Financing New Venture exam 1

# List of Topics on Exam 1

* Definition of Free Cash Flow (+)
* Definition of Bridge Financing (+)
* Lifestyle firm is driven by founder skills, personality, energy, and contacts (+)
* Internal Rate of Return (+)
* Bootstrapping (+)
* Real options ~ non-financial options (+)
* LLC: terms, articles, incorporations (+)
* Pass Through Taxation(+)
* Capital leases (+)
* Net cash burn, net cash build (+)
* Basic terms: Net Income, Net Working capital, etc. (+)
* The equity multiplier (+)
* Interest Tax Shield (+)
* Stages of life cycle (order) and kind of financing needed at each stage (+)
* IPO (+)
* Private vs public financial markets (features) (+)
* Order of income statement (+)
* Difference between free cash flow vs free cash flow to equity
* Intellectual Property
* Personal Income Tax table
* Analysis: Cross Sectional, etc.
* Cash Conversion Cycle, etc.
* Exercise:  
  Given: Information about Sales, COGs, selling expenses, depreciation, interest expenses, tax rate. Find …?

# Chapter 1 review (Intro to Finance for Entrepreneurs)

The entrepreneurial process - involves developing opportunities, gathering resources, and managing and building operations, all with the goal of creating value.

1. Determine the feasibility of the idea, screen the idea as a possible venture opportunity, analyze the related competitive environment, develop a sound business model, prepare a business plan.
2. Gather the physical assets, intellectual property, human resources, and financial capital necessary to move from opportunity to entrepreneurial.
3. An effective business model must generate revenues to cover operating costs in the foreseeable future.

Capitalism - is a market-oriented economic system that allows private ownership of physical and financial assets, permits private production and sale of goods and services for possible profit, provides a mechanism for setting prices for allocating resources, and establishes financial markets for the exchange of claims to wealth.

A political system that allows individuals to formulate new business ideas, develop new business ventures, and reap the financial benefits when new ventures are successful is an important element when deciding where to locate an entrepreneurial endeavor.

A democracy is a government system that grants authority and power to its people who participate in the government’s decision-making process by voting either directly or through electing representatives.

Entrepreneurship - process of changing ideas into commercial opportunities and creating value.

Entrepreneur - individual who thinks, reasons, and acts to convert ideas into commercial opportunities and to create value.

Entrepreneurial opportunities - ideas with potential to create value through different or new, repackaged, or repositioned products, markets, processes, or services.

Megatrends are large societal, demographic, or technological trends or changes that are slow in forming but, once in place, continue for many years.

Fads are not predictable, have short lives, and do not involve macro changes.

7 principles of entrepreneurial finance:

1. Real, human, and financial capital must be rented from owners.   
2. Risk and expected reward go hand in hand.   
3. While accounting is the language of business, cash is the currency.   
4. New venture financing involves search, negotiation, and privacy.   
5. A venture’s financial objective is to increase value.   
6. It is dangerous to assume that people act against their own self-interests.   
7. Venture character and reputation can be assets or liabilities.

Cash burn measures the gap between the cash being spent and that being collected from sales.

Cash build measures the excess of cash receipts over cash disbursements, including payments for additional investment.

Public financial markets where standardized contracts or securities are traded on organized securities exchanges.

In such markets, publicly traded prices may be considered good indicators of true values; investors who disagree are free to buy and sell the securities to express their sentiments to the contrary. Public markets exhibit efficiency (i.e., prices reflect information about the company or its industry) and liquidity (i.e., investors who disagree with prevailing prices can buy and sell the security to express their objection).

Private financial markets where customized contracts or securities are negotiated, created, and held with restrictions on how they can be transferred.

Characterization of such markets as relatively inefficient (prices may not reflect significant information known to the venture or its investors) and illiquid (investors who disagree cannot easily sell or buy to express discontent or approval).

Financial objective for the venture’s owners: **to increase value**.

Free cash - cash exceeding that which is needed to operate, pay creditors, and invest in assets.

**Free cash flow - (FCF)** - is the cash a company generates after taking into consideration cash outflows that support its operations and maintain its capital assets.

Entrepreneurial finance application and adaptation of financial tools and techniques to the planning, funding, operations, and valuation of an entrepreneurial venture.

Financial distress when cash flow is insufficient to meet current debt obligations.

Early-stage ventures - new or very young firms with little operating history.

Seasoned firms - firms with successful operating histories and operating in their rapid-growth or maturity life cycle stages.

Venture life cycle stages of a successful venture’s life from development through various stages of revenue growth

Stage Activity

1. **Development stage** – Developing opportunities  
    period involving the progression from an idea to a promising business opportunity.
2. **Startup stage** – Gathering resources

period when venture is organized & developed, and an initial revenue model is put in place

1. **Survival stage** - Gathering resources; managing and building operations  
    period when revenues start to grow and help pay some, but typically not all, of the expenses
2. **Rapid-growth stage** - Managing and building operations  
    period of very rapid revenue and cash flow.
3. Table

   Description automatically generated**Early-maturity stage** - Managing and building operations  
    period when the growth of revenue and cash flow continues but at a much slower rate than in the rapid growth stage.

Seed financing funds needed to determine whether an idea can be converted into a viable business opportunity.

Startup financing funds needed to take a venture from having established a viable business opportunity to initial production and sales.

Venture capital early-stage financial capital often involves substantial risk of total loss.

Business angels wealthy individuals operating as informal or private investors who provide venture financing for small businesses.

Venture capitalists (VCs) individuals who join formal, organized firms to raise and distribute venture capital to new and fast-growing ventures.

Venture capital firms formed to raise and distribute venture capital to new and fast-growing ventures.

First-round financing equity funds provided during the survival stage to cover the cash shortfall when expenses and investments exceed revenues.

Trade credit financing provided by suppliers in the form of delayed payments due on purchases made by the venture.

Government assistance programs financial support, such as low-interest rate loans and tax incentives, provided by state and local governments to help small businesses

Commercial banks financial intermediaries that take deposits and make business and personal loans

second-round financing for ventures in their rapid-growth stage to support investments in working capital.

mezzanine financing funds for plant expansion, marketing expenditures, working capital, and product or service improvements

warrants rights or options to purchase a venture’s stock at a specific price within a specified time period

**Bridge financing** - temporary financing needed to keep the venture afloat until the next offering or IPO

initial public offering (IPO) a corporation’s first sale of common stock to the investing public

secondary stock offering founder and venture investor shares sold to the public

investment banking firms - firms that advise and assist corporations regarding the type, timing, and costs of issuing new securities.

investment banker individual working for an investment banking firm who advises and assists corporations in their security financing decisions and regarding mergers and acquisitions.

venture law firms law firms specializing in providing legal services to young, fast-growing entrepreneurial firms.

seasoned securities offering the offering of securities by a firm that has previously offered the same or substantially similar securities

Diagram

Description automatically generatedReal option - A real option is an economically valuable right to make or else abandon some choice that is available to the managers of a company, often concerning business projects or investment opportunities. It is referred to as “real” because it typically references projects involving a tangible asset (such as machinery, land, and buildings, as well as inventory), instead of a financial instrument.

# Chapter 2: Developing the Business Idea

Types of businesses: salary-replacement, lifestyle, entrepreneurial firm, or venture.

Lifestyle firms - firms that allow owners to pursue specific lifestyles while being paid for doing what they like to do

Sound business model provides a framework for the venture to:

1. Generate revenues
2. Make profits
3. Produce free cash flow

Graphical user interface, text, application, timeline

Description automatically generated

Viable venture opportunity an opportunity that creates or meets a customer need, provides an initial competitive advantage, is timely in terms of time-to-market, and offers the expectation of added value to investors.

SWOT analysis an examination of strengths, weaknesses, opportunities, and threats to determine the business opportunity viability of an idea.

SWOT analysis should consider the following areas as potential strengths or weaknesses:

1. Unfilled customer need

2. Intellectual property rights

3. First mover

4. Lower costs and/or higher quality

5. Experience/expertise

6. Reputation value

7. Existing competition

8. Market size/market share potential

9. Substitute products or services

10. Possibility of new technologies

11. Recent or potential regulatory changes

12. International market possibilities

Venture opportunity screening assessment of an idea’s commercial potential to produce revenue growth, financial performance, and value

Cost of goods sold direct costs of producing a product or providing a service

Gross profit revenues less the cost of goods sold

Gross profit margin gross profit divided by revenues

Net profit dollar profit left after all expenses, including financing costs and taxes, have been deducted from the revenues

Net profit margin net profit divided by revenues

Asset intensity total assets divided by total revenues; the reciprocal of asset turnover

Asset turnover revenues divided by total assets; the reciprocal of asset intensity

Return on assets (ROA) net after-tax profit divided by total assets

ROA model return on assets is the product of the net profit margin and the asset turnover ratio

Operating cash flow cash flow from producing and selling a product or providing a service

Free cash flow to equity cash remaining after operating cash outflows, financing and tax cash flows, investment in assets needed to sustain the venture’s growth, and net increases in debt capital

**Internal rate of return** (IRR) - compound rate of return that equates the present value of the cash inflows received with the initial investment

Financial **bootstrapping** minimizing the need for external financial capital and finding unique sources for financing a new venture

Table

Description automatically generated

# Chapter 3: Organizing and Financing New Venture

Table

Description automatically generated

Proprietorship business venture owned by an individual who is personally liable for the venture’s liabilities

Unlimited liability personal obligation to pay a venture’s liabilities not covered by the venture’s assets

Partnership business venture owned by two or more individuals who are jointly and personally liable for the venture’s liabilities

Partnership agreement an agreement that spells out how business decisions are to be made and how profits and losses will be shared

Joint liability legal action treats all partners equally as a group

Joint and several liability subsets of partners can be the object of legal action related to the partnership

Table

Description automatically generated

Corporation a legal entity that separates personal assets of the owners, called shareholders, from the assets of the business

Limited liability creditors can seize the corporation’s assets but have no recourse against the shareholders’ personal assets

Corporate charter legal document that establishes the corporation

Articles of incorporation basic legal declarations contained in the corporate charter

Corporate bylaws rules and procedures established to govern the corporation

S corporation corporate form of organization that provides limited liability for shareholders; plus, corporate income is taxed as personal income to the shareholders

Limited liability company (LLC) a company owned by shareholders with limited liability; its earnings are taxed at the personal income tax rates of the shareholders

Intellectual property a venture’s intangible assets and human capital, including inventions that can be protected from being freely used or copied by others

Intellectual property a venture’s intangible assets and human capital, including inventions that can be protected from being freely used or copied by others. (Utility, Design, Plant, Business method)

Computer software can be patented. Examples include an application program to run an automated production plant and software to provide financial management systems for financial institutions. Most software products, however, such as the Microsoft® Office series, are copyrighted rather than patented.

Trade secrets intellectual property rights in the form of inventions and information, not generally known to others, that convey economic advantages to the holders

Trademarks intellectual property rights that allow firms to differentiate their products and services through the use of unique marks (Trademarks, Service marks, Collective marks, Certification marks)

Copyrights intellectual property rights to writings in printed and electronically stored forms

(unfinished) Section 3.5

Table

Description automatically generated

Pass-through taxation refers to businesses that do not pay taxes on the entity level. Instead, the income passes to the owners of the business who pays personal income taxes for their share of the business. Pass-through taxation typically applies to sole proprietorships, partnerships, and S-corporations as long as no exception applies. This is opposed to either traditional corporations or C-corporations, in which the company itself pays corporate taxes on income the corporation earns and later gets taxed on the owner level whether through sale of stock or distributions.

# Chapter 4: Preparing and Using Financial Statements

assets financial, physical, and intangible items owned by the business.

Table

Description automatically generated with low confidence

Generally accepted accounting principles (GAAP) guidelines that set out the manner and form for presenting.

Accounting information accrual accounting the practice of recording economic activity when it is recognized rather than waiting until it is realized.

Accrual accounting the practice of recording economic activity when it is recognized rather than waiting until it is realized.

Balance sheet financial statement that provides a “snapshot” of a business’s financial position as of a specific date.

Equity measures the amount of money that would be returned to shareholders if the business liquidated its assets and paid off its liabilities.

**Total Assets = Total Liabilities + Owners’ Equity**

Liquidity how quickly an asset can be converted into cash

Current assets cash and other assets that are expected to be converted into cash in less than one year

Cash amount of coin, currency, and checking account balances

Marketable securities short-term, highquality, highly liquid investments that typically pay interest

**Receivables** credit sales made to customers. (Customer owns the company)

Inventories raw materials, work-in process, and finished products that the venture hopes to sell

Fixed assets - assets with expected lives of greater than one year

Depreciation reduction in value of a fixed asset over its expected life, intended to reflect the usage or wearing out of the asset

Accumulated depreciation sum of all previous depreciation amounts charged to fixed assets

**Other long-term asset** - intellectual property rights or intangible assets that can be patented or owned

**Payables** – short-term liabilities owed to suppliers for purchases made on credit.

**Accrued wages** - liabilities owed to employees for previously completed work.

**Bank loan interest** - bearing loan from a commercial bank.

**Other current liabilities** - catchall account that includes borrowing in the form of cash advances on credit cards.

**Long-term debts loans** - that have maturities of longer than one year.

**Capital leases long-term** - noncancelable leases whereby the owner receives payments that cover the cost of equipment plus a return on investment in the equipment.

**Operating leases** - provide maintenance in addition to financing and are also usually cancelable.

**Owners’ equity** - capital contributed by the owners of the business.

**Stockholders’ equity** - book value of owners’ equity in a corporation.

**Common stock account -** book value of ownership interest in a corporation.

**Additional-paid-in capital account -** additional book value of ownership interest in a corporation when the common stock has a par value.

**Retained earnings account -** accumulated profits (or losses) retained in the business from operations.

**Cost of goods sold -** cost of materials and labor incurred to produce the products that were sold.

Net Sales – COGs – (Marketing + Administrative + Building + Depreciation) expenses – Interest – taxes

(Gross Earnings)

( Earnings before interest and taxes EBIT )

( Earnings before Taxes )

( NET Income )

Income statement financial statement that reports the revenues generated and expenses incurred over an accounting period.

**Gross earnings** - net sales minus the cost of production.

**Operating income** - also called earnings before interest and taxes (EBIT), the firm’s profit after all operating expenses, excluding financing costs, have been deducted from net sales.

**EBIT** - earnings before interest and taxes; also called operating income.

**Net income** (or profit) bottom-line measure of what’s left of the firm’s net sales after operating expenses, financing costs, and taxes have been deducted.

**EBITDA -** earnings before interest, taxes, depreciation, and amortization.

**EBDAT** - earnings before depreciation, amortization, and taxes.

**EBDAT** **breakeven** - amount of revenues (i.e., survival revenues) needed to cover a venture’s cash operating expenses.   
 ***EBDAT = Revenues (R) - Variable Costs (VC) - Cash Fixed Costs (CFC)***

***Survival Revenue = CFC/(1 - VCRR); CFC – Cash fixed costs; VCRR – variable cost revenue ratio***

**Cash flow breakeven** - cash flow at zero for a specific period (EBDAT = 0).

Statement of cash flows financial statement that shows how cash, as reflected in accrual accounting, flowed into and out of a company during a specific period of operation.

Venture leverage measure of how changes in top-line revenues relate to changes in EBDAT

(chapter should be revised)

# Chapter 5: Evaluating Operating and Financial Performance

Table

Description automatically generated

Financial ratios are one of the integral indicators of the financial state of the venture. A ratio is a relationship between two financial variables. There are 3 main analyses with involvement of financial ratios:

* Trend analysis: financial data is compared over a period.
* Cross-sectional analysis: financial data against other venture’s financial data in a similar life cycle stage or industry.
* Industry comparable analysis: financial performance and comparing it against the average performance of other ventures in a similar industry.

Cash Burn Rates and Liquidity Ratios

* Cash Burn Rate: can be defined as the amount of cash burnt by a venture on its operating and financing expenses and its investments in assets over a fixed period.

Cash Build rate: is the cash built for a fixed period. **Cash Build = Net Sales – Increase in Receivables**

**Cash Burn = Income Statement-Based Operating, Interest, and Tax Expenses + Increase in Inventories - (Changes in Payables and Accrued Liabilities) + Capital Expenditures**

Net Cash Burn = Cash Burn - Cash Build

* Current ratio: This ratio indicates the margin of current assets over current liabilities.   
  Current Ratio = Average Current Assets/ Average Current Liabilities
* Quick ratio: The quick ratio indicates the ability of liquid assets to pay current. liabilities.   
  Quick Ratio = Average Current Assets - Average Inventories) / Average Current Liabilities
* NWC to Total Assets Ratio: is used to analyze the venture’s liquidity with respect to it’s net working capital.   
  NWC to Total assets Ratio = (Average Current assets- Average Current Liabilities) / Average Total Assets

Conversion Period Ratios

* Inventory to Sale Conversion Period: This ratio is used to analyze the amount of time between the cash outlay for materials and labor and production of a salable good. Inventory to Sale Conversion Period = Average Inventories /(Cost of Goods Sold/365)
* Purchase to Payment Conversion Period: This ratio helps to measure the average time from a purchase of materials and labor to actual cash payment.
* Purchase to Payment Conversion Period = (Average Payables + Average Accrued Liabilities)/ (Cost of Goods Sold/ 365)
* Cash Conversion Cycle: This ratio indicates the average time it takes a venture to complete its operating cycle, less a deduction for the days supported by trade credit and delayed payroll financing.  
    
  Cash Conversion Cycle = **DIO + DSO – DPO**

Leverage Ratios are primarily used to analyze a venture’s current to meet its debt obligations.

* Total Debt to Total Assets Ratio: helps to analyze that how much of a venture has been committed to its debt holders and how much is supported by equity.  
    
  Total Debt to Total Assets Ratio = Average Total Debt/ Average Total Assets
* Equity Multiplier: shows how much of the ventures is financed by the owner and how much of the venture is financed by debt.   
    
  Equity Multiplier = Average Total Assets/ Average Owner’s equity
* Debt to Equity Ratio: shows a direct comparison between debt and equity
* Current Liabilities to Total Debt Ratio: helps to assess the cash outflow of a company with respect to time. It tells us how much a venture is bound to pay its creditors in the short term and long term.   
    
  Current Liabilities to debt Ratio = Average Current Liabilities/ Average Total Debt
* Interest Coverage: helps to analyze whether the venture’s earnings are able to meet its interest obligations. Interest Coverage= EBITDA/Interest
* Fixed-Charges Coverage: is a ratio that helps to asses that if a firm’s earnings are adequate enough to meet its fixed charges obligations Fixed Charges  
  Coverage = (EBITDA + Lease Payments)/(Interest + Lease Payments + [Debt repayments/ (1-Tax rate])

Profitability and Efficiency Ratios determine how a venture controls its expenses and uses its assets efficiently.

* Gross Profit Margin: helps to assess whether a venture’s revenues exceed the cost of goods sold.

Gross Profit Margin: (Net Sales -Cost of Goods Sold)/ Net Sales

* Operating Profit Margin: helps to assess if a venture can cover its financing costs and pay the tax bill and experience net profit.

Operating Profit Margin = EBIT/Net sales

* Net Profit Margin: is known as the bottom line indicates if the venture is making profit or not. (Net Profit Margin = Net income/ Net Sales)
* NOPAT Margin: is used to compare net profit margins between two ventures with different amounts of financing and tax distortions in relative performance.

NOPAT Margin = (EBIT (1-Tax Rate))/Net Sales

* Sales to Total Assets Ratio: helps to assess how much revenue is generated based on the assets invested.

Sales to Total Assets Ratio = Net Sales/Average Total Assets

(unfinished)