactions** 2,261 2,198 3% Other 351 341 3% \$6,814 Total non-interest revenue \$6,619 3% Net interest revenue (including dividends) 6,298 6,054 4% Total revenues, net of interest expense 13,112 12,673 3% 7,371 Total operating expenses 7,228 2% 3% Net credit losses 80 78 280 275 Credit reserve build (release) 2% Provisions for credit losses 360 353 2% Income from continuing operations before taxes 5,381 5,092 6% Income taxes 1,774 1,681 6% \$3,607 \$3,411 6% Net income Average assets (in billions of dollars) \$485 \$465 4% 0.74% 0.73% 1% Return on average assets Efficiency ratio 56 57 (1%)Average loans \$110 \$104 6% **EOP** deposits \$250 \$238 5% Net income from continuing operations by business **Global Banking** \$1,719 \$1,621 6% **Global Markets** 1,888 1,790 5% **Total** \$3,607 \$3,411 6%

SimStart INSTITUTIONAL CLIENTS GROUP US - REVENUE DETAILS

| In millions of dollars | Year 0 | Year (-1) | % Change Year 0 vs. Year (-1) |
|---|----------|-----------|----------------------------------|
| Investment Banking revenue details | | | |
| Advisory | \$428 | \$416 | 3% |
| Equity underwriting | 350 | 340 | 3% |
| Debt underwriting | 986 | 957 | 3% |
| Total investment banking | \$1,764 | \$1,713 | 3% |
| Treasury and trade solutions | 3,015 | 2,914 | 3% |
| Corporate lending | 672 | 647 | 4% |
| Private bank | 1,188 | 1,141 | 4% |
| Total banking revenues | \$6,638 | \$6,415 | 3% |
| Fixed income markets | \$4,417 | \$4,268 | 3% |
| Equity markets | 1,204 | 1,162 | 4% |
| Securities services | 853 | 828 | 3% |
| Total markets and securities services revenue | \$6,474 | \$6,258 | 3% |
| Total revenues | \$13,112 | \$12,673 | 3% |

Bank 1 INSTITUTIONAL CLIENTS GROUP INTERNATIONAL

| | | | % Change |
|---|-----------|-----------|----------------------|
| In millions of dollars, except as noted otherwise | Year 0 | Year (-1) | Year 0 vs. Year (-1) |
| Commissions and fees | \$2,358 | \$2,246 | 5% |
| Administration and other fiduciary fees | 1,483 | 1,432 | 4% |
| Investment banking | 2,779 | 2,647 | 5% |
| Principal transactions | 3,562 | 3,392 | 5% |
| Other | 986 | 939 | 5% |
| Total non-interest revenue | \$11,168 | \$10,656 | 5% |
| Net interest revenue (including dividends) | 9,870 | 9,292 | 6% |
| Total revenues, net of interest expense | 21,038 | 19,948 | 5% |
| Total operating expenses | 11,616 | 11,386 | 2% |
| Net credit losses | 127 | 125 | 2% |
| Credit reserve build (release) | 347 | 339 | 2% |
| Provisions for credit losses | 474 | 464 | 2% |
| Income from continuing operations before taxes | 8,948 | 8,098 | 10% |
| Income taxes | 2,505 | 2,267 | 10% |
| Net Income | \$6,443 | \$5,831 | 10% |
| | | | |
| Average assets | \$776 | \$753 | 3% |
| Return on average assets | 0.83% | 0.77% | 7% |
| Efficiency ratio | 55 | 57 | (3%) |
| Average loans | \$133 | \$129 | 3% |
| EOP deposits | \$388 | \$356 | 9% |
| Income from continuing operations by business | | | |
| Global Banking | \$3,436 | \$3,057 | 12% |
| Global Markets | 3,007 | 2,774 | 8% |
| Total | \$6,443 | \$5,831 | 10% |
| FX translation impact | | | |
| Total revenues - as reported | \$21,038 | \$19,948 | 5% |
| Impact of FX translation | - | - | |
| Total revenues - ex-FX | \$21,038 | \$19,948 | 5% |
| Total operating expenses - as reported | \$11,616 | \$11,386 | 2% |
| Impact of FX translation | · | - | _,, |
| Total operating expenses - ex-FX | \$11,616 | \$11,386 | 2% |
| Provisions - as reported | \$474 | \$464 | 2% |
| Impact of FX translation | 5474 - | 7404 - | ∠/0 |
| Provisions - ex-FX | \$474 | \$464 | 2% |
| | · | • | |
| Net income - as reported | \$6,443 | \$5,831 | 10% |
| Impact of FX translation | <u> </u> | | |
| Net income - ex-FX | \$6,443 | \$5,831 | 10% |

SimStart INSTITUTIONAL CLIENTS GROUP INTERNATIONAL - REVENUE DETAILS

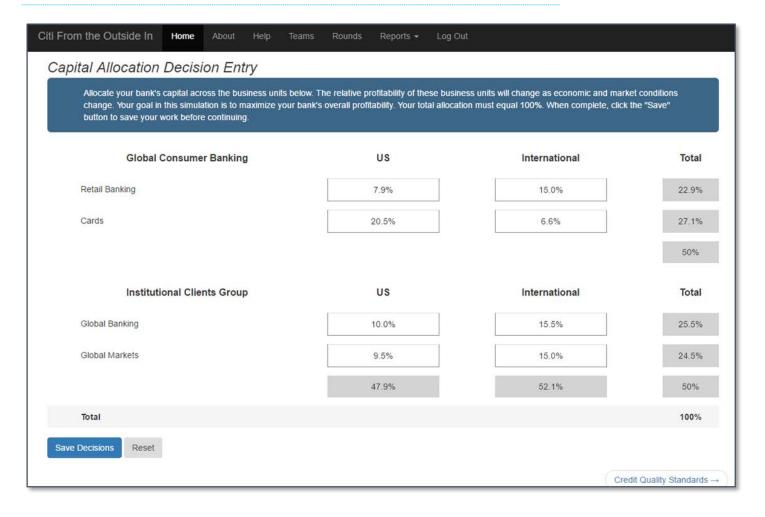
| In millions of dollars | Year 0 | Year (-1) | % Change Year 0 vs. Year (-1) |
|---|----------|-----------|----------------------------------|
| Investment Banking revenue details | | | |
| Advisory | \$674 | \$642 | 5% |
| Equity underwriting | 552 | 526 | 5% |
| Debt underwriting | 1,553 | 1,479 | 5% |
| Total investment banking | \$2,779 | \$2,647 | 5% |
| Treasury and trade solutions | 5,481 | 5,157 | 6% |
| Corporate lending | 954 | 905 | 5% |
| Private bank | 1,886 | 1,738 | 8% |
| Total banking revenues | \$11,099 | \$10,447 | 6% |
| Fixed income markets | \$6,927 | \$6,670 | 4% |
| Equity markets | 1,924 | 1,798 | 7% |
| Securities services | 1,088 | 1,033 | 5% |
| Total markets and securities services revenue | \$9,939 | \$9,501 | 5% |
| Total revenues | \$21,038 | \$19,948 | 5% |

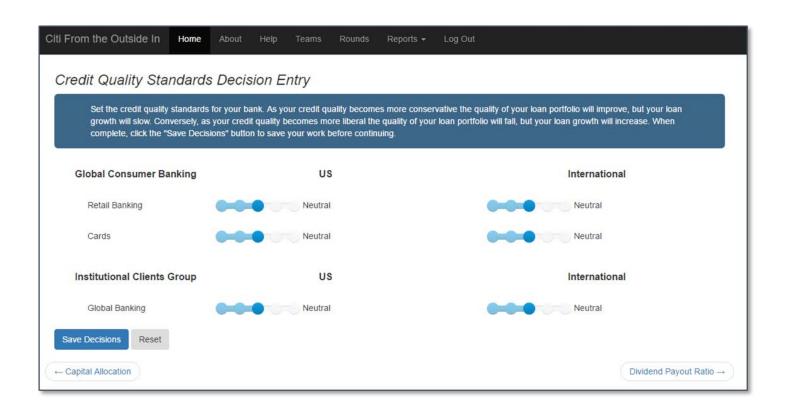
SimStart ALLOWANCE FOR CREDIT LOSSES

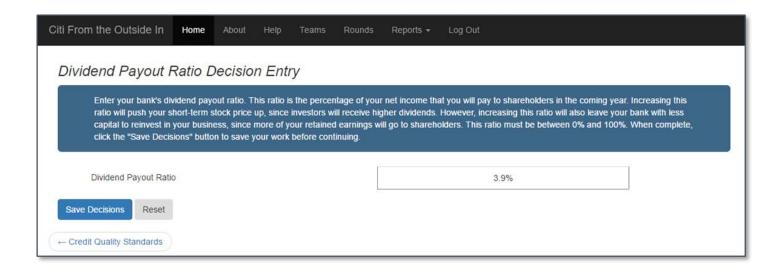
| In millions of dollars | Year 4 | Year 3 | Year 2 | Year 0 | Year (-1) | % Change Year 0 vs. Year (-1) |
|--|--------|--------|--------|----------|-----------|----------------------------------|
| Allowance for loan losses at beginning of period | | | | \$21,326 | \$20,228 | 5% |
| Net credit losses | | | | | | |
| Global Consumer Banking | | | | | | |
| US | | | | \$3,753 | \$3,575 | 5% |
| International | | | | 1,605 | 1,543 | 4% |
| Institutional Clients Group | | | | | | |
| US | | | | 80 | 78 | 3% |
| International | | | | 127 | 125 | 2% |
| Total | | | | \$5,565 | \$5,321 | 5% |
| Provision for loan losses | | | | | | |
| Global Consumer Banking | | | | | | |
| US | | | | \$4,047 | \$3,855 | 5% |
| International | | | | 1,783 | 1,715 | 4% |
| Institutional Clients Group | | | | • | ŕ | |
| US | | | | 360 | 353 | 2% |
| International | | | | 474 | 464 | 2% |
| Total | | | | \$6,664 | \$6,387 | 4% |
| Allowance for loan losses at end of period | | | | \$22,425 | \$21,326 | 5% |

DECISION ENTRY FORMS

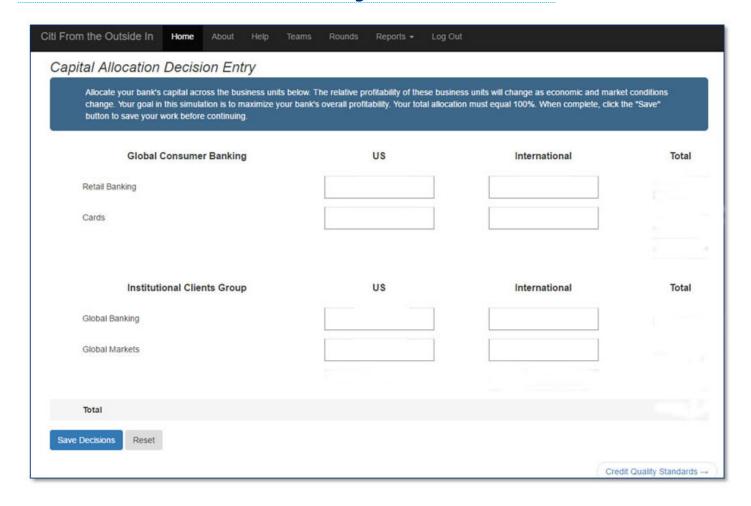
SimStart Decisions

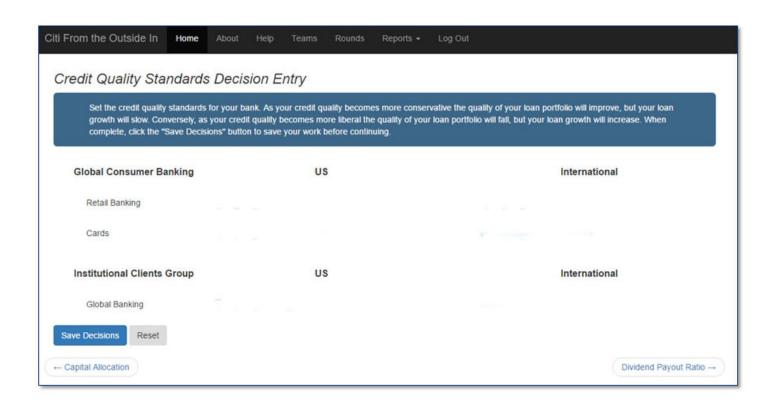


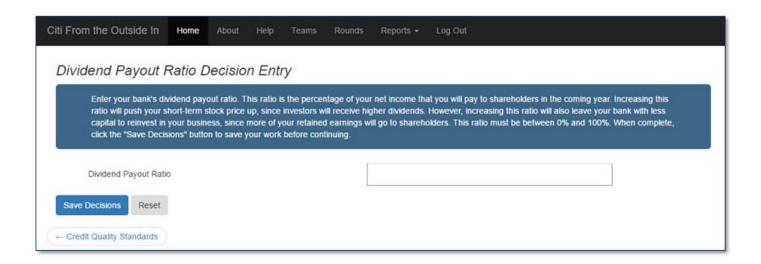




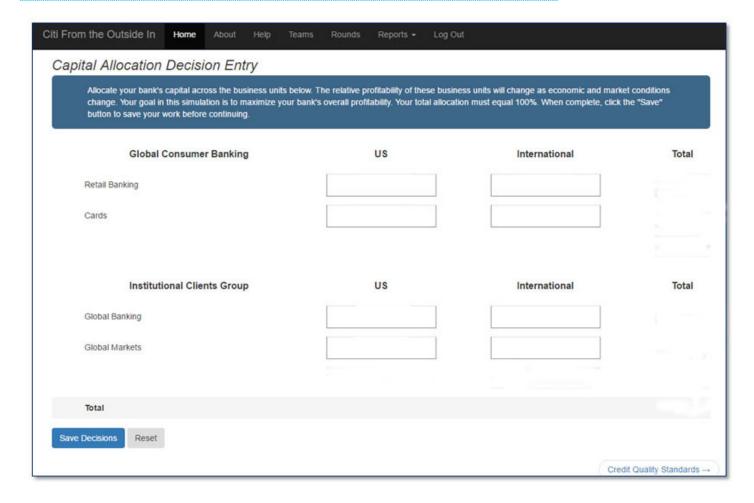
Round One Decision Entry Forms

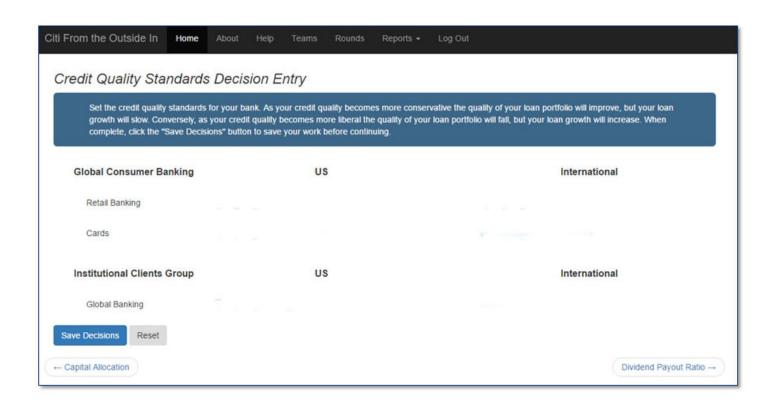


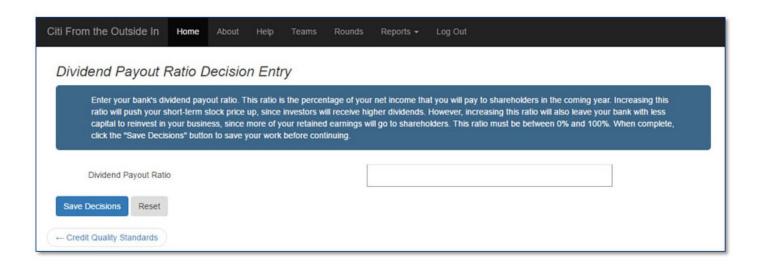




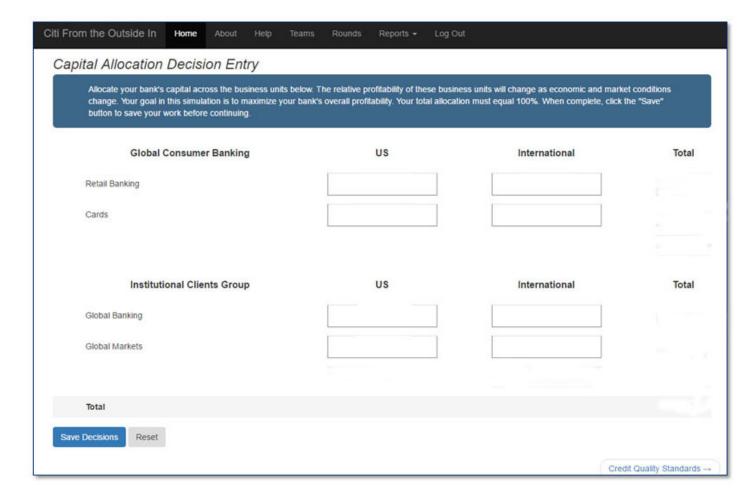
Round Two Decision Entry Forms

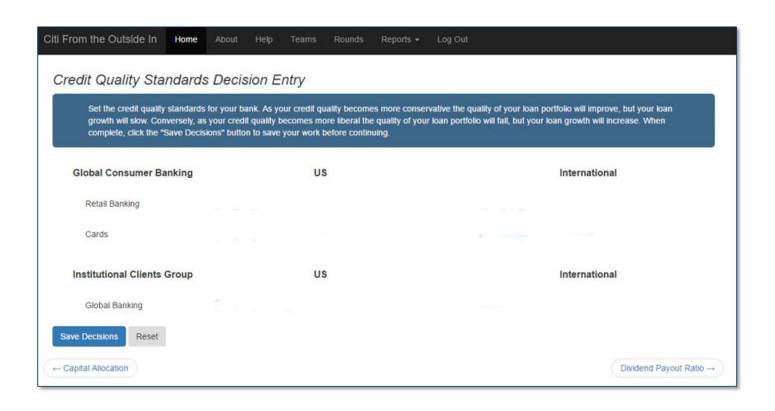


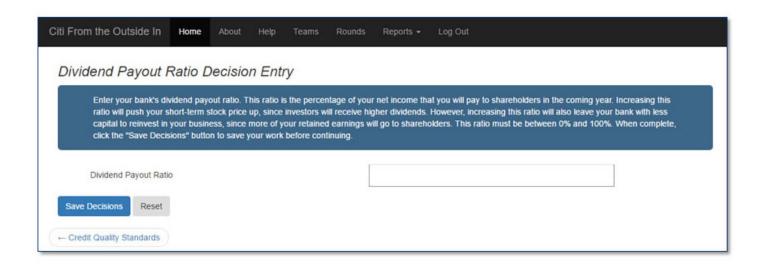




Round Three Decision Entry Forms







Round Four Decision Entry Forms

