CONTRACT PRICING ALTERNATIVES

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PRESENTATION OUTLINE

- Introduction
- Considerations for Selection of Pricing Methods
- Pricing Alternatives
- Contract Incentives
- Conclusions

Introduction

- **Pricing alternatives are grouped in to two types:**
  - **Fixed price methods**
  - **Cost reimbursable methods**
- **Here, we will discuss all methods covering their features, costs risks, and applicability.**
- **Pricing terms:**

  Certain pricing terms that used in contract pricing are defined as follow:

  Cost: contractor cost for labor, material, equipment and so on

  Fee: additional amount to be paid to the contractor over its incurred costs.

  Price: total amount to be paid by the owner
- **Methods of pricing a contract**

PRICING ALTERNATIVES

FIXED PRICE

Lump sum
Unit Price

Lump Sum with escalation

Fixed price incentive
Fixed price prospective price redetermination
Fixed price retroactive price redetermination
Cost reimbursable, no fee
Cost sharing
cost plus incentive fee
Cost plus awarded fee
Cost plus fixed fee
Time and Materials
Cost plus percentage of the costs

COST REIMBURSABLE

Owner preference

Contractor preference

Considerations for Selection of <u>Pricing Method</u>

- No single pricing method is superior
- Combinations of pricing methods are common
- Performance incentives and escalation may be added to each pricing method
- Pricing methods must be defined properly in contractual agreements and must be carefully monitored to achieve their objectives
- Owners are not always free to select the pricing method
- Services are generally more difficult to price than goods
- Creative work is more difficult to price than goods or services

1. Lump Sum

- A definite and fixed price is agreed upon prior to contract award and is not subjected to adjustment except for changes in scope of work
- Risks to owner:
  - Possibility of large contingency amount being included in the contractual price
  - Changes of work: that not included in the lump sum amount and usually cost more
  - Breach of the contact
  - Reduction of bidder competition
- To reduce these risks: through bidder qualification procedure-thorough definition of scope-control of extra work
- This method is common for short duration and well-defined scope of works. It is common for smaller construction contracts

2. Unit Price

- Unit price method is a fixing of the price of a given unit of the work and the total price is the unit price times the the quantity of items delivered, erected, or installed
- Risks to owner are similar to the lump sump method
- Close monitoring at quantity verification is required to reduce risks to owner

3. Lump Sum With Escalation

- Escalation provisions can be applied to lump sum or unit prices. The purpose is to eliminate unwarranted price increases to cover contingencies in the contractor's bid
- Escalation provisions call for adjustment based on
  - Contractor's cost change from base amount
  - Published indexes of price changes for material or labor
- Considerations before awarding:
  - Selection of appropriate and applicable indexes
  - Careful definition of the amount to be escalated
  - Indexes application to progress payment, planned and actual expenditures

3. Lump Sum With Escalation Continued

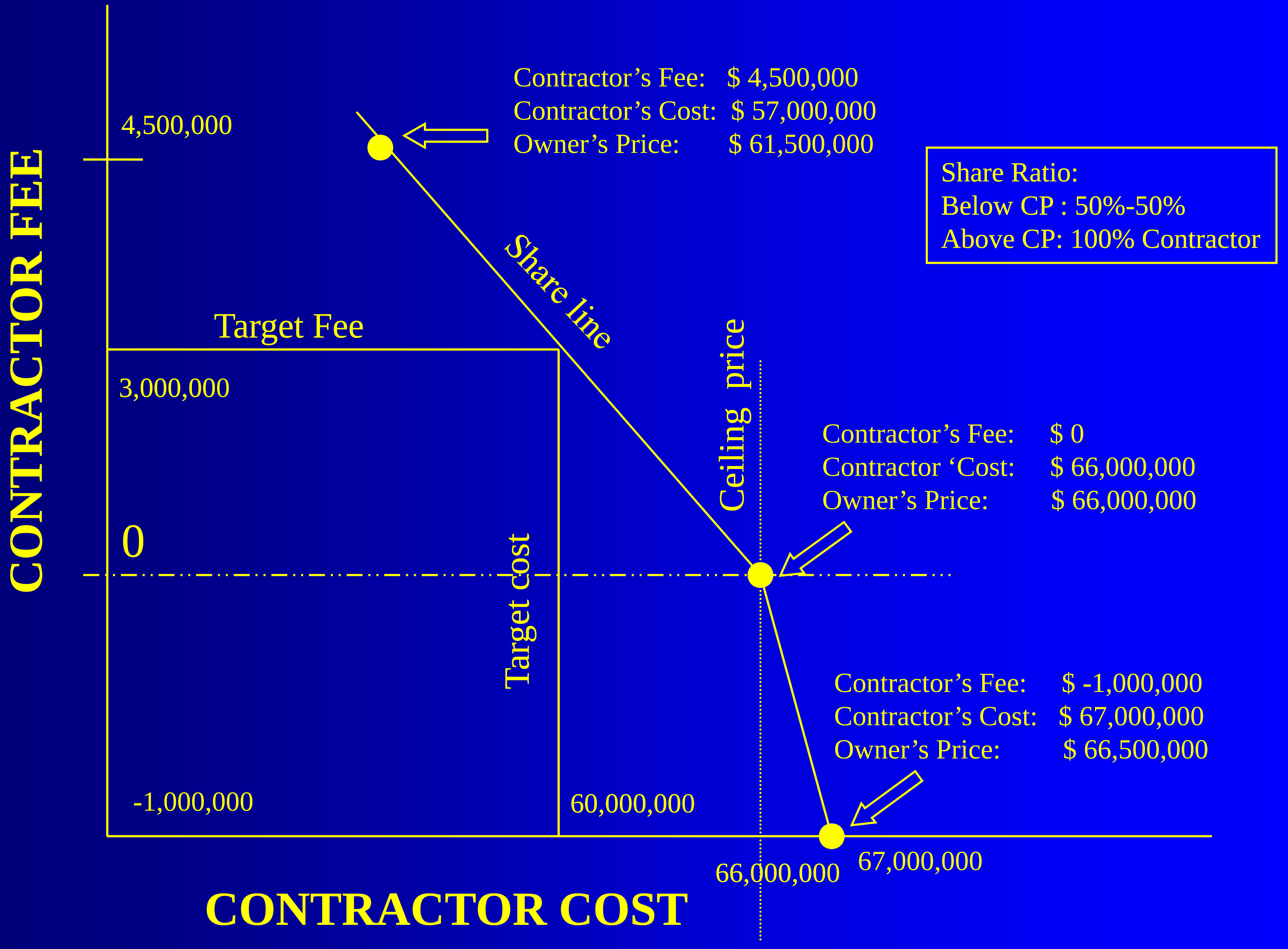
- Costs risks to the owner are similar to the ones under lump sum. In order to reduce these risks owners should insist on clear definition and full enforcement of the items to be escalated and the method of determining escalation amounts

4. Fixed Price Incentives (Guaranteed Maximum)

- **It allows the fee portion of the price to be adjusted (upward or downward) depending on actual costs incurred by the contractor**
- **During the contract agreement, a target cost , target fee and target price are agreed upon also, a ceiling price and share formula for overruns and under runs are defined**

- **Relations between these factors are explained in the following graph.**

FIXED PRICE INCENTIVES



4. Fixed Price Incentives

Continued

- Risks to owner originate from
  - High setting of the ceiling price
  - Improper selection of the share formula
- If this method is selected, it is recommended to:
  - Determine a target cost and ceiling price that are reasonable and contain significant cost incentives
  - Negotiate a meaningful and realistic share formula
  - Maintain quality standards
- This method is used mainly for goods and services that are difficult to price in a fixed manner and it is common for large general construction contracts

5. Fixed Price Prospective Redetermination

- A firm fixed price is established for a portion of the work, and provisions are made for price redetermination for future work of the same type
- Risks associated with this type of pricing involve uncertainty at the time of agreement regarding price and quantity of future items or work
- This method is unused for construction contracts

6. Fixed Price Retroactive Redetermination

- In this method a ceiling price is negotiated prior to starting the work. After the work is completed, a final price is negotiated and it should not exceed the original ceiling price
- It is rarely used in construction projects

7. Cost Reimbursable, No Fee

- By this method the contractor is reimbursed for incurred costs only, no fee is paid
- This alternative has little application in commercial constructions
- It is generally restricted to work performed for non profit organizations such as universities and charity works or for works for research development

8. Cost Sharing

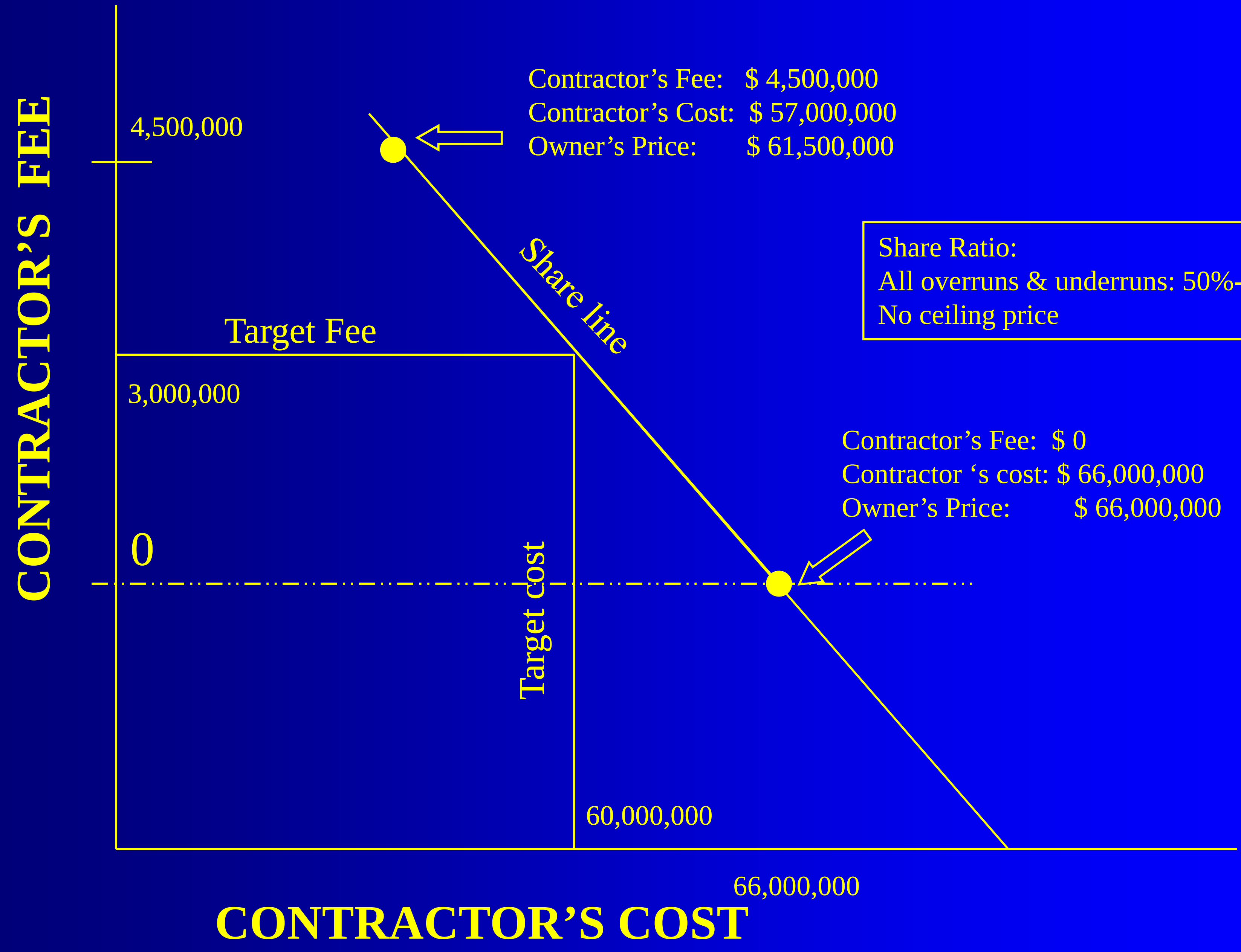
- Both contractor and owner share the cost of performing the work. No fee for the contractor
- It has no applications to construction projects
- It is generally restricted to nonprofit work, research projects, or for facilities that their benefit will be shared between the owner and the contractor

9. Cost Plus Incentive Fee

- This method is similar to a fixed-price-incentive-fee, except that the contractor is normally reimbursed for all his costs at a minimum
- Target cost, target fee, fee adjustment formula are factors that are determined by the contact parties

- Relations between the above factors are shown in the next graph:

COST PLUS INCENTIVE FEE



9. Cost Plus Incentive Fee

Continued

- Cost risks to the owner are similar to those under the fixed-price-incentive -fee. If the cost increases beyond minimum fee then the owner assumes all costs. Cost monitoring by the owner is required due to the absence of ceiling price
- Method advantages:
  - The contractor has some incentive to keep costs or labor hours down
  - Scope of work can be less specific when awarding
  - Agreement can be reached more rapidly than with the fixed-price method
  - Unnecessary contingencies in bid amounts should be eliminated
- This method is quite common in agreements with A-E firms and other consultants

10. Cost Plus Awarded Fee

- The contractor is reimbursed for all costs and receives a guaranteed minimum fee plus an awarded fee
- This type of pricing is used when uncertainty of work scope is too high to establish a ceiling price or when the work is first time attempt and the degree of performance is not ensured
- Rarely used for furnishing of goods and construction services

11. Cost Plus Fixed Fee

- In this method the contractor is reimbursed for all costs and receives a fixed fee for its services
- The fixed fee amount should bear some relation to the degree of difficulty in performing the work, the cost of the work and the duration of performance
- This pricing method is quite common for construction contracts and for some service-related contracts as well.

12. Time And Materials

- The contractor is reimbursed for all materials used at their actual cost and is paid for direct labor at a fixed rate (usually hourly)
- These contacts are simply obtained and can be awarded rapidly
- This method gives the contractor an incentive to increase the labor and materials cost so, greater effort is required to monitor materials costs and labor hours
- The are common for small scope of work; such as repairs or emergencies. It is quite common for construction work and professional services

13. Cost Plus Percentage Of Costs

- Contractor is reimbursed for all costs and given a fee that is directly proportional to some or all the costs involves in the work
- Cost-plus-percentage of the costs are not recommended for any application
- If used, they should be restricted for short duration, low-cost or emergencies work performed by reliable contractors

PROFIT INCENTIVES

- Cost, technical, schedule incentives can be used for all pricing methods. They are used to promote efficiency, quality, and timeliness of the contractor performance.
- Technical incentives punches or reward the contractor. The are used when certain performance is valuable and important to the owner
- Schedule incentives seek to reward contractors for early completion or penalize for the late completion.

CONCLUSION

Selecting a contract type and its pricing strategies should be a logical process that considers:

- Nature of the work
- Time of performance
- Contractor marketplace
- Completeness of design information at the time of bidding
- Resources of owner to monitor and administer the contract

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