

# Econ 340 Industrial Economics

Prof. Dr. Murat Yulek

- Microeconomics: mostly ideal
- Industrial organization/economics:
  - mostly specialized
  - more real world

- Industrial Economics
  - Structure of markets and firms
  - Transaction costs
  - Informational asymmetries
  - Entry barriers
  - Regulation and supervision by public bodies

- Industrial economics: analysis methods
  - Structure-conduct-performance:
    - institutional aspects of how markets and firms function
    - Descriptive
    - Performance of an industry: how well it serves consumers
    - Performance depends on conduct
    - Conduct depends (partly) on structure of the market
  - Price (microeconomic) theory

## Some basic concepts

- Transaction costs: business transactions is not free of cost.
- Bounded rationality: human mental power is not unlimited in capacity. Humans are not computers.
- Contestable markets: low entry barriers may render a market competitive.
- Informational asymmetry
- Price setter; price taker
- Monopoly
- Monopolistic competition
- Monopsony
- Oligopoly
- Collusion
- Price discrimination

# The Firm and its Costs

- Consumers: maximize utility
- Firms: maximize profits

### Ownership types:

- Sole propritersip & partnerships
- Incorporated business
  - LLCs
  - Joint stock companies

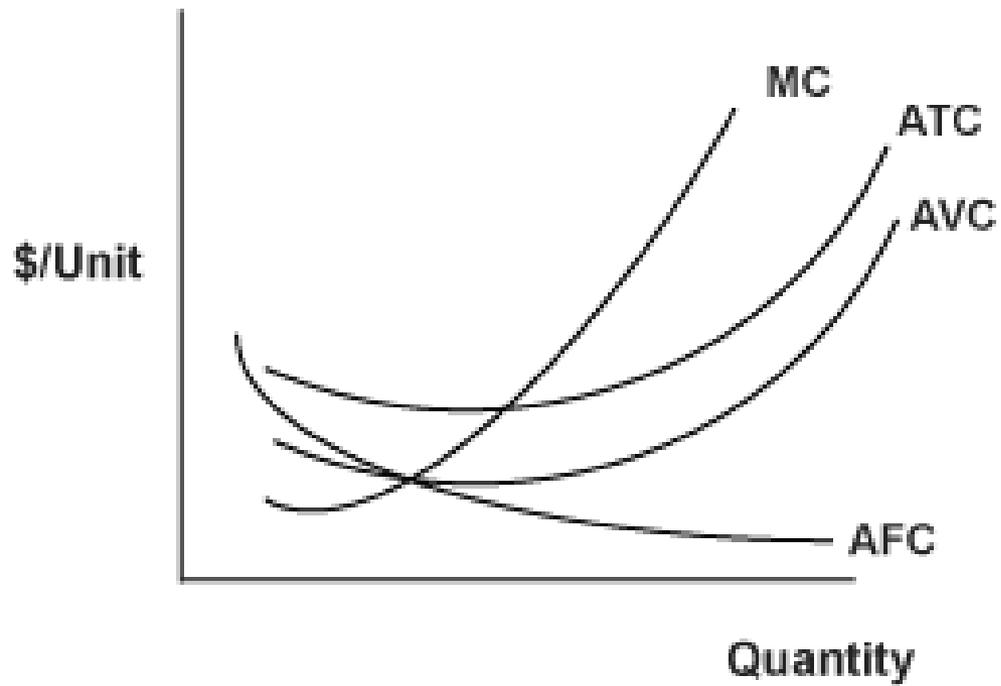
- Principal agent problem / separation of ownership and management

- Size of companies
  - Grow to produce more
  - Grow to produce different goods/services
  - Grow to vertically integrate

- Size growth
  - Organic
  - Inorganic
- M&As: Why
  - Economies of scale
  - Economies of scope
  - Takeovers for better performance

- Total (production) costs (TC)
  - Fixed costs (FC)
    - Sunk
    - Recoverable
  - Variable costs (VC)
- Average (production) costs (AC)
  - Average fixed costs (AFC)
  - Average variable costs

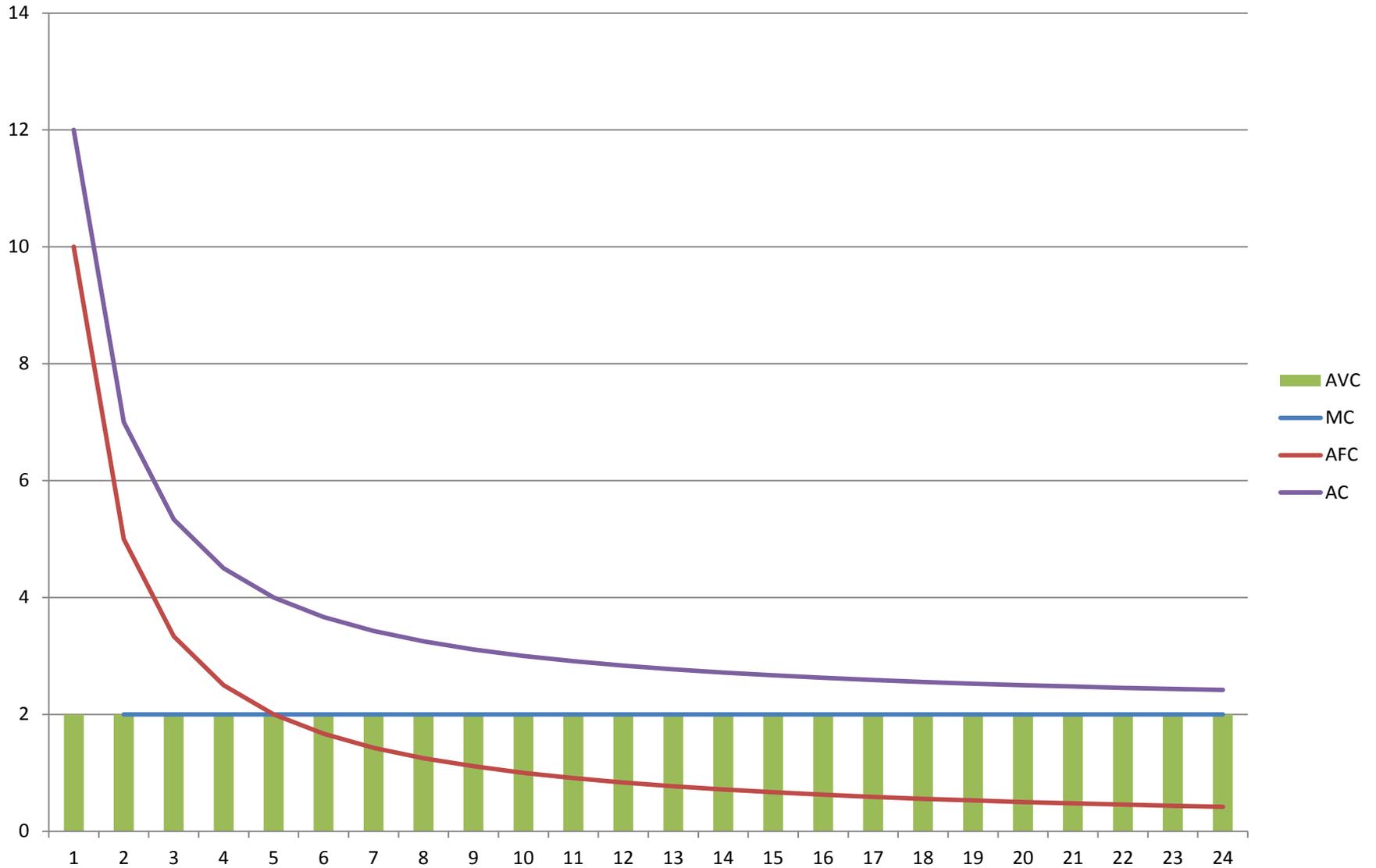
- Costs



# AVC constant

| Unit | Fixed costs | Variable Cost (per unit) | Total cost | MC  | AFC | AVC | AC   |
|------|-------------|--------------------------|------------|-----|-----|-----|------|
| 1    | 10          | 2                        | 12         |     | 10  | 2   | 12.0 |
| 2    | 10          | 2                        | 14         | 2.0 | 5.0 | 2   | 7.0  |
| 3    | 10          | 2                        | 16         | 2.0 | 3.3 | 2   | 5.3  |
| 4    | 10          | 2                        | 18         | 2.0 | 2.5 | 2   | 4.5  |
| 5    | 10          | 2                        | 20         | 2.0 | 2.0 | 2   | 4.0  |
| 6    | 10          | 2                        | 22         | 2.0 | 1.7 | 2   | 3.7  |
| 7    | 10          | 2                        | 24         | 2.0 | 1.4 | 2   | 3.4  |
| 8    | 10          | 2                        | 26         | 2.0 | 1.3 | 2   | 3.3  |
| 9    | 10          | 2                        | 28         | 2.0 | 1.1 | 2   | 3.1  |
| 10   | 10          | 2                        | 30         | 2.0 | 1.0 | 2   | 3.0  |
| 11   | 10          | 2                        | 32         | 2.0 | 0.9 | 2   | 2.9  |
| 12   | 10          | 2                        | 34         | 2.0 | 0.8 | 2   | 2.8  |
| 13   | 10          | 2                        | 36         | 2.0 | 0.8 | 2   | 2.8  |
| 14   | 10          | 2                        | 38         | 2.0 | 0.7 | 2   | 2.7  |
| 15   | 10          | 2                        | 40         | 2.0 | 0.7 | 2   | 2.7  |
| 16   | 10          | 2                        | 42         | 2.0 | 0.6 | 2   | 2.6  |
| 17   | 10          | 2                        | 44         | 2.0 | 0.6 | 2   | 2.6  |
| 18   | 10          | 2                        | 46         | 2.0 | 0.6 | 2   | 2.6  |
| 19   | 10          | 2                        | 48         | 2.0 | 0.5 | 2   | 2.5  |
| 20   | 10          | 2                        | 50         | 2.0 | 0.5 | 2   | 2.5  |
| 21   | 10          | 2                        | 52         | 2.0 | 0.5 | 2   | 2.5  |
| 22   | 10          | 2                        | 54         | 2.0 | 0.5 | 2   | 2.5  |
| 23   | 10          | 2                        | 56         | 2.0 | 0.4 | 2   | 2.4  |
| 24   | 10          | 2                        | 58         | 2.0 | 0.4 | 2   | 2.4  |

# AVC constant



# AVC non-constant

| Unit | Fixed costs | Variable Cost (per unit) | Total cost | MC  | AFC | AVC | AC   | Total VC |
|------|-------------|--------------------------|------------|-----|-----|-----|------|----------|
| 1    | 10          | 2.0                      | 12.0       |     | 10  | 2.0 | 12.0 | 2.0      |
| 2    | 10          | 1.9                      | 13.9       | 1.9 | 5.0 | 2.0 | 7.0  | 3.9      |
| 3    | 10          | 1.8                      | 15.7       | 1.8 | 3.3 | 1.9 | 5.2  | 5.7      |
| 4    | 10          | 1.7                      | 17.4       | 1.7 | 2.5 | 1.9 | 4.4  | 7.4      |
| 5    | 10          | 1.6                      | 19.0       | 1.6 | 2.0 | 1.8 | 3.8  | 9.0      |
| 6    | 10          | 1.5                      | 20.6       | 1.5 | 1.7 | 1.8 | 3.4  | 10.6     |
| 7    | 10          | 1.5                      | 22.1       | 1.5 | 1.4 | 1.7 | 3.2  | 12.1     |
| 8    | 10          | 1.4                      | 23.5       | 1.4 | 1.3 | 1.7 | 2.9  | 13.5     |
| 9    | 10          | 1.3                      | 24.8       | 1.3 | 1.1 | 1.6 | 2.8  | 14.8     |
| 10   | 10          | 1.5                      | 26.3       | 1.5 | 1.0 | 1.6 | 2.6  | 16.3     |
| 11   | 10          | 1.6                      | 27.9       | 1.6 | 0.9 | 1.6 | 2.5  | 17.9     |
| 12   | 10          | 1.8                      | 29.7       | 1.8 | 0.8 | 1.6 | 2.5  | 19.7     |
| 13   | 10          | 2.0                      | 31.7       | 2.0 | 0.8 | 1.7 | 2.4  | 21.7     |
| 14   | 10          | 2.2                      | 34.0       | 2.2 | 0.7 | 1.7 | 2.4  | 24.0     |
| 15   | 10          | 2.5                      | 36.4       | 2.5 | 0.7 | 1.8 | 2.4  | 26.4     |
| 16   | 10          | 2.8                      | 39.2       | 2.8 | 0.6 | 1.8 | 2.4  | 29.2     |
| 17   | 10          | 3.1                      | 42.3       | 3.1 | 0.6 | 1.9 | 2.5  | 32.3     |
| 18   | 10          | 3.4                      | 45.7       | 3.4 | 0.6 | 2.0 | 2.5  | 35.7     |
| 19   | 10          | 3.8                      | 49.4       | 3.8 | 0.5 | 2.1 | 2.6  | 39.4     |
| 20   | 10          | 4.2                      | 53.6       | 4.2 | 0.5 | 2.2 | 2.7  | 43.6     |
| 21   | 10          | 4.6                      | 58.2       | 4.6 | 0.5 | 2.3 | 2.8  | 48.2     |
| 22   | 10          | 5.2                      | 63.4       | 5.2 | 0.5 | 2.4 | 2.9  | 53.4     |
| 23   | 10          | 5.7                      | 69.1       | 5.7 | 0.4 | 2.6 | 3.0  | 59.1     |
| 24   | 10          | 6.3                      | 75.5       | 6.3 | 0.4 | 2.7 | 3.1  | 65.5     |

# AVC constant

