

# Investing in (Re)Development

## Development Process

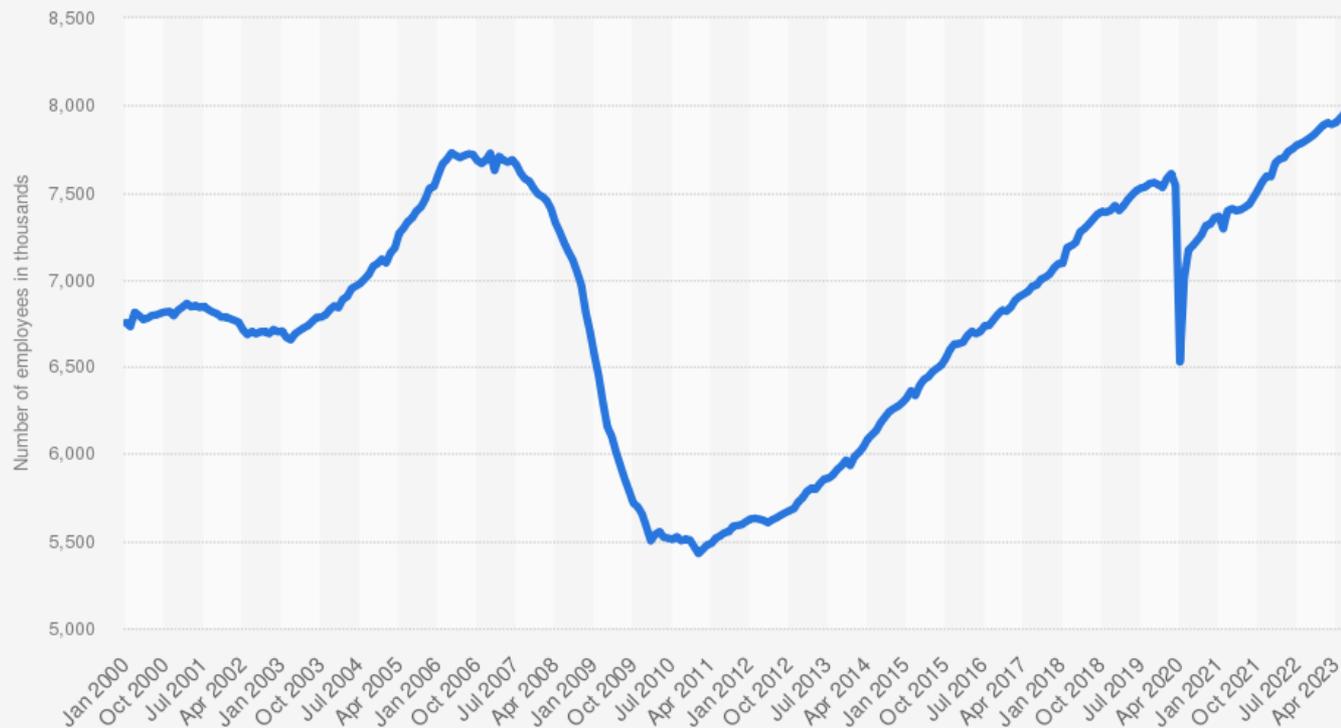
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April, 2025

**UConn**

# 1 Introduction

**Number of employees in the construction industry in the United States from January 2000 to July 2023 (in 1,000s)**



**Sources**

Bureau of Labor Statistics; St. Louis Fed  
© Statista 2023

**Additional Information:**

United States; January 2000 to July 2023; The figures for the last two months are preliminary.

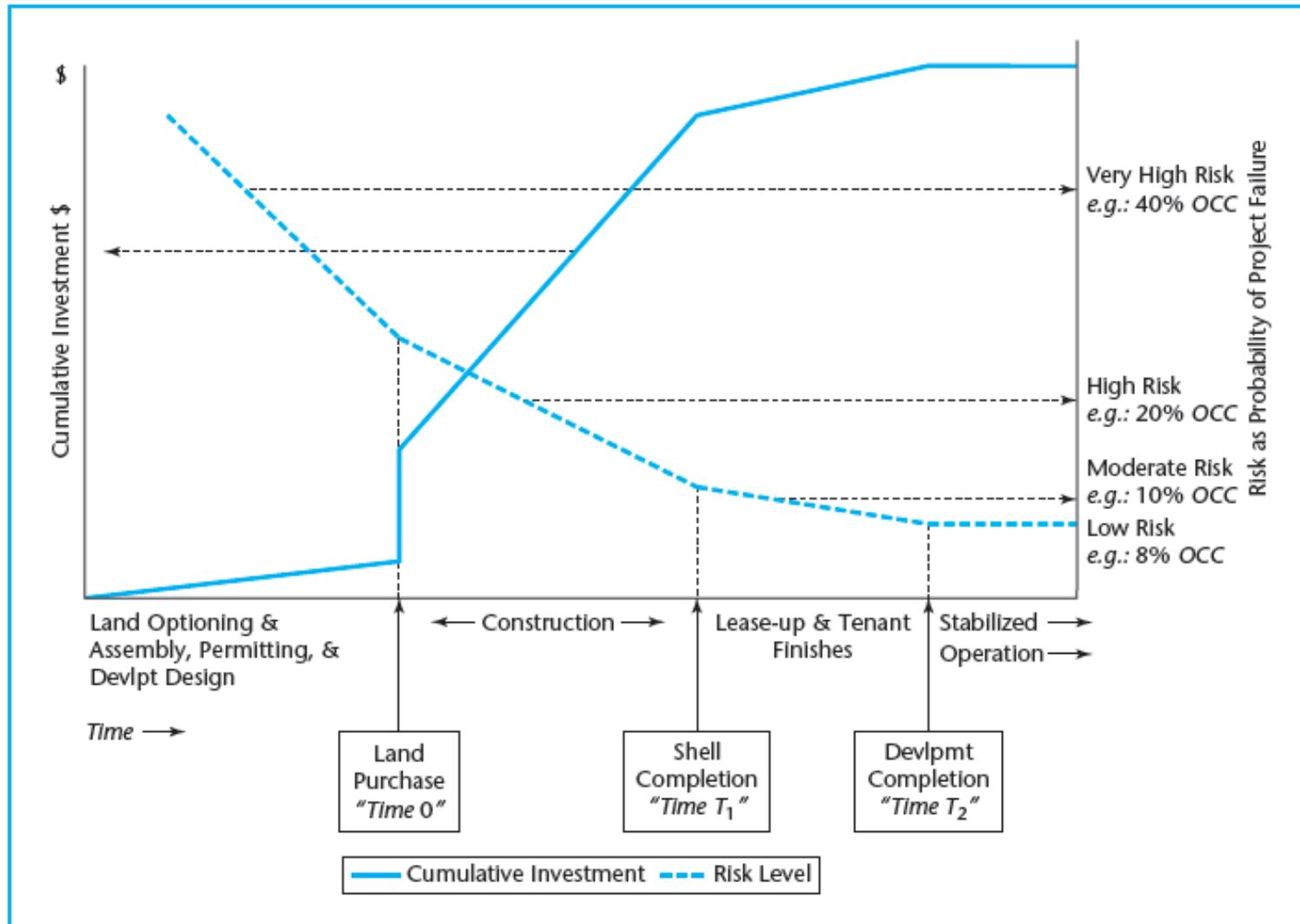
# 1 Introduction

## What are we going to do during this class:

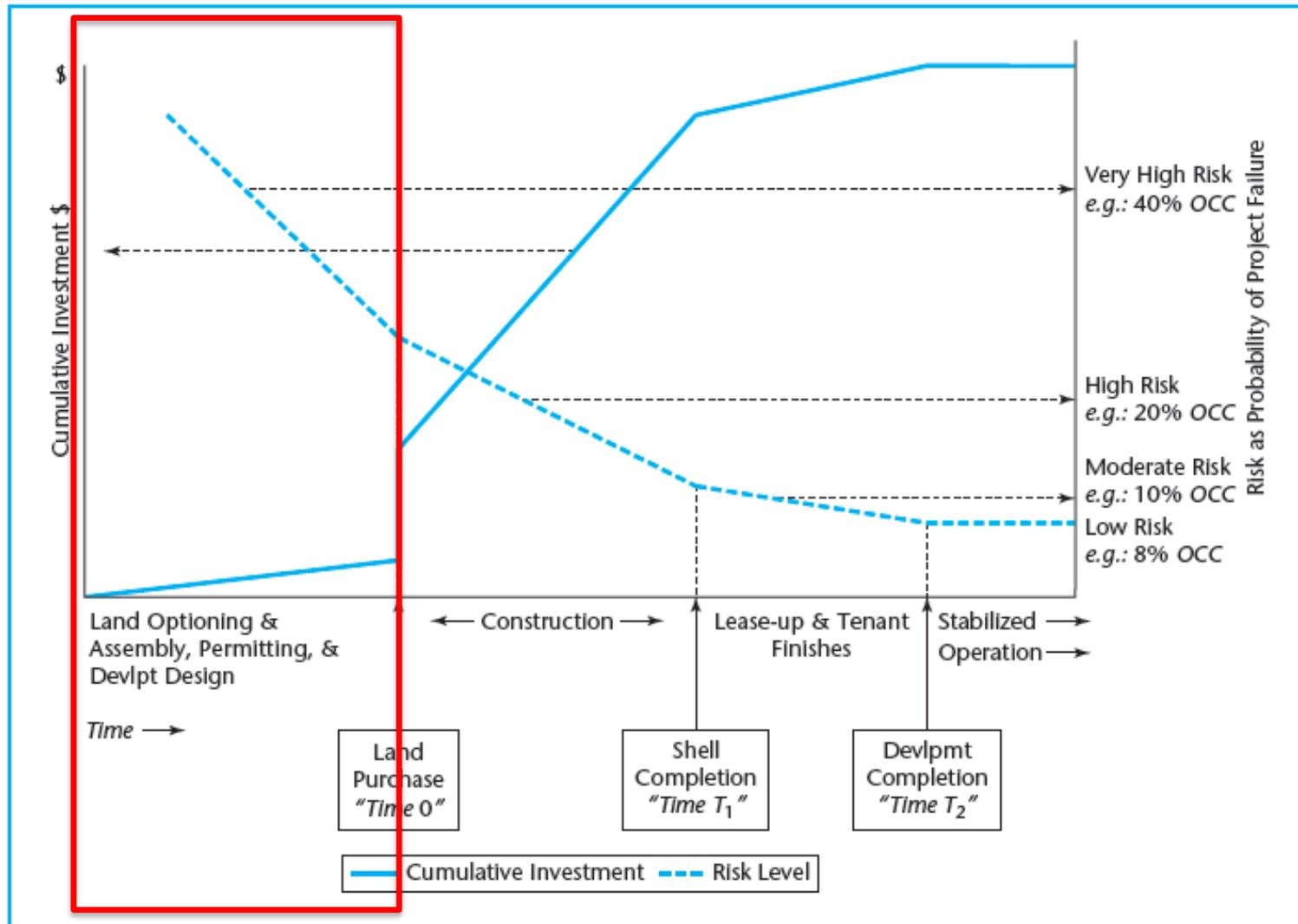
- Development is very important for many reasons.
  - Housing alone contribute 17% tot total GDP, mostly via renovations and developments.
  - You can actually add value with developments!
- Today we will look at the development process in overview.



# The four stages of development



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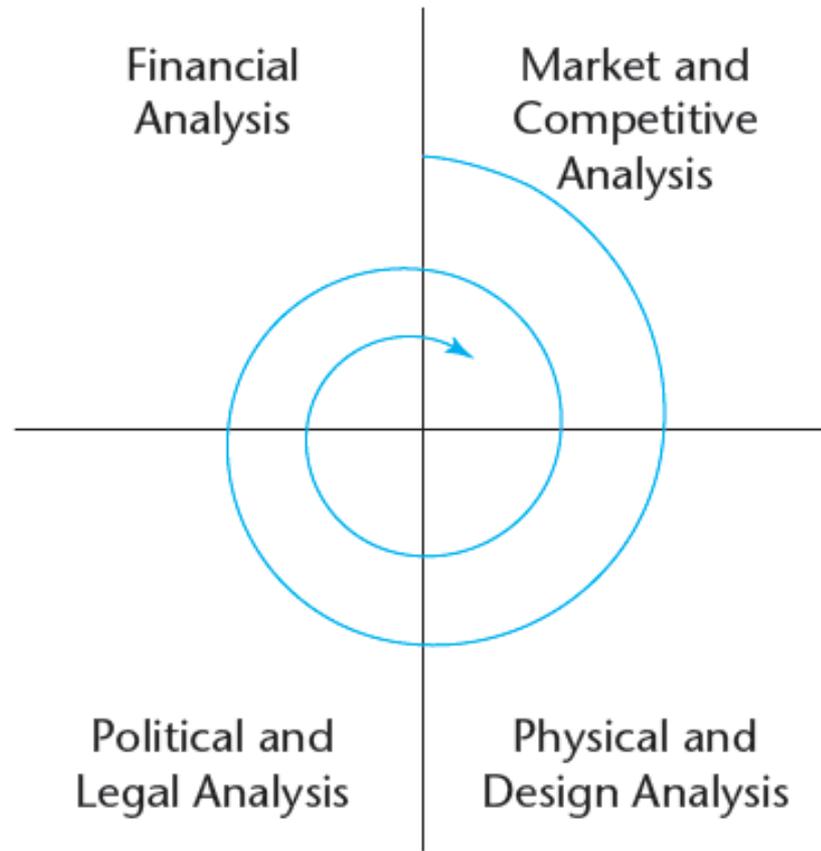
# Highest and Best Use

- Graaskamp famously that development can be described by two scenarios;
  - There is a site looking for a use.
  - There is a use looking for a site.
- With the first, you already own a piece of land, and you are looking for the HBU of that site. Thus, the main focus of such an exercise is the find HBU, etc.
- The second mostly occurs when a developer has a special expertise, like biotech space or senior-oriented housing. We find a lot of retail specialization in the real world. In this case you have to find to perfect location (demand-wise and competition-wise) for your new property.

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# Site looking for a use



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- Development will cycle through analysis from at least four different disciplinary perspectives;
  - **Urban economics.** Knowing the real estate space market.
  - **Architectural/engineering.** Physical analysis.
  - **Legal/political.** Think of zoning restrictions, etc.
  - **Financial economics.** Knowing the real estate asset market, and the borrowing market.
- Obviously, our focus is on the feasibility of developments. However, development is very tricky and needs input from multiple disciplines, and one good entrepreneur to put it all together!

# Site looking for a use

## General flow:

- Find the Highest and Best Use of a plot of land.
- Make a design and get all necessary permits.
- We are going to discuss;
  - The cost-side. Known as the **construction and absorption budget**.
  - The benefit-side. Also known as the **operating budget**.
- In order to know how much the property will sell for, you will need to do a DCF of the finished property!
  - However, it will only be finished in a year or two. What to do?
- Purchase (or option) the land (assemble) and find a limited / money partner.
- Find as many tenants as possible.

# Cost of Construction

- We typically divide construction costs into two subgroups;
  - **Hard costs.** Direct cost of the physical components of the project, like building materials and labor.
  - **Soft costs.** Basically, everything else, like design, legal and interest rate on the construction loan. (I.e. financing costs.)
- Where the land acquisition cost or opportunity cost of land is placed depends on who you ask.
  - It is also sometimes a completely separate item to make it even more confusing...

# Cost of Construction

## Hard costs

- Land cost\*
- Site preparation costs
- Permits
- Contractor fees
- Management and overhead
- Materials
- Labor
- Equipment rental
- Tenant finish
- Developer fee

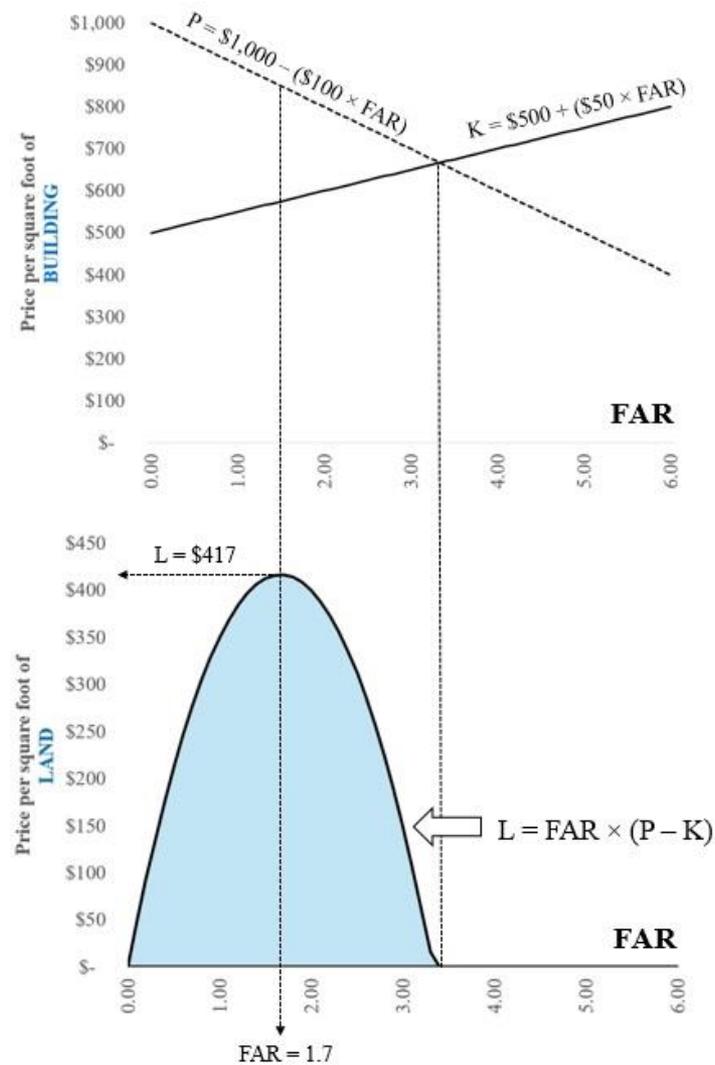
## Soft costs

- Loan fees
- Construction interest
- Legal fees
- Soil testing
- Environmental studies
- Land planner fees
- Architectural fees
- Engineering fees
- Marketing cost
- Leasing commissions

# Cost of Construction

- Other than costs associated with constructing the physical asset, there are also so-called **absorption** or **lease-up cost** for income producing properties.
  - This absorption budget is necessary when a project is built at partially **on spec**. In other words, the property was not pre-leased at the time of the development decision.
- You need an absorption budget until at least;
  - **Property-level**; current building is break even on a current cash flow basis.
  - **Financial-level**; until the building is at or near its expected long-term occupancy level. Only at this point is the property “stabilized” (meaning it has the expected risk/return profile). This is also the moment you can get a permanent loan.

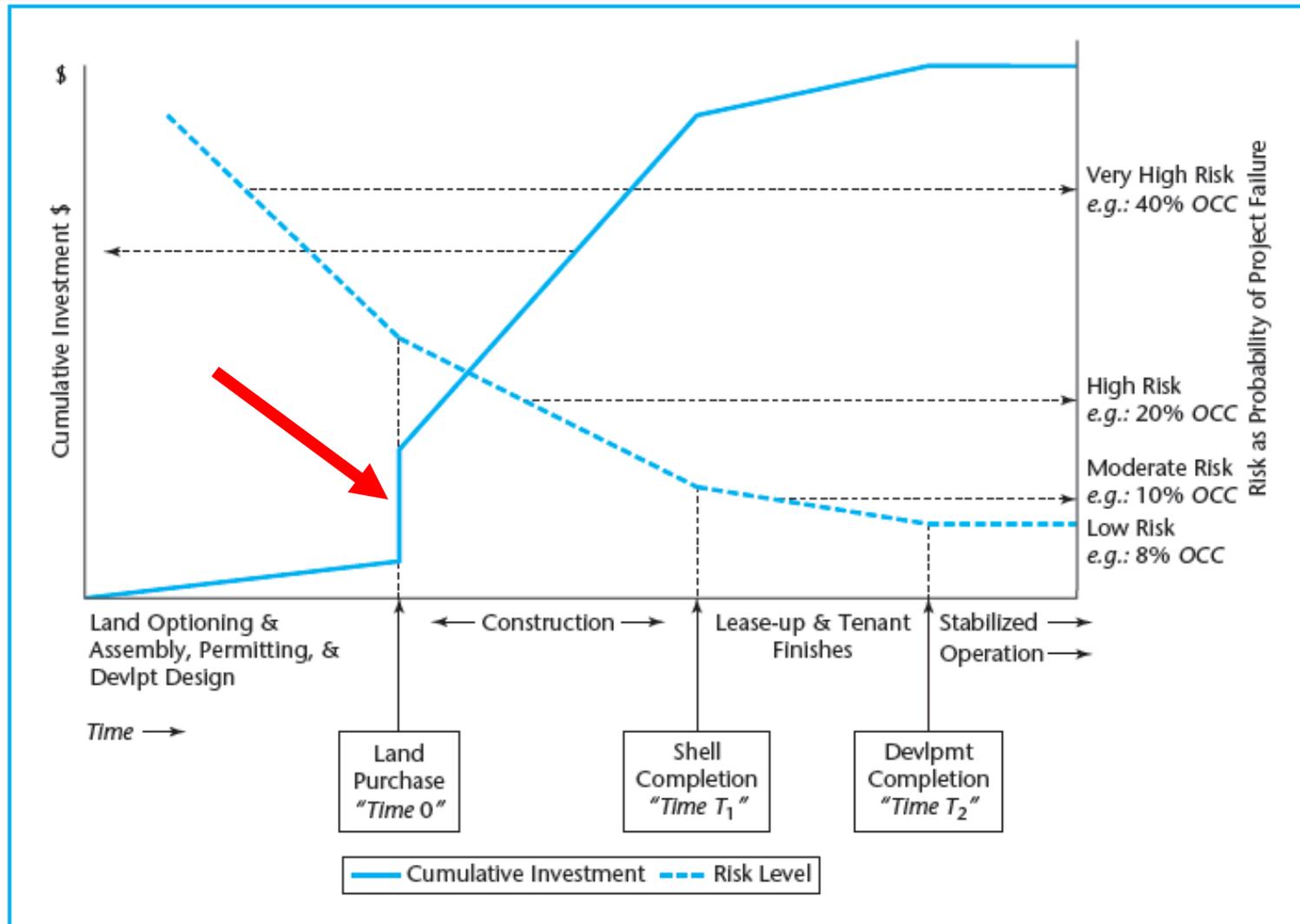
# Finding FAR



# Stage 1: Preliminary state

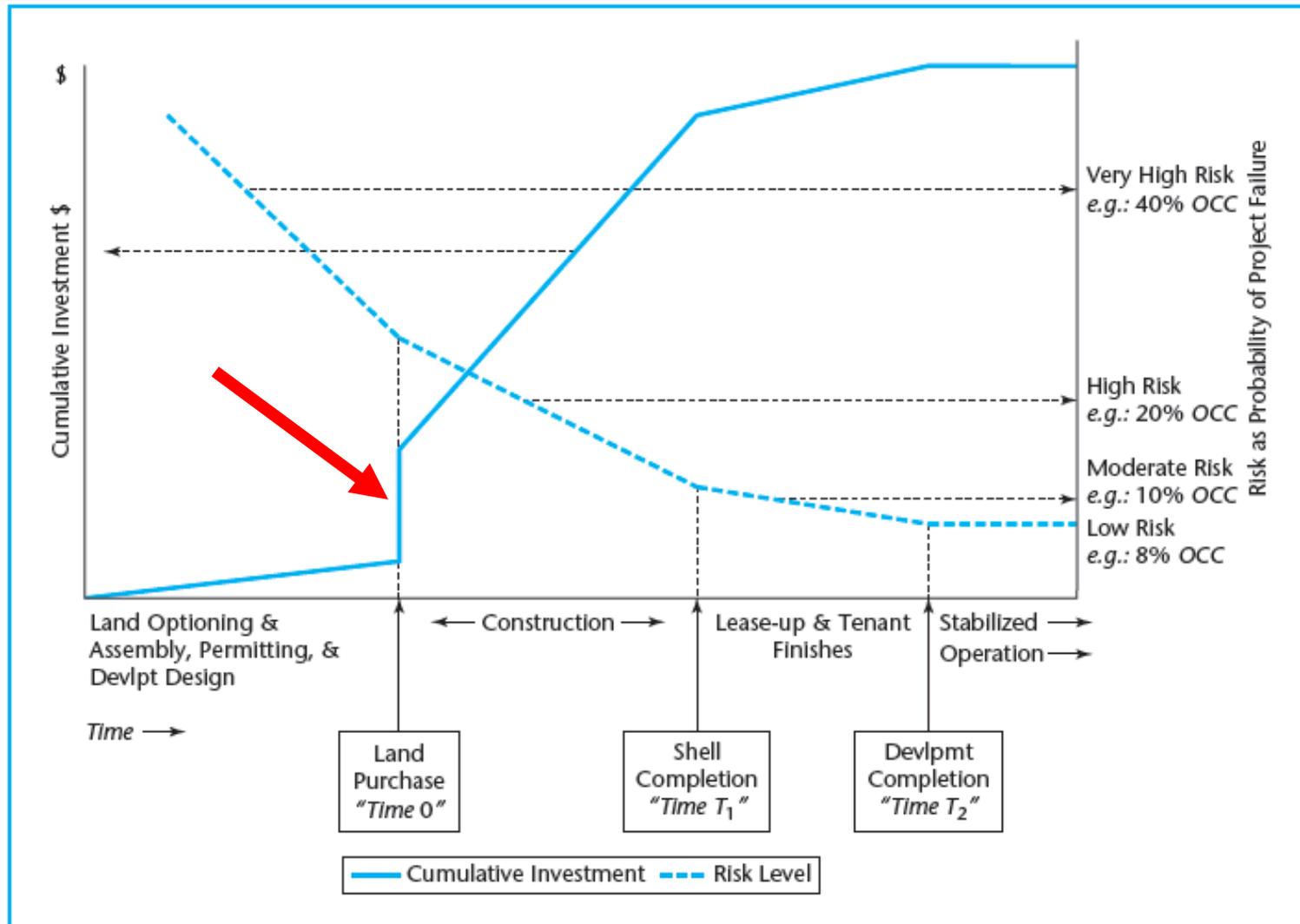
- Most creative and entrepreneurial time of the project!
- This phase of development can include;
  - Optioning and assembly of separate land parcels or infrastructure requirements.
  - The design of the project.
  - Doing a Highest and Best Use analysis of the project.
- This phase is characterized by the highest degrees of iterations between the disciplines described before.
- This phase is where the most value is created! **It is also the stage where you have the most risk** (it is basically land speculation), even though the invested amount is relatively small.
- At the end of this stage, you have the right to start construction.
- This phase can take decades!

# Intermezzo: What happens here?



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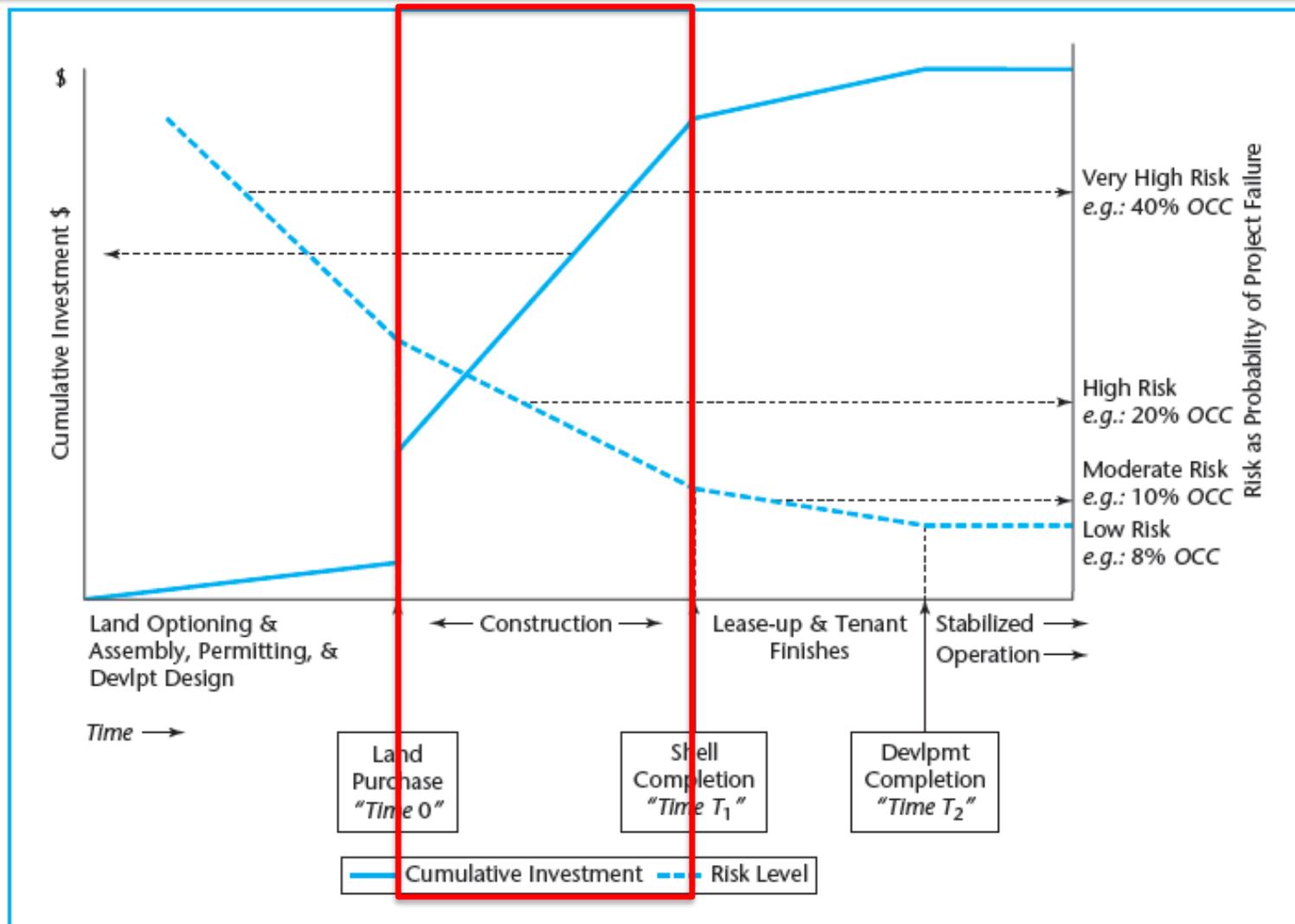
The land is bought here!



# Partnership structure

- General partner (the entrepreneur) needs a limited partner for two reasons;
  - The GP simply does not have the money.
  - The bank (for construction loan) requires collateral, something a GP typically doesn't have.
- The deal is usually structured as a **waterfall**. This works;
  - Less risk for the LP. It gets a preferred return.
  - The GP supervises the development process and get compensated for this.
  - The GP can get huge returns and is therefore incentivized.

# The four stages of development



# Stage 2: Construction

- This is the moment where the bulk of the capital expenditures take place.
- Here you pay for the entire construction cost of developing the site.
- This phase is risky for two reasons;
  - In many/most cases, the building is leased-up before construction starts. Thus, it is not known for certain what the occupancy will be. (A space market risk.)
  - Development investments inherently contain “**operational leverage**”, even if there is no loan, because you **have to pay the construction costs**, no matter how much the property is worth at completion.
    - Suppose construction costs are \$70M, and you bought the land for \$20M, and the present value of the constructed property is \$100M. What happens if this present value happens to be 10% less?

# Cost of Construction Loan

- As we noted earlier developments are financed by a temporary construction loan.
- You typically **do not pay interest** while the development is underway.
- In contrast, you pay back the principle and **the full accrued interest** after the loan is refinanced to a permanent loan.
- A construction loan is typically not a lump sum amount, but rather a maximum is negotiated, and as the construction moves forward, funds are **drawn out**.
- The construction loan provider, typically will check the development status during the process.

# Cost of Construction Loan

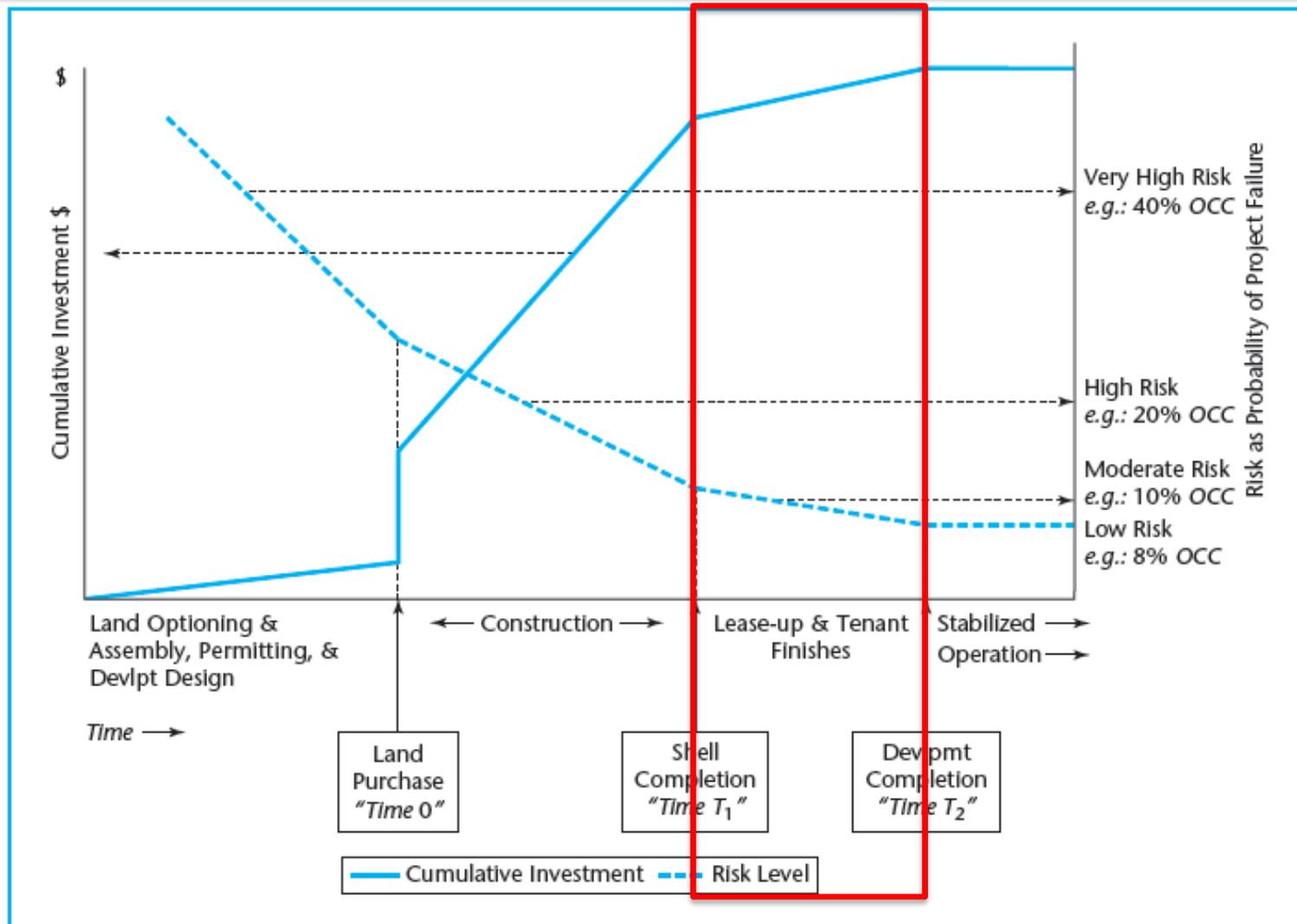
- Say you have a loan with 8% **annual** interest.
  - Thus monthly interest is 8%/12.
- The new loan balance increases because the principle is not paid.
- At the end, the new loan balance is \$2.78M, whereas the withdrawn amount is \$2.75M. The difference is the accrued interest.

Month	New Draw	Current Interest	New Loan Balance
1	\$ 500,000	\$ 3,333	\$ 503,333
2	\$ 750,000	\$ 8,356	\$ 1,261,689
3	\$ 1,500,000	\$ 18,411	\$ 2,780,100
4 and so on			

# Cost of Construction Loan

- The lender typically checks whether or not all previous work has been done.
  - For smaller project just showing the receipts of all subcontractors is enough.
  - For bigger projects, the lender might send inspectors.
- There is always a contingency budget of around 5-10%.
- The construction lender, also typically requires that the developer already obtains a commitment in advance from a permanent lender.
  - This is also why the permanent loan is sometimes referred to as a **take-out loan**.

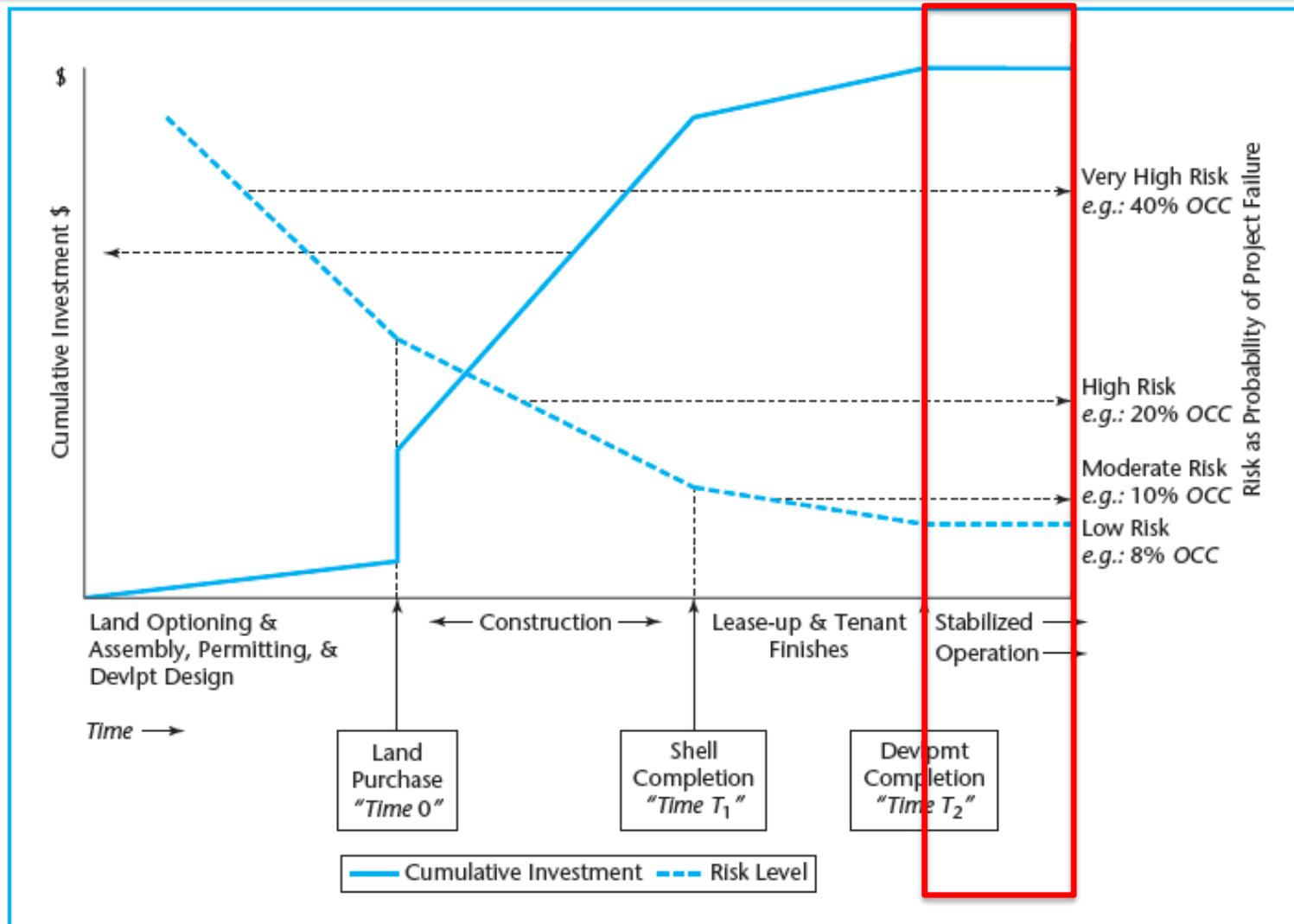
# The four stages of development



# Stage 3: Leasing up & Tenant Finishes

- This stage starts when the outer shell is done.
- The inside can be finished.
- However, it is quite common that (in case of long-term leases) the future tenants are involved in finishing up the inside.
  - Both tenant and developer can pay for such finishes, it really depends.
- Less capital needed, and also less risky by now.
- Together with the construction phase, both phases represent the development project.
- The development can take several years.
- Sometimes, with multiple buildings for example, this phase itself might be subdivided into multiple stages. Flexibility!

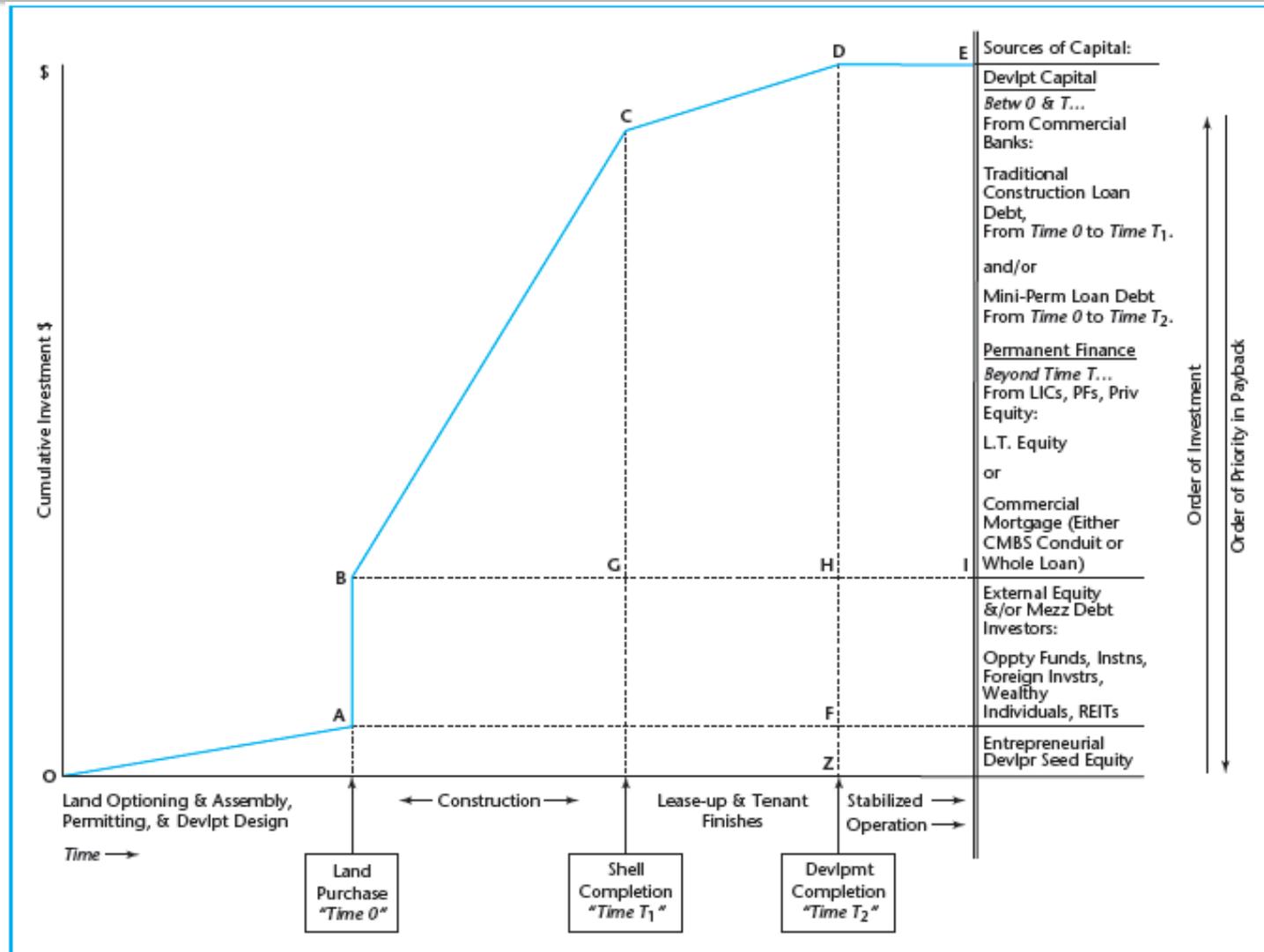
# The four stages of development



# Stage 4: Stabilized

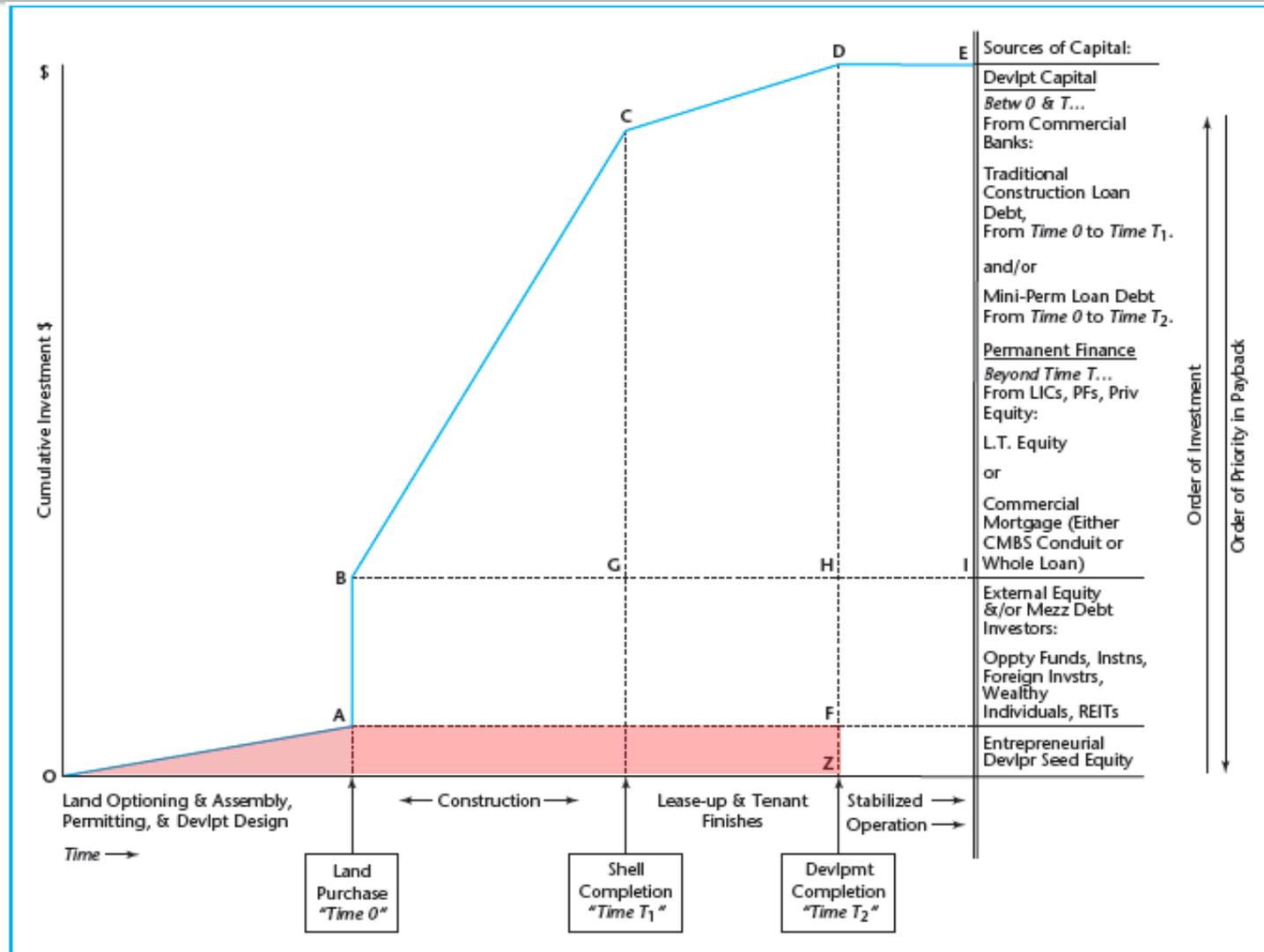
- At the end of the development, we have a stabilized property.
- It now operates at its long-run steady-state level of profitability.
- Usually, this means recapitalization;
  - Different investors are in the market for such low-risk property.
  - The construction loan will be retired, by replacing it with a “permanent” commercial mortgage on the property.
- Starting from now, we can use the tools we developed earlier to do our investment analysis on the existing property.

# Sources of Debt



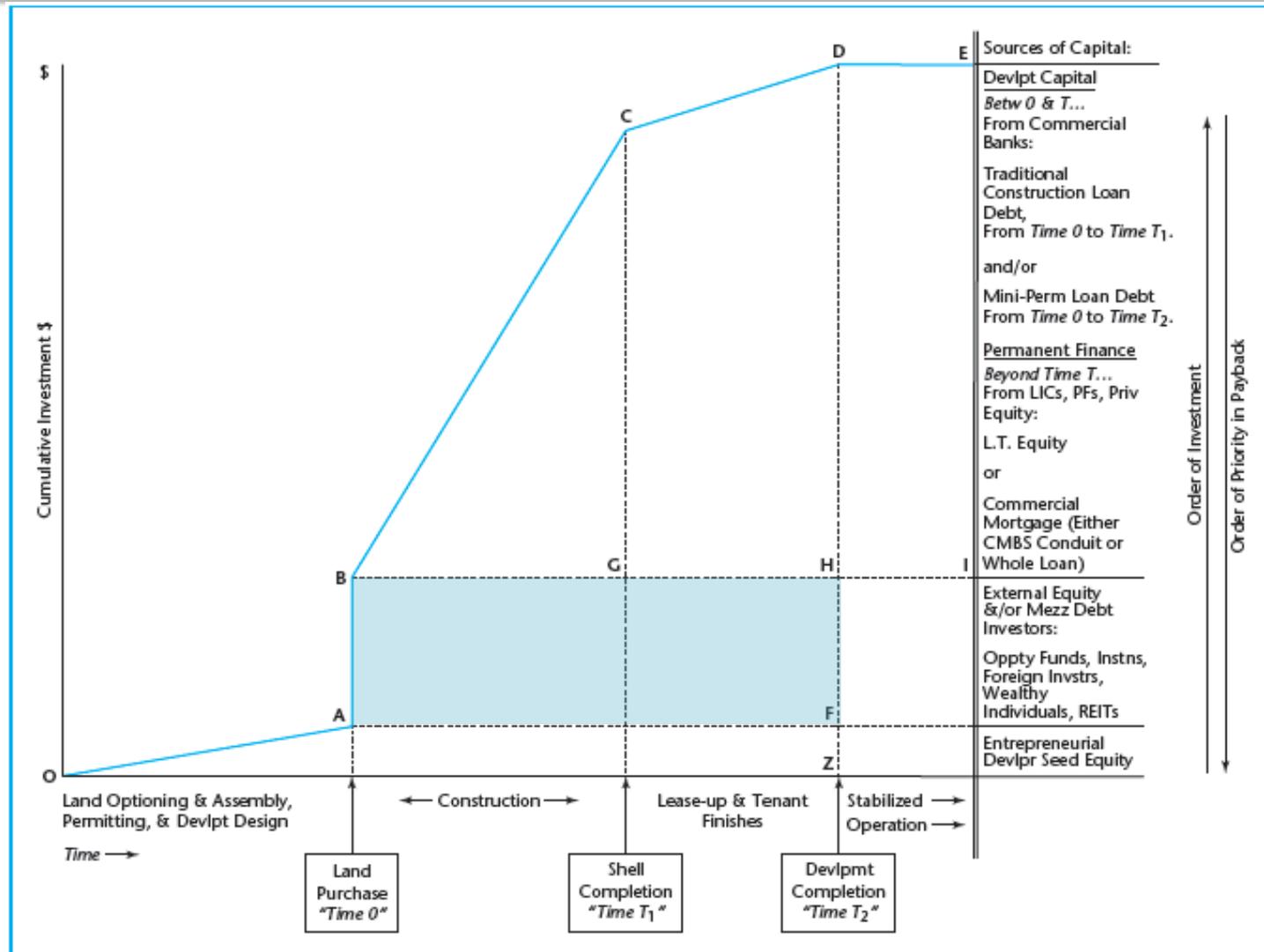
# Sources of Debt

Entrepreneur's money



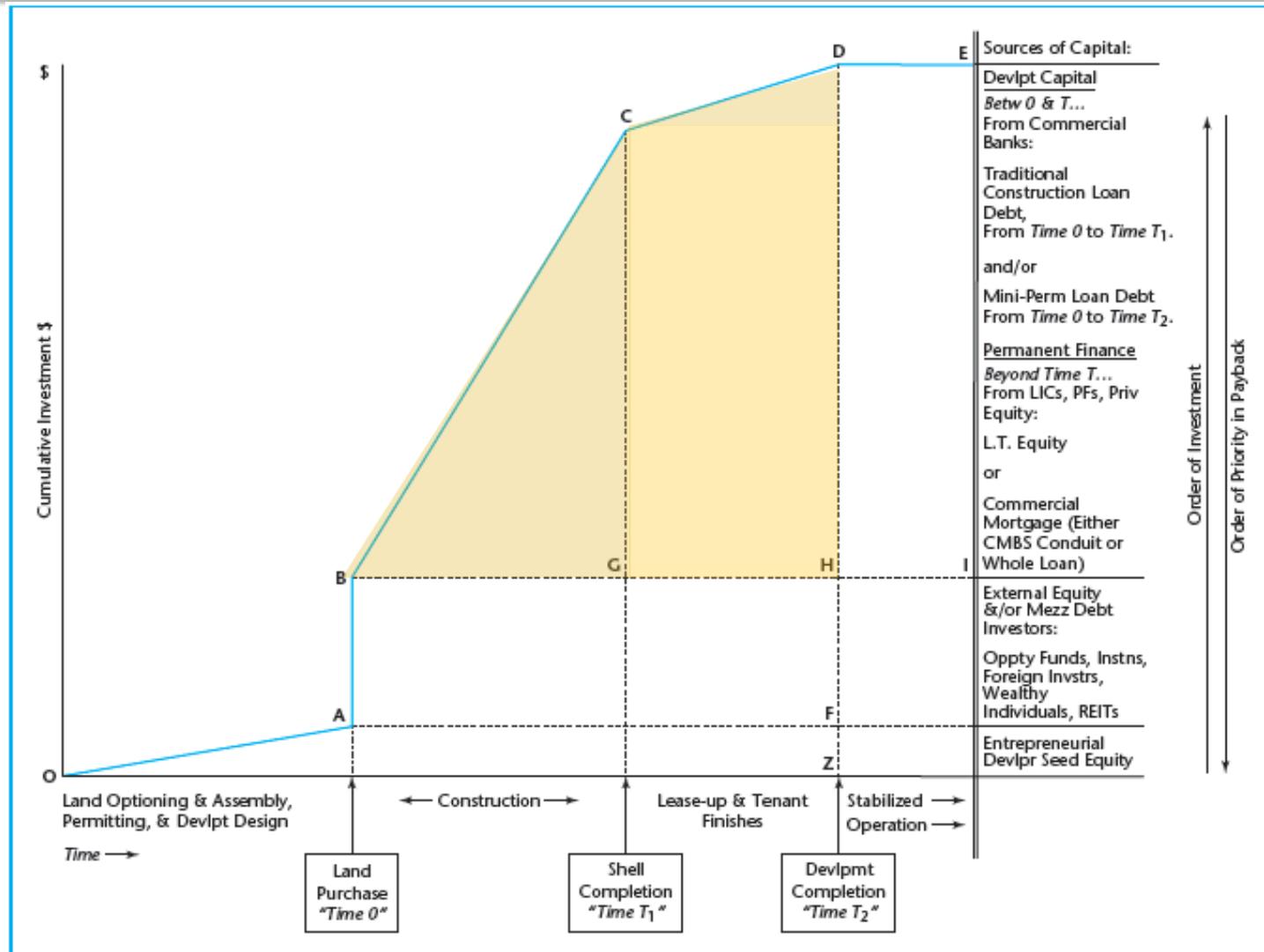
# Sources of Debt

Money partner's money



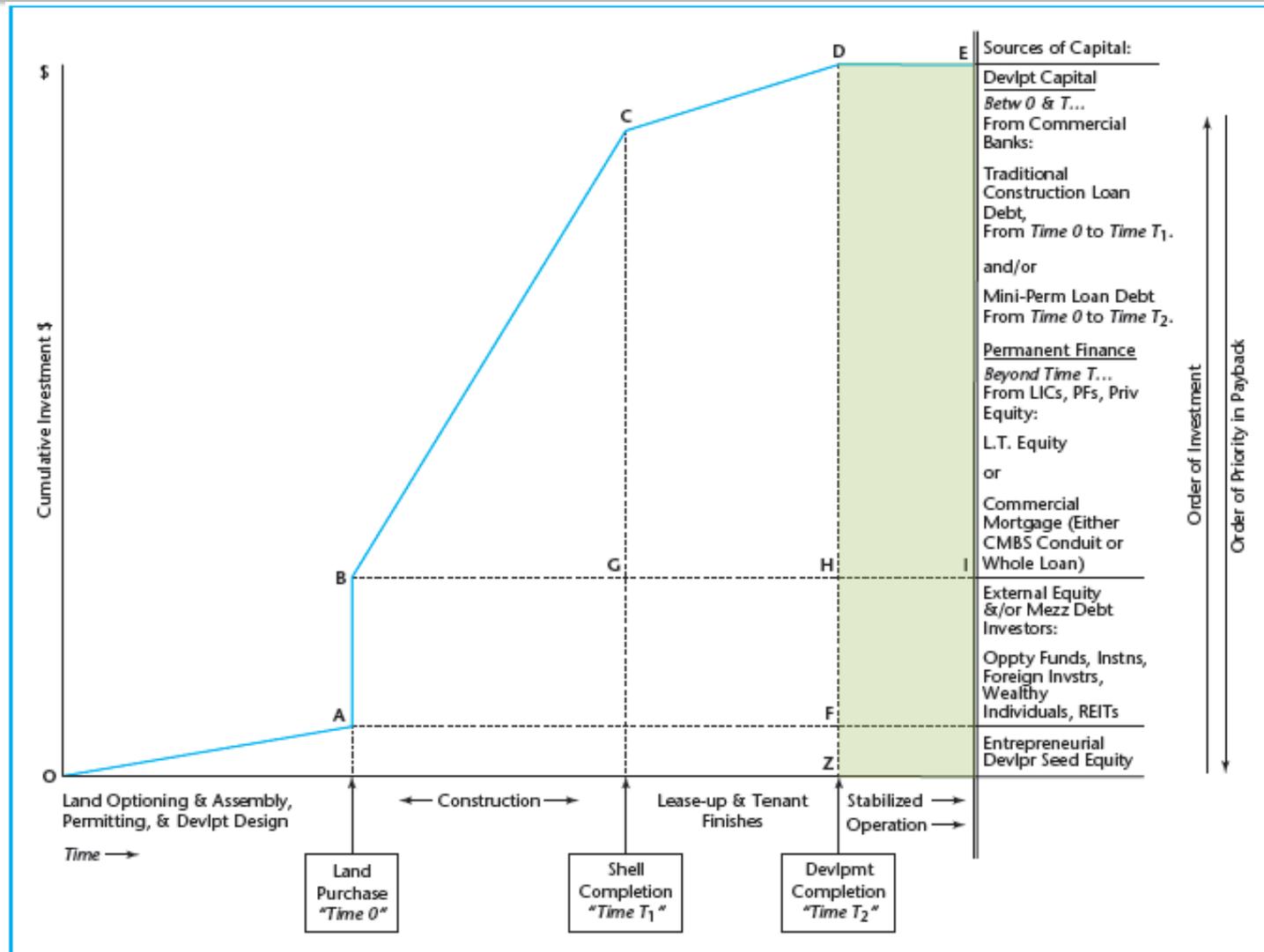
# Sources of Debt

Construction loan



# Sources of Debt

Sold to end user.



# Sources of Capital

- Even though this course is not about debt financing, it is important from the development workflow point of view to understand where the capital comes from. We identify three stages;
  - First, we have the seed equity from the entrepreneur starting the project in the preliminary phase. It is a relatively small amount, but with a high return requirement.
  - Next, we find that “money partners” / Join Venture partners jump in, like opportunity funds, financial institutions (like pension funds) or public real estate firms, in order to **buy the land**. The entrepreneur can also completely fund this part itself. Sometimes even “mezzanine debt” is used.
  - During the construction, you take up a construction loan.