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## **MODULE 1**

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# **PRIVATE EQUITY AND VENTURE CAPITAL**

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**Università Bocconi and SDA Bocconi**

## 1. What Is Private Equity and Venture Capital?

2. Why Companies Need Private Equity And Venture Capital
3. Private Equity Clusters: Through the Fund's Life Cycle
4. Seed, Startup, and Early Stage Financing
5. Expansion Financing
6. Replacement Financing
7. Vulture Financing
8. Private Equity and Venture Capital: Today and Tomorrow - Interview with *Fabio Sattin*

# Preliminary Definitions

The definition of Private Equity (PE) is based on two aspects, each related to the two main characteristics of the PE relation:

- PE is a **source of financing**: It is an alternative to other sources of liquidity, (such as a loan or an initial public offering (IPO)) for the company receiving the financing.
- PE is an **investment** made by a financial institution: Private Equity Investor (PEI) in the equity of a non-listed company (i.e. not a public company).

Throughout the course, the definition of PE will be used in its broad meaning, which also includes Venture Capital.

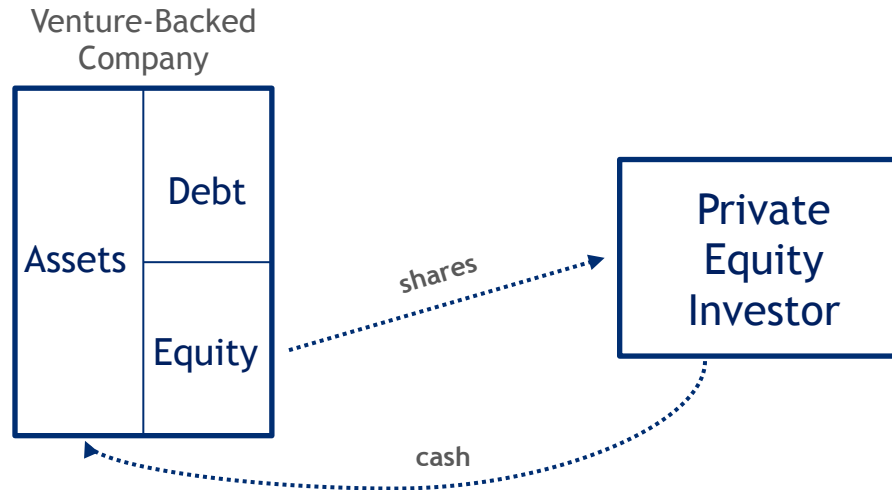
Venture Capital is a very specific case of PE. It is the investment in the very early stages of a company's life.

# The Need of Financing

How does the relationship between the PEI and the venture-backed company (i.e. the company financed by the PEI) work?



The investor gets shares of the equity of the company in return for the inflow of cash.



# The Consequences the Financing

As a consequence, the relationship between the venture-backed company and the PEI is based on some relevant issues:

- A company needing money for a certain and **clearly identified reason**;
- The company collects money with the **issuance of equity** on the private market, the company does not pay any interest expenses to the PEI;
- The newly issued shares will be bought by the PEI;
- The professional investor will not only become a shareholder but will contribute to the **management of the company**. The smaller the company is, the larger the contribution of the PEI in the business management will be;
- The professional investor will create profit only through the generation of **capital gain**, i.e. exiting from the investment by selling shares to someone else on the market.



The most critical aspect in PE is the strict relationship between the investor and the entrepreneur.

# The Difference between: PE and Investing in a Public Company



Public

Private

PRICING	LIQUIDITY	MONITORING
The price is driven by the market, either upwards or downwards.	Liquidity is very high. Whenever an investor wants to sell the shares of the public company there is always a buyer.	When trading on the stock exchange, there is always a very high level of protection for the shareholders, regardless their stake in the company.
The price is the result of the negotiation process which be both easy or hard.	Selling the shares is not so easy. Since there is no stock exchange, finding a new shareholder can very hard and time consuming.	The shareholders (the PEI) have to protect themselves and the values generated by the company. All of the rules will be stated in a formal agreement.

1. What Is Private Equity and Venture Capital?

## 2. Why Companies Need Private Equity And Venture Capital

3. Private Equity Clusters: Through the Fund's Life Cycle

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5. Expansion Financing

6. Replacement Financing

7. Vulture Financing

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# Why Would a Company Need PE?

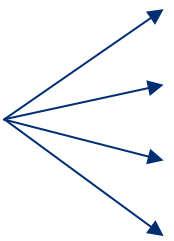
PE is based on two aspects:

- PE is a source of **financing**;
- And PE is an **investment**.

... but why would a company need PE? Why should a company let an external investor sit on its board of directors and make managerial decisions? (Note: The bank would have been an outsider.)



The venture-backed company wants to enjoy some direct and indirect benefits that a company can exploit when financed by a PEI.

- 
1. Certification Benefit
  2. Network Benefit
  3. Knowledge Benefit
  4. Financial Benefit



# 1. The Certification Benefit

Due to the long screening phase before deciding to invest in a company, if the PEI finally does choose to invest in the venture-backed company, in a way, that confirms the very high quality of the company's accounts.

This can give a sign of great health of the company and this high quality can be used as a kind of promotion for the venture-backed company's brand.

## 2. The Network Benefit

The PEI can give the company a very strong network, in terms of suppliers, customers and banks therefore multiplying its possible contacts.

### 3. The Knowledge Benefit

The PEI can transfer knowledge to the company:

- **Soft Knowledge:** the capability to manage the business
- **Hard Knowledge:** the specific-field knowledge of a business, this applies particularly to high-tech or pharmaceutical industries

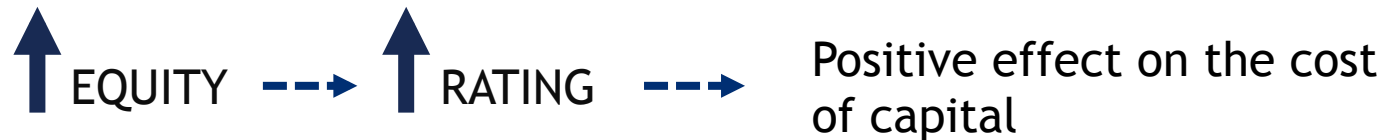
With this knowledge, an investor can even carry the company through very hard and difficult steps, such as a merger and acquisition (M&A) process.

The PEI plays the role of an advisor and mentor.

## 4. The Financial Benefit

The financial benefit is generated through the injection of cash in return for shares of the venture-backed company.

The increase generates the following effect on the cost of capital:



If a company needs at least one of the four benefits, then PE is the only choice; if not, there are other sources of financing, each suitable for the life stage where the company has that specific need.

# Financing and Life Cycle of a Company

	Founder & Family	Other Partners	Angels	Private Equity	Banking System	Trade Credit	Financial Markets
Development					These sources are not right for the company does not yet exist at this stage		
Startup					The risk is too high for banks (capital requirements)		
Early Growth							
Mature Age					To do something complex		
Expansion							Maybe for an IPO
Crisis or decline	It goes back to them					They disappear	

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## **3. Private Equity Clusters: Through the Fund's Life Cycle**

4. Seed, Startup, and Early Stage Financing
5. Expansion Financing
6. Replacement Financing
7. Vulture Financing
8. Private Equity and Venture Capital: Today and Tomorrow - Interview with *Fabio Sattin*

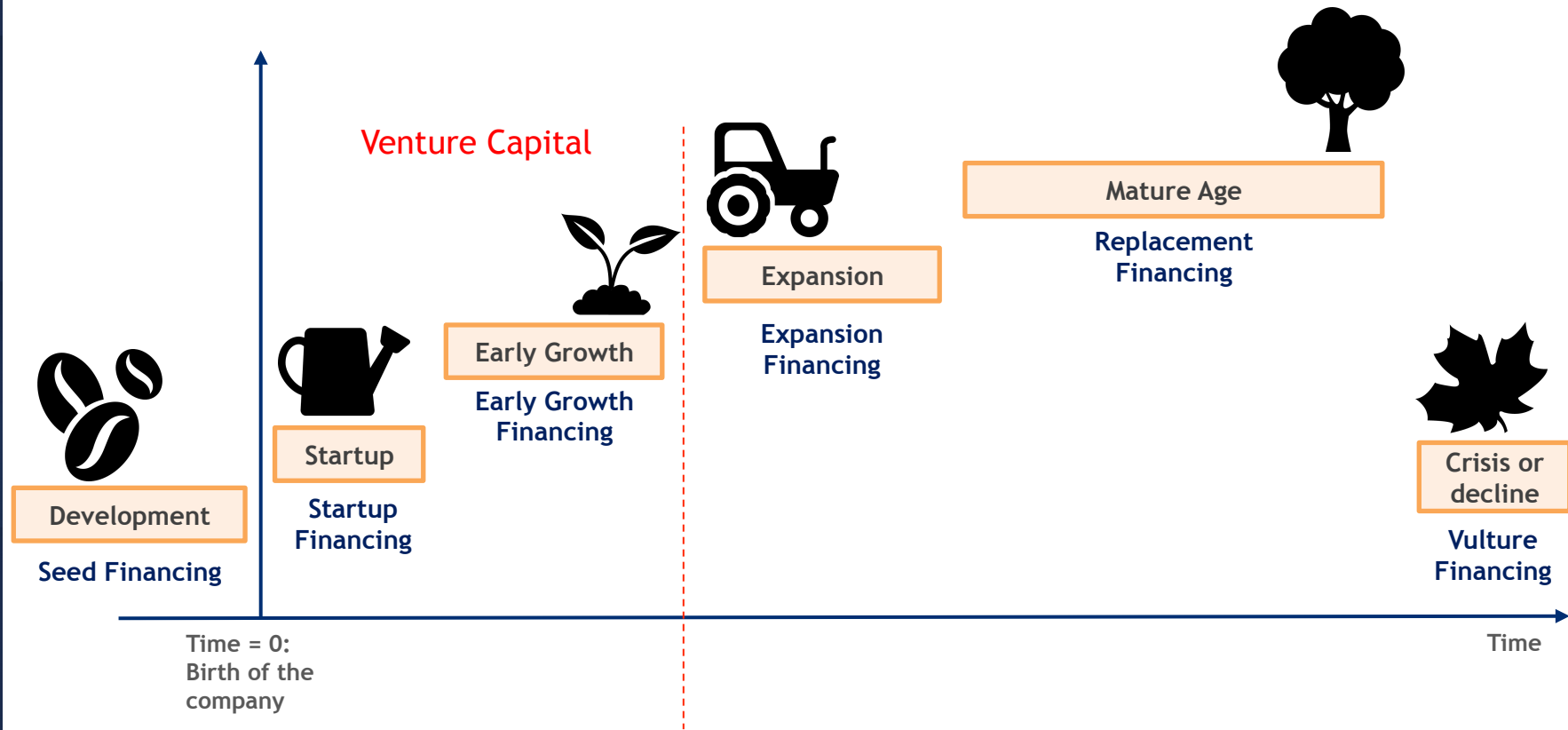
# The Taxonomy of PE Clusters

The life cycle of the company is important in two ways:

1. To understand *if* a company can use PE to accomplish its needs;
2. And to identify the different kinds of PE investment (and the right one).

As said in the first clip, the definition of PE is an **umbrella definition**: It identifies as many clusters as the numbers of the company's life cycle stages as long as it (the company) is not listed.

# The Taxonomy of PE Clusters





# The Taxonomy of PE Clusters

The six life stages each related to the suitable private equity investment are as follows:



## 1. DEVELOPMENT

The life cycle starts with development. It is the moment in which the founders start to create and try to develop the business idea.

The corresponding investment of the PEI is *seed financing*.



## 2. STARTUP

This is when the business actually starts. For this phase, the PE investment is called *startup financing*.



## 3. EARLY GROWTH

This represents the moment when the company start its growth. In the professional world, this is known as “the financing of the day after.” The PE investment is the *early growth financing*.



These kinds of investment make up the venture capital subsample.

# The Taxonomy of PE Clusters



## 4. EXPANSION

In this phase, the sales keep on growing at a very high rate. The corresponding investment of the PE is called *expansion financing*.



## 5. MATURE AGE

This is the moment when sales growth is stable. The PE investment is called *replacement*.



## 6. CRISIS

In the end, when (and if) the company comes across its decline, in this case the PE investment will be very hard and it is called *vulture financing*.

In each stage there is a different market and a different risk-return profile.

# The Taxonomy of PE Clusters

The PEI can either be a minority or a majority shareholder and depending on which it is, approach can be different:

→ **Hands-On:** The investor provides the support a company requires under the forms of the four benefits seen in the second clip and in addition they operate together with the entrepreneur.

→ **Hands-Off:** The investor provides the support the company requires in the forms of the four benefits seen in the second clip but the PEI does not give any additional support.

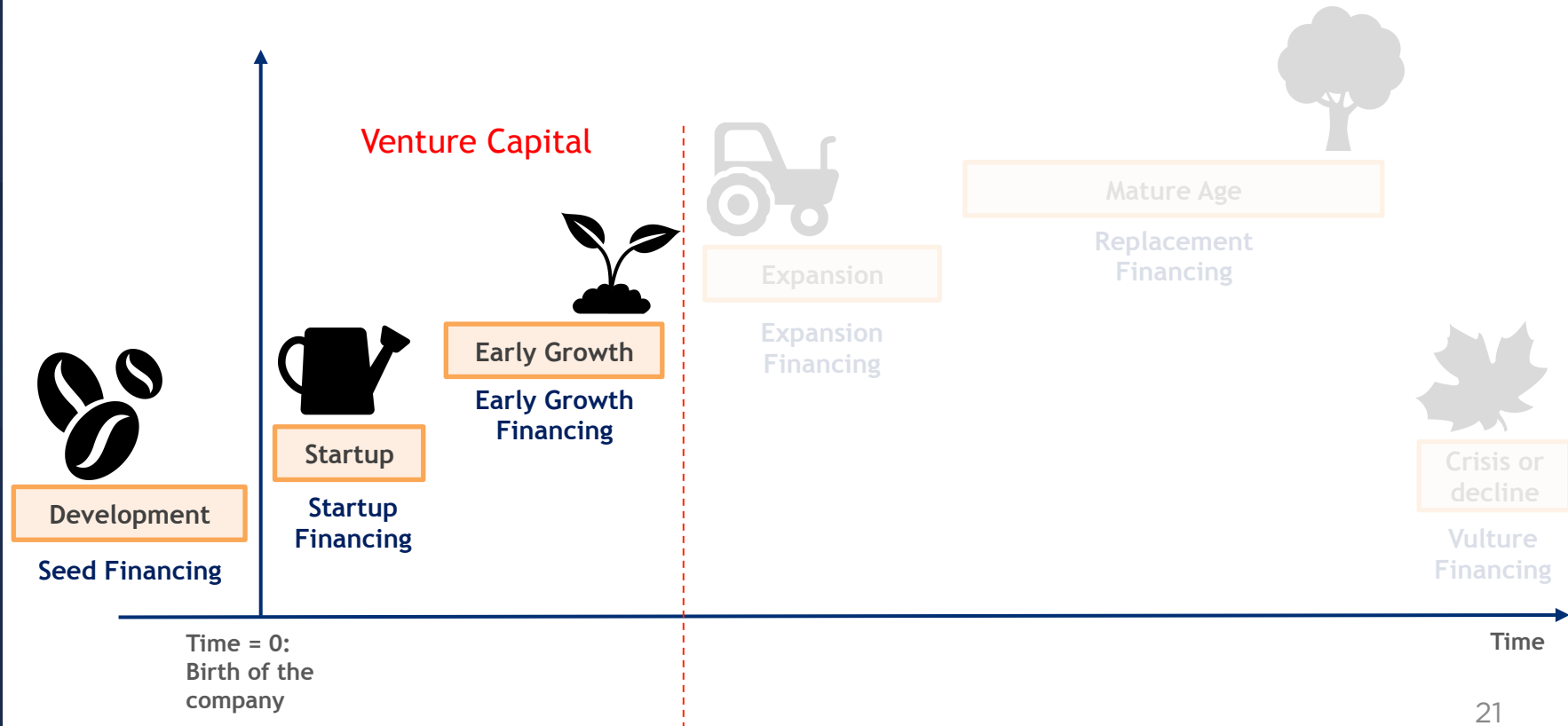
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# The Venture Capital Fundamental





# Seed Financing

The Seed Financing is the most complex and riskiest activity among the PE investment.

It is the investment of an idea or of an research and development (R&D) project, it is in fact very industry-oriented: it usually deals with the biomedical, IT, and the pharmaceutical industries / sectors. Under *seed financing*, the uncertainty of the project is high because the investor has to trust the idea of the entrepreneur. This is why the managerial role of the investor is very limited.

There are two levels of risk:

1. The capability for the idea to generate on output
2. If there is an output: does this output have a marketability?



# Seed Financing

Because this phase is very risky, there are three golden rules an investor needs to know:

## 1. 100/10/1 RULE

- The investor has to screen *one hundred* projects, finance *ten* of them and be lucky (and able) enough to find the *one* successful one.
- The activity is risky that you must invest on much more than one project. The investor needs to invest a huge amount of money. The “psychological threshold” is one billion €.
- By the time the investors find the winning project they will have lost much of their beginning investment.

## 2. SUDDEN DEATH RISK

- Because this investment occurs before the company is founded, the investors have to protect themselves in case the person owning the project’s idea suddenly can no longer perform his or her job.
- The solution to this risk is in the Incubator Strategy, an *ad hoc* infrastructure in which the inventor can work without worrying about his or her ideas being stolen.



# Seed Financing

## 3. SIZE OF THE MARKET

- The investors usually invest in the markets they know the best.
- Despite this, in some cases, the idea may be a good one without a market willing to buy it.
- Such is the case in which the investors look for venture philanthropy, set up by non-profit institutions with the investors themselves.





# Startup Financing

The Startup Financing is the financing of a new company starting its own initial operations.

The entrepreneurs and the founders' need of cash derives from the necessity to buy the necessary equipment to start (e.g. equipment, inventory, building, etc.) the business. In this kind of financing the risk is still very high, leading to a high level of protection for the investor.

The level of risk depends on the fact that the PEI is betting on a business plan. Because the investor is neither a non-profit organization nor a High Net Worth Individual (HNWI), there are several ways in which this can occur.

## 1. PUT OPTION

- This tool is used to sell back to the entrepreneur the shares the investor bought. This tool is quite dangerous: it assumes that if the business plan does not work, the founder will still have money to pay off the PE. For this reason, the put option may be used together with a second tool...



# Startup Financing

## 2. COLLATERAL

- This is a pledge for the investor over some valuable assets of the newly founded company and this is usually used together with the put option.

## 3. STOCK OPTIONS FOR THE INVENTOR

- Another way to reduce the risk the business plan is not accurate and reliable is to grant the inventor some stock options. In this way the entrepreneur will also enjoy the profitability of the company.

## 4. BALANCE BETWEEN MONEY AND SHARES

- The PEI needs to find the right combination between not losing all its investment (such is the case when the PE owns 95% of the equity) and not having any say in the management of the business (such is the case when the PEI owns 2% of the equity)
- For instance, for the investor the right balance would be owning 48% of the company.



In such case the PEI would have the right to lead the company but the founder is the owner of the company.



# Early Growth Financing

Early growth Financing is the financing of the first phase of growth of a new company that has started generating sales.

The entrepreneurs and the founders' need of cash derives from the necessity to buy inventory and to sustain the gap existing between cash flow and money needed. In this phase, the cash flow is still negative, but not as much as in the previous stages of life of the company.

The risk is still high for the PEI since it is investing in a very young company and when they make the injection, they do not exactly know how the company will turn out.

In this phase, there is a very hands-on approach. If the PEI thinks that the company is based on a good idea, but the business plan is not adequate, it helps rewrite the business plan (→ knowledge effect, *see Clip 2*).

For this reason the PEI usually has a high amount of shares in the equity of the company.

On average this financing occurs up to the end of the first three year after the startup stage.

In this kind of investment, the PEI may also not have any protections, due to the high stake in the equity of the company and to the adoption of a hands on approach.

# Conclusion on Venture Capital

After an overview on the venture capital different clusters, we can define some common features for this subsample:

1. The investment is often characterized by a high level of risk.
2. The PEI needs to have a hands on approach.
3. The PEI must have a very deep knowledge of the field where the company operates in.

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2. Why Companies Need Private Equity And Venture Capital?
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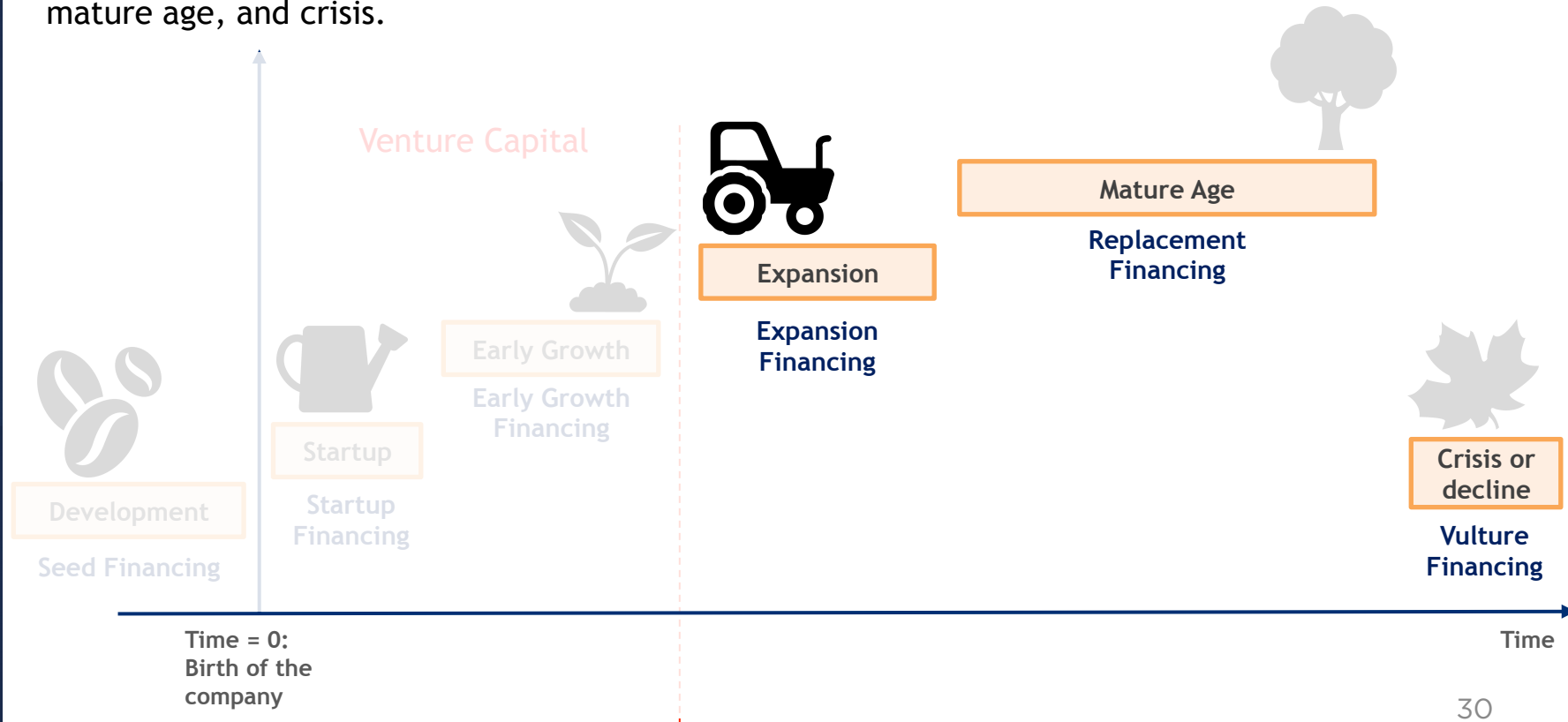
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# The PE Clusters

In clip 4 the venture capital has been presented. In the following Clips (5, 6, and 7), we will see the other clusters belonging to the PE family which are made for the phases of expansion, mature age, and crisis.





# Expansion Financing

The expansion financing takes place in the fastest phase of growth of a firm to consolidate its position in the market.

The investment is only used to sustain the (reducing) gap existing between the cash flow and money needed.

In this phase, the level of risk is moderate (and it mostly depends on the business) because the trend of development of the business is well known.

In this cluster the stake held by the PE is not usually very high.

The expansion financing deals are about the growth of a company.

In an adult company, growth can be:

1. Internal (or organic)
2. External



According to the growth a company finds itself in, the role of the PEI changes.



# Expansion Financing

## Internal Growth

We say that a company grows via internal growth when it plans to grow “by itself.” This means that investments in fixed assets and in working capital will be made.

The role of the PEI: the investor needs to provide money to the venture backed company in order to buy and/or sustain the procurement of working capital and to purchase new assets.

**Because this kind of deal is not difficult for a PEI, the offer is very wide and there is a very high number of investors providing this financing.**

This kind of financing can be an alternative to a loan.



**Why should a company choose PE over a bank?**

Because the need for extra money comes with other needs which can be accomplished with one of the four benefits seen in Clip 2.

There may be the need for the PE network or the need to build a good reputation.





# Expansion Financing

## External Growth

We say that a company grows via external growth when it plans to grow by acquiring another company (i.e. carry on an M&A) in order to enhance the level of sales and exploit the synergies coming from this operation. This path is much more complicated than the internal growth and it may be undertaken by an adult company in order to enter a new market.

**The role of the PEI:** the investor has to sustain the M&A and in this case, they not only have to provide the venture-backed company with the money necessary, but they also have to:

- a. Screen and scout the market
- b. Support the negotiation with the potential target
- c. Provide the Venture-backed Company with money
- d. Support the M&A process  
(also from a legal and a fiscal point of view)
- e. Legal and taxation support
- f. The integration process after the operation



**Hands on approach**

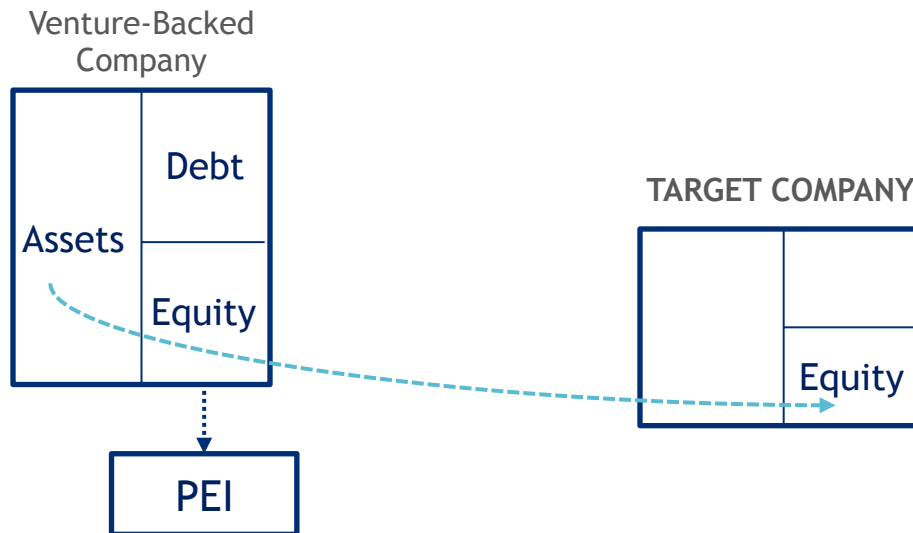


# Expansion Financing

## External Growth

The injection of money can be done in two ways:

1. The PEI invests in the venture-backed company, from which it gets shares and the company has to get enough money to carry on the M&A. If the process is successful the venture-backed company and the target will merge.





# Expansion Financing

## External Growth

### The PROs

The venture-backed company will merge with the target and the company will benefit from the synergies.

### The CONs

The venture-backed company is going to give the investor a portion of the synergies created.

In order to address this drawback, there is another way to do and M&A using PE.



# Expansion Financing

## External Growth

2. The second way in which this M&A can be done is as follows:

- The PEI builds a Special Purpose Vehicle (SPV). The SPV is an “empty box” built only for the purpose of a specific extraordinary operation. This company does not have any assets nor liabilities and equity before the operation takes place.
- The PEI and the venture-backed company collect money from the banking system and put the cash collected in the SPV.



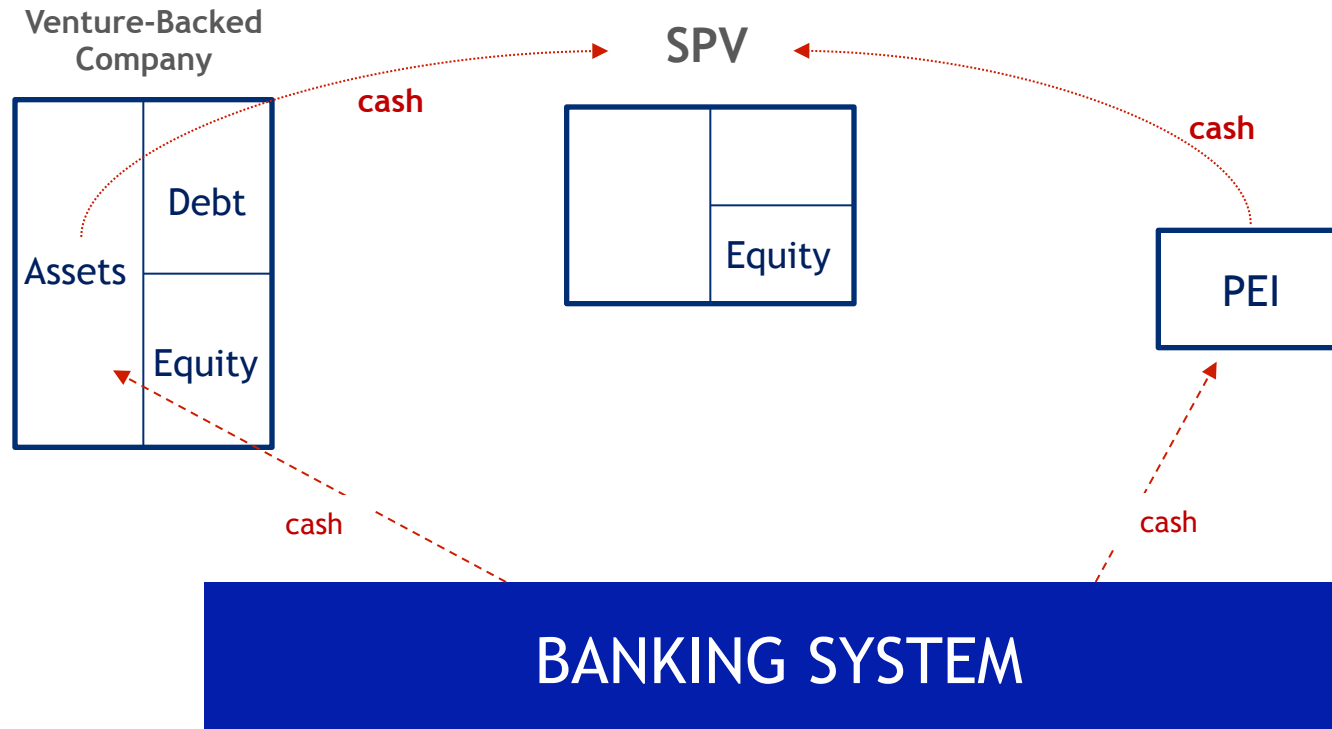
**In this way, they will have enough capital to buy another company.**

This option can be used in two cases:

- a. When the venture-backed company has got a huge financial need and it does not want to further increase the amount of debt.
- b. The company wants to keep the SPV as a separate entity, this happens when the company does not want the PEI to share the gain deriving from the M&A process.



# Expansion Financing External Growth





## **Expansion Financing**

### **External Growth**

In this way, the PE will not benefit from the synergies created.

On the other hand:

- This second option is more expensive than the first one;
- The PEI has a minor incentive in creating synergies (this may entail that lower synergies will be created)
- The company has to obtain financing from banks to invest in the SPV:

1. What Is Private Equity and Venture Capital?
2. Why Companies Need Private Equity And Venture Capital?
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4. Seed, Startup, and Early Stage Financing
5. Expansion Financing

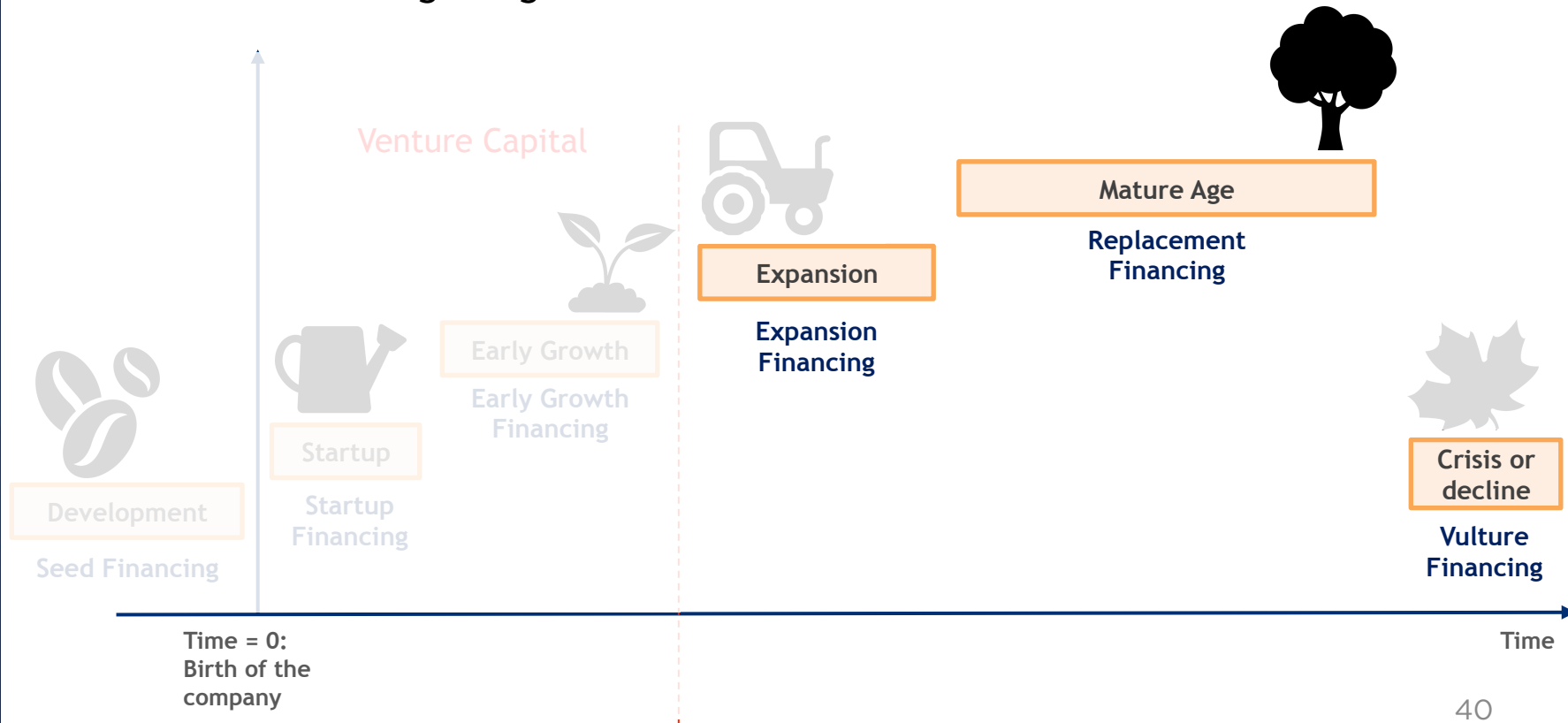
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7. Vulture Financing
8. Private Equity and Venture Capital: Today and Tomorrow - Interview with *Fabio Sattin*



# PE Clusters

Replacement Financing occurs when a company is beyond the phase of fast growth and is in the mature age stage.







# Replacement Financing

Replacement financing takes place in the mature age of a company and the role of the PEI is that of replacing an existing shareholder.

A company needs replacement financing when it wants to face strategic decisions linked either to governance, status, or corporate finance decisions. The level of risk is moderate and linked to the quality of the strategic process that has to be put in place.

There are three kinds of operations belonging to this cluster:

1. Leverage Buyout (LBO)
2. Private Investment in Public Equity (PIPE)
3. Corporate Governance (CG) Deals



These deals do not derive from the arise of need of money of a company.



# Leverage Buyout

LBO is very commonly used, especially in the Anglo-Saxon world, where they account for 45%.

The role of an investor is not only to finance the company but to identify the target company that the venture-backed company has to buy at 100%.

This operation takes place in the following steps:

1. When the PEI identifies the potential target, the PEI itself creates an SPV (*for the SPV definition, see clip 5*) of which it becomes the full owner (i.e. 100% shareholder).
2. The PEI collects money up and highly leverages the SPV up to a ratio of 90% debt and 10% equity.
3. The SPV receives a huge amount of cash through which it is able to purchase the target company.



# Leverage Buyout

4. The SPV buys the target company either through a negotiation process or through a hostile process and through an IPO on the stock exchange. The aggressiveness of the operation depends on the level of debt used by the PE to buy the target company.
5. The PE fully owns the target company.

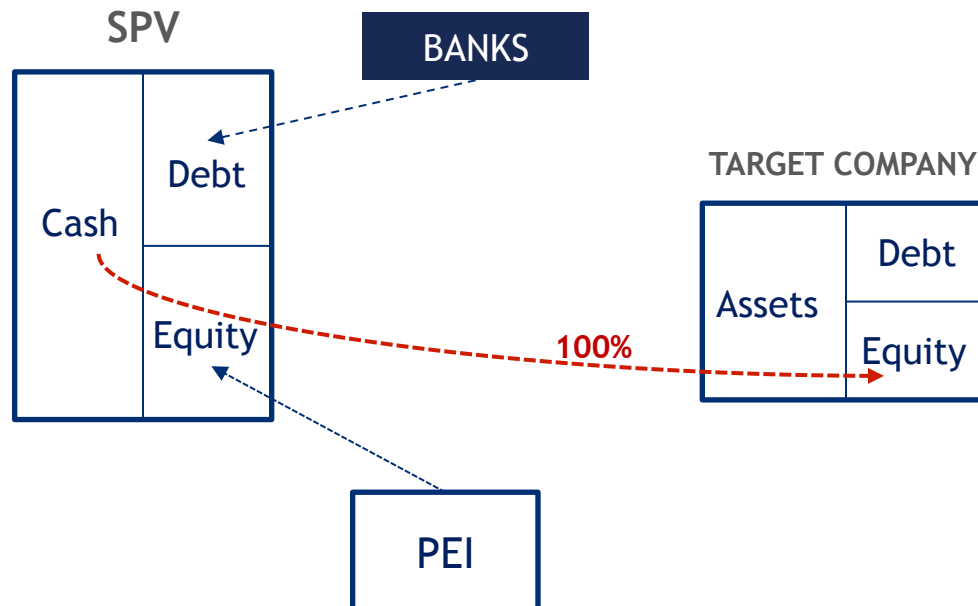
After the acquisition, the PE will sell the target to another company.



# Leverage Buyout

The target company usually has:

- Relevant Cash Flow
- Low D/E ratio
- Assets that can be easily sold on the market





# Private Investment in Public Equity

PIPE is a investment made in a company listed in a stock exchange.

Even though the investment is made in a public entity it still belongs to the PE world: the profit mechanism is still not related to the stock exchange.

This deal is not done with trading purposes. The purpose is to buy a minority stake and then to sell it to another potential shareholder at a price not based on the stock exchange (which usually is three - four times bigger). This stake has to be big enough to become the biggest shareholder.

To make this deal work the PEI has to understand the small amount of shares which is necessary to be the owner of the company. For this reason, these deals can become very aggressive.



# Corporate Governance Deals

CG deals, just like PIPE, do not derive from financial needs of the company.

The PEI invests in a company to manage the redesign of the corporate governance. These operations occur particularly when there are problems in the management succession.

In the case of corporate governance deals there is a reputational risk, rather than a financial one.

1. What Is Private Equity and Venture Capital?
2. Why Companies Need Private Equity And Venture Capital
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4. Seed, Startup, and Early Stage Financing
5. Expansion Financing
6. Replacement Financing

## 7. Vulture Financing

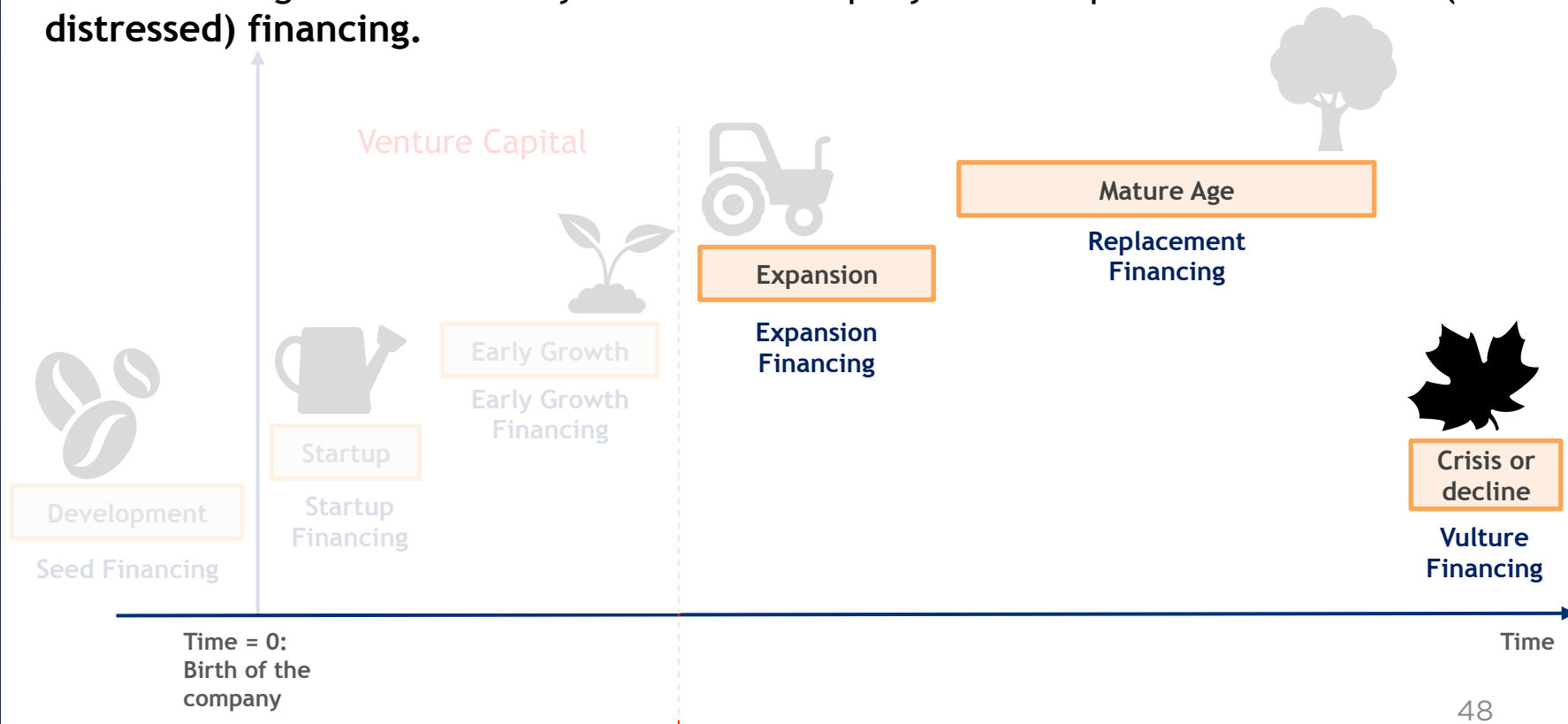


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# PE Clusters

This is the final clip related to PE clusters.

The final stage of the life cycle of the company will be presented: **Vulture (or distressed) financing**.





# Vulture Financing



Vulture financing takes place in the final stage of a company's life cycle, when it enters its decline phase or, worse, a crisis.

Money is used to sustain the financial gap generated from the decline of growth. The financial aid coming from the PEI is used to launch a survival plan.

Due to the life stage, this activity is very risky, even though the level of risk also depends on the sector of the venture-backed company. For this reason, the PEI fully understand the field in which the company operates.



# Vulture Financing

There are two deals included in this definition:

1. Restructuring financing (or turnaround)
2. Distressed financing

The separation of the vulture financing in two different kinds of deals derive from two different ways to differently regulate the deals.

# **Restructuring Financing**



In restructuring financing, the company is facing a crisis, but is still alive.

The need of financing derives from the settlements of debts with banks and with suppliers. At the same time, money can be used to re-launch the business, therefore in some cases money can be used to buy further assets or invested to redesign the business plan.



**The company needs the strategic support from the PEI**

These strategic needs make the PEI not only a financier for the troubled company but also an **advisor**.



# **Restructuring Financing**

Because the risk is very high due to the strategic nature of the role of PE, the investor is a majority shareholder: there is a very strong hands-on approach and this needs a majority stake in the equity of the company.

For the high difficulty of the deal and due to the elevated riskiness of these projects, it is very difficult to find a PEI investing in such deal, it is more of an investment banking activity.



# **Distressed Financing**

Contrarily to replacement financing, distressed financing is a very common deal for PEI and it occurs when the company is dead.

This may look a bit contradictory to the other clusters of PE in which the main goal of a PE deal is to finance a company finding itself in the need of money.

The aim of PE is not in fact to merely finance the company, rather to buy the relevant (and valuable) assets of the company.

In this case, an investor is going to buy:

- Patents
- Brands
- Contracts
- Equipment
- ...

# **Distressed Financing**



Why would a PEI want to buy the assets of a defaulted company?

1. In some cases, the PE may be a trader of assets. This means that the investment is made only to sell such assets to a third buyer.
2. In other cases, the PEI buys the assets because it inserts them in other venture-backed companies in its portfolio.

The assets are bought before a court, and the negotiation process can be tough between the court and the investor. As a matter of fact, it is a desire of the court to maximize the liquidity of a company when it goes bankrupt, so that it can pay off its debts.

Sometimes the court implements the “**poison pill**.” This means that the PEI is going to buy a valuable asset mandatorily together with another less valuable assets or together with a debt of the company.

These deals work differently according to the different countries. In the US, these deals work very well: there is a chapter in the United States Bankruptcy Code dedicated to the distressed financing (Chapter 11) (find out more about Chapter 11 at [this link](#)).

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## Who Is Fabio Sattin?



Founder of a Private Equity Firm: Private Equity Partners

Chairman of the EVCA in the past.

Professor of “Private Equity and Venture Capital” at Bocconi University



## Q&A

Today, what is state of the art in private equity and venture capital all around the world?

*“Today PE is an engine for the economic growth, especially for Europe and Italy.*

*As for Europe, one of the main hurdles is made up of the big role the banking system plays (huge difference with respect to the US).*

*In Europe, There is the need to create a new financial intermediary, not “banking-related,” which should possess specific knowledge on companies and their development and this is why PE can be (and is) so important in Europe.*

*Nowadays we can see an increasing interest in private debt, again standing as a signal that PE in Europe plays a fundamental role.”*

## Q&A

According to you, are Europe and the US are two different worlds concerning private equity?

*“There is a European way to play PE which is very different from the American one.*

*I recall that years ago the, then Italian Ambassador, a big PE player in the US, once said that Europe is a completely different market.*

*Why is that? Europe (excluding the UK) can be taken as one very big country with many family businesses and PE can help them to develop → this changes the approach a PE has when investing in a family business.*

*We can say that PE has adapted also to invest in each specific country. Basing on my experience in the US, I can tell that in continental Europe, PE players support generational change: again, a different way to do PE.”*

## Q&A

What are the key trends in the market for private equity and venture capital?

*“After the financial crisis, today PE is definitely changing like many other industries.*

*In the first place there is a problem at the fundraising level, which has become more difficult and PE firms had to come up with new strategies to do fundraising, like club deals, co-investments, SPACs.*

*The second problem is the fees’ structure. The fact that the fees are calculated on the committed capital is under a review process by many funds.*

*Again, I see many sovereign funds investing in PE.*

*On the deal-side, in Europe SMEs are the main target for PE investments (€ 45 bio invested each year).*

*In the future, I think that the investments may have a different structure.”*

## Q&A

The industry is changing: new strategies are coming up, in the US we see majority investments, whereas we see minority investments in Europe. How do you see the market in terms of strategic choices of the biggest players in the market, as the company of yours?

*“One of the most important aspects is the fact that in Europe most deals are not very large. In addition, minority investments will still make the majority of the deals.*

*For these reasons, PE firms are boosting their industrial skills in order to enhance their industrial know how → PE is not a replacement for the managers, they are active owners, not active managers.*

*Having said that, it is necessary for the PE investors to have a solid knowledge of the company and of the sector in order to help companies to develop their strategies.*

*This must be done without overlapping the role of the management team.”*