

Lecture Topic 2: FinGame Online 5.0 Simulation



Presentation to Cox Business Students

FINA 3320: Financial Management

FinGame Online 5.0 – Overview

- FinGame Online is a financial management decision simulation
 - Comprehensive multi-period finance case
 - Multi-period environment forces students to recognize importance of maintaining future flexibility in making decisions
 - Flexibility is retained by avoiding decisions that eliminate a large set of feasible future decision options for the firm
 - Purpose of simulation is to assist students in the development and enhancement of financial management and decision-making skills
 - Student decisions include both internal and external management of the firm
 - Viewpoint is that of the Chief Financial Officer (CFO)

FinGame Online 5.0 – Overview

- Student FinGame management teams have approximately the same degree of control as managers in actual firms in terms of the following:
 - Determination of dividend policy
 - Issuance and retirement of preferred and common stocks
 - Issuance, retirement, and refunding of several different types of debt
 - Determination of investment policy
 - Analysis and determination of risk level
 - Evaluation (or valuation) of capital budgeting projects
 - Determination of production (and capacity) decisions
 - Evaluation and determination of sales discount
 - Determination of liquidity management
 - Etc. (a host of additional decisions)

FinGame Online 5.0 – Overview

- Simulation's complex environment enables students to gain insights into the interrelationships among finance, capital budgeting, liquidity management, production, and capacity management
 - Student FinGame managers focus on the long-term prosperity and competitiveness of their FinGame companies
- FinGame requires student managers to apply theory, analytical tools and concepts in order to address key questions pertaining to corporate finance:
 - (1) What long-term investments should the FinGame firm choose?
 - (2) How should the FinGame firm raise funds for selected investments?

FinGame Online 5.0 Manual

- FinGame Online 5.0 Participants' Manual
 - **Chapter 1: Introduction**
 - Provides statement of purpose, description of simulation, organization of manual, and discussion of company strategy
 - **Chapter 2: Web Access and Use**
 - Covers initiation and operation of FinGame company on Web
 - **Chapter 3: Establishing a Management Plan**
 - Covers the establishment, maintenance, and revision of the FinGame team's company plan
 - **Chapter 4: The Company Environment and Rules**
 - Presents company operating instructions, company and environment rules, and provides a "Quick Reference"
 - **Chapter 5: The Game and the Real World**
 - Covers differences between the simulation and the real world

FinGame Online 5.0 Instructions

- Student FinGame teams make non-revocable decisions for number of periods of operation
 - Each period of simulation is equal to managing the company for a 3-month or quarter-year period
 - Student managers receive information on performance and position of firm after each period
 - Student managers evaluate this information together with future forecasts provided each quarter to formulate decisions for the company for future quarters

FinGame Online 5.0 Instructions

- Minimum Computer Requirement
 - System requirement include a Web browser
 - Microsoft Internet 6, 7, or Firefox 11.5 or above
 - Broadband Internet is recommended
 - Initial loading will take several minutes with dial-up connections
 - But thereafter will be almost instantaneous if the 500k downloaded material is stored in the browser's cache
 - Printer is required if hard copy quarterly simulation output is desired
 - Recommended!

FinGame Online 5.0 Instructions

- Set-up Instructions

- Quarter 1 in FinGame Online 5.0 is used to generate the starting company
 - Quarter 1 generates the same starting company for all student FinGame teams
- Student FinGame managers cannot make any decisions for quarter 1
 - Quarter 1 is used to ‘initialize’ the starting company and generate the starting set of financial statements
- Student FinGame managers’ first active set of decisions for the company will be for quarter 2

FinGame Online 5.0 Instructions

- Initial instructions and starting the simulation
 - Before starting the simulation, students need to:
 - Know how to access the mhhe.com website
 - Have knowledge of their company environment
 - Know what their role is in managing the company
 - Have access to the large set of rules governing their company and environment

FinGame Online 5.0 Instructions

- Initial instructions and starting the simulation
 - Following steps are used to initiate use of simulation:
 - (1) Professor's group code is required for students to join the FINA 3320 group
 - Students won't have any functionality until joining professor's group
 - (2) Read Chapters 1 and 2 of manual immediately
 - (3) Name your FinGame company
 - (4) Professor will generate new initial FinGame company for quarter 1
 - (5) Students will then be allowed to use their account
 - Students can practice decision entry for pro forma financial statement construction, run pro forma simulations, view created statements, etc.
 - (6) Read Chapters 3 and 4 of manual prior to creating first set of decisions for quarter 2
 - (7) Read Chapter 5 of manual

Group Code:

FINA3320Summer2013

View Code:

FINA3320Summer2013

FinGame Online 5.0 Instructions

- Access to historic financial information of other FinGame companies
 - Professor will make prior quarterly statements of all companies available to students
 - Enable student managers to undertake comparative analyses
 - This availability of information is necessary for various FinGame one-page papers
 - Beta calculation (Paper #3)
 - Calculation of team's WACC (Paper #4)
 - Availability also makes the simulation more realistic

FinGame Online 5.0 Evaluation

- Performance evaluation for a FinGame company based on two items
 - (1) *Primary performance evaluation* based on per-share “*Common Share Price*” provided on Summary Sheet
 - Common Share Price is forward looking and incorporates expected future market conditions and company prospects as in the real world
 - Other measures (e.g., those incorporated in Accumulated Wealth – see below) are primarily historical performance measures, which are less informative
 - (2) *Secondary performance evaluation* based on per-share “*Accumulated Wealth*” given on Summary Sheet
 - Accumulated Wealth includes (a) current value of one share of stock, plus (b) value of all dividends from quarter 1, plus (c) a market rate of interest on all previous dividends

FinGame Online 5.0 Evaluation

- FinGame company performance evaluation
 - Student FinGame managers should focus on the long-term value enhancement of their company
 - There is no end-game strategy within the FinGame simulation
 - Student managers should treat their company as if it will continue to operate after the end of the semester
 - Therefore, students' decisions should consider the long-term time horizon of the firm
 - Long-term value maximization is the focus within the FinGame simulation (as well as the real world)!

FinGame Online 5.0 Pro Forma

- FinGame Pro forma statement construction
 - Students can use FinGame simulation to prepare estimated pro forma financial statements
 - Enables students to estimate consequences of their decisions prior to using these decisions for actual nonreversible quarterly simulation (read Chapters 2 and 3 of manual)
 - Pro forma statements test the impact of decisions
 - Pro forma statements can be repeated as often as desired for a quarter
 - Use Pro Forma Decision Sheet (see Screen 3, Chapter 2)
 - Input decisions and “Run Pro Forma Simulation” option to generate pro forma statements
 - Review results with “View Pro Forma Results” option to see if shareholders’ wealth maximization is achieved

FinGame Online 5.0 Pro Forma

- FinGame Pro forma statement construction
 - Students should undertake manual pro forma statement construction to understand process
 - Read “Pro Forma Statement Construction Step-by-Step Instructions” provided by professor on Blackboard
 - Document provides 32 step-by-step instructions that walks students through manual pro forma statement construction
 - Enables students to understand the ‘black box’ of pro forma construction provided automatically by FinGame simulation
 - Also read downloadable PDF file “Preparing Pro Forma Statements by Hand” accessible from “Documents Section” of the main menu screen online
 - Procedures and details use the rules outlined in Chapter 4 of manual

FinGame Simulation Schedule

- Information and quarterly decisions due dates
 - FinGame name and team member information due 6/4
 - Each team should consist of 3 to 5 students
 - Quarterly decisions
 - FinGame Quarter #1 Decision (generated by professor) 6/5
 - FinGame Quarter #2 Decision Due 6/6
 - FinGame Quarter #3 Decision Due 6/10
 - FinGame Quarter #4 Decision Due 6/12
 - FinGame Quarter #5 Decision Due 6/13
 - FinGame Quarter #6 Decision Due 6/17
 - FinGame Quarter #7 Decision Due 6/25
 - FinGame Quarter #8 Decision Due 6/28
 - Quarterly decisions are due @ 8am on due date
 - Penalty for late decision is significant!
 - Students should upload decision by evening before due date

FinGame Simulation Schedule

- FinGame paper due dates
 - Bonus Point (Optional) FinGame Papers
 - FinGame Paper #1: Long-Term Strategic Planning 6/6
 - FinGame Paper #2: Financial Statement Analyses 6/10
 - FinGame Paper #3: Beta Coefficient 6/19
 - FinGame Paper #4: WACC Calculation 6/25
 - FinGame Paper #5: Capital Budgeting 6/28
 - Papers are due @ beginning of class on due date
 - Each student must submit IPS evaluation form @ same time
 - Late IPS forms will not be accepted, but there will be no grade penalty
 - Later papers will not be accepted
 - Late papers receive a grade of zero
 - Each Bonus Point FinGame Paper is worth a maximum of 1%
 - Students have the ability to raise their final grade one-half grade level

FinGame Paper #1 Outline

- Long-Term Strategic Planning
 - One-page paper on developing FinGame team's overall strategy
 - One-page paper should consist of three paragraphs:
 - (1) Develop and outline strategic planning areas including (A) capital structure and leverage decisions, (B) dividend policy decisions, and (C) debt, preferred stock, and common stock financing decisions
 - (2) Define key variables management team must control to successfully implement each area of the long-term strategic plan
 - (3) Discuss how student managers plan to integrate each strategic area into a comprehensive long-term strategic plan
 - Backup Information attached to one-page paper:
 - Any backup team deems appropriate and necessary

FinGame Paper #2 Outline

- Financial Statement Analyses
 - One-page paper on application of FinGame team's overall strategy using ratio and cash flow analyses
 - One-page paper should consist of three paragraphs:
 - (1) Capital Structure Decision – report results of financing mostly with equity, a 50-50 mix of debt and equity, and mostly with debt
 - (2) Short-Term versus Long-Term Debt Financing Decisions – report results of financing debt portion with all short-term bank notes versus all long-term debentures
 - (3) Dividend Policy Decisions – report results of low, moderate, and high dividend payout
 - Backup Information attached to one-page paper:
 - Ratio and cash flow calculations
 - Additional backup team deems appropriate and necessary

FinGame Paper #3 Outline

- Beta Coefficient Calculation
 - One-page paper on determining FinGame firm's beta coefficient
 - One-page paper should consist of three paragraphs:
 - (1) Explanation of how beta coefficient was determined
 - (2) Discussion and analysis of appropriate level of systematic risk
 - (3) Discussion of team's plans to adjust future risk level
 - Backup Information attached to one-page paper:
 - Printout of calculation of firm's beta coefficient
 - Additional backup team deems appropriate and necessary

FinGame Paper #4 Outline

- WACC Calculation
 - One-page paper on determining FinGame firm's weighted average cost of capital (WACC)
 - One-page paper should consist of three paragraphs:
 - (1) Explanation of how WACC was determined using both DCF and CAPM
 - (2) Discussion and analysis of whether firm's cost of capital provides the appropriate risk-return relationship
 - (3) Analysis/Discussion of results and plans for future changes
 - Backup Information attached to one-page paper:
 - Printout of calculation of firm's WACC
 - Additional backup team deems appropriate and necessary

FinGame Paper #5 Outline

- Capital Budgeting (Projects A and B)
 - One-page paper on determining if your FinGame firm should undertake either (or both) of the two cost saving capital budgeting projects
 - One-page paper should consist of three paragraphs:
 - (1) Explanation of the design of the Excel spreadsheet
 - (2) Analysis/Discussion of the NPV for each project
 - (3) Discussion of management's future plans for employing these cost saving capital budgeting projects
 - Backup Information attached to one-page paper:
 - Printout of numeric and cell formula solutions from Excel
 - Additional backup team deems appropriate and necessary

Thank You!



Charles B. (Chip) Ruscher, PhD

Department of Finance and Business Economics