#### **ETH** zürich



## **Section 14 Monopolistic Competition**

#### Reference:

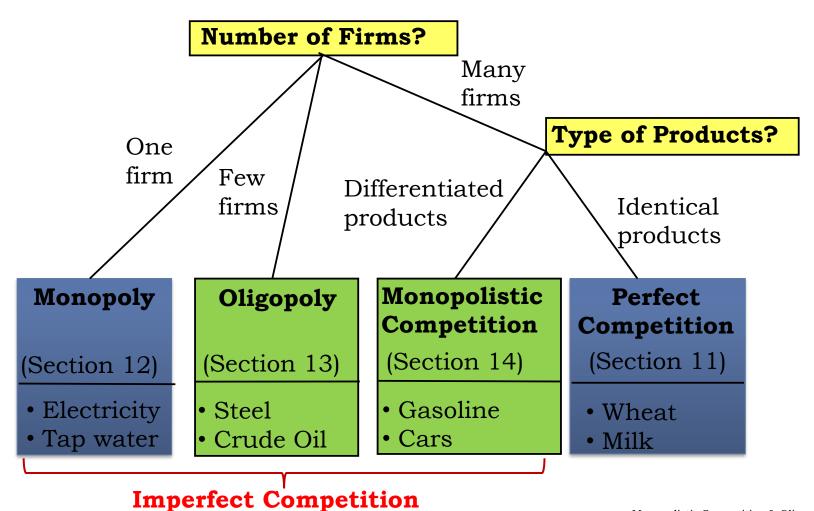
N. Gregory Mankiw and Mark P. Taylor (2020), "Microeconomics", Cengage Learning, Chapters 12 Goodwin et al. (2019), "Microeconomics in Context", Routledge, Chapter 8

The slides of this section are mainly based on the 6<sup>th</sup> edition of the book by Mankiw and Taylor (2023). In some slides we reproduce figures, sentences and definitions given in the book.





## **Models of Imperfect Competition**





#### **Contents**

- A. Monopolistic Competition
- B. Monopolistic Competition in the Short Run
- C. Monopolistic Competition in the Long Run
- D. Monopolistic vs. Perfect Competition





## A. Monopolistic Competition





#### **Monopolistic Competition**

**Monopolistic Competition**: Many firms selling products that are similar but not identical.

Attributes of Monopolistic Competition:

- Many sellers: There are many firms competing for the same group of customers (e.g. Books, CDs, restaurants).
- Product differentiation: Each firm produces a product that is at least slightly different from those of other firms. Rather than being a price taker, each firm faces a downward-sloping demand curve.
- ♥ Free entry and exit: Firms can enter or exit the market without restriction, i.e. the number of firms in the market adjusts until economic profits are zero.
- The cross-price elasticities of demand are large but not infinite.





## **TABLE 12.1**

#### Examples of Markets Which Have Characteristics of Monopolistic Competition

Computer games

Restaurants

Conference organizers

Wedding planners

Plumbing

Coach hire

Funeral directors

Fabric manufacturers

Tailors

Music teachers

Books

CDs/DVDs

Landscape architects

Environmental consultants

Furniture manufacturers

Vets

Hotel accommodation

Air conditioning systems

Pest control

Removal services

Beauty consultants

Shop fitters

Waste disposal

**Dentists** 

Children's entertainers

Gas engineers

Steel fabricators

Driving schools

Opticians

Chimney sweeps

Source: Mankiw & Taylor (2020), table 12.1, p. 268





## B. Monopolistic Competition in the Short Run



#### Monopolistic Competition in the Short Run

 A monopolistically competitive firm chooses its quantity and price just as a monopoly does.

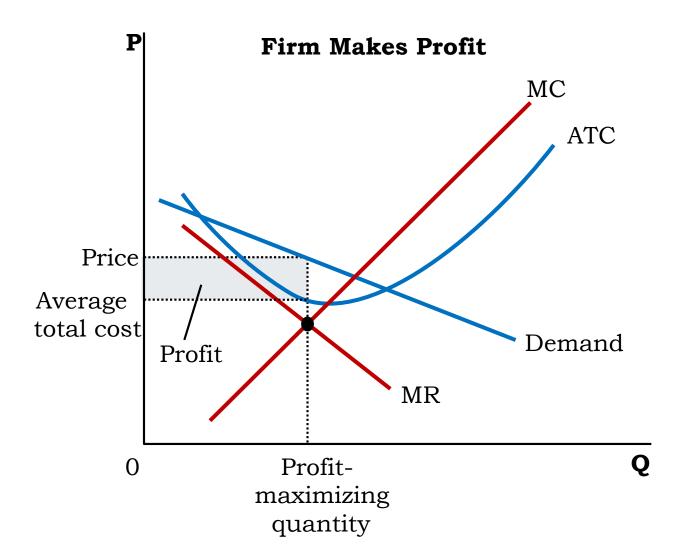
In the short-run, these two types of market structure are similar!





#### Monopolistic Competition in the Short Run

Quiz: How much profits will a firm in a monopolistic market make in the short-run?

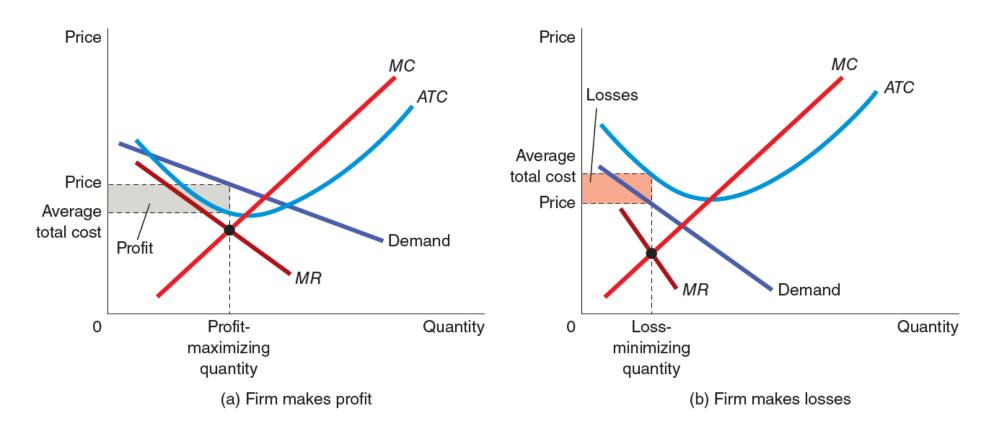


Source: Mankiw & Taylor (2023), "Microeconomics"





## Monopolistic Competitor in the Short Run



Source: Mankiw & Taylor (2023), "Microeconomics"





#### Monopolistic Competition in the Short Run

**Short-run economic profits** encourage new firms to enter the market. This:

- \$ Increases the number of products offered.
- Reduces demand faced by firms already in the market.
- Incumbent firms' demand curves shift to the left.
- \$\top\$ Demand for the incumbent firms' products fall, and their profits decline.





#### Monopolistic Competition in the Short Run

**Short-run economic losses** encourage firms to exit the market. This:

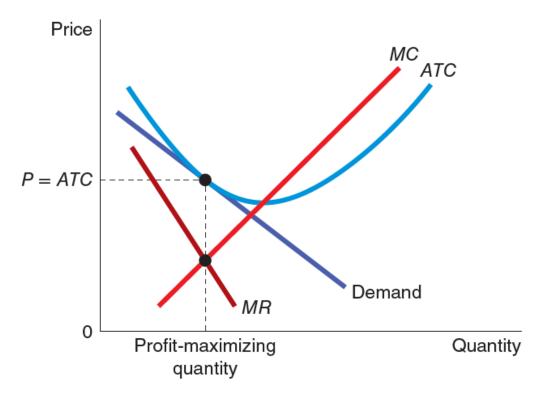
- \$\top\ Decreases the number of products offered.
- \$ Increases demand faced by the remaining firms.
- \$\\$\\$Shifts the remaining firms' demand curves to the right.
- \$\text{Increases the remaining firms' profits.}





# C. Monopolistic Competition in the Long Run

## Monopolistic Competitor in the Long Run



Source: Mankiw & Taylor (2023), "Microeconomics"



# D. Monopolistic vs. Perfect Competition





## Monopolistic vs. Perfect Competition

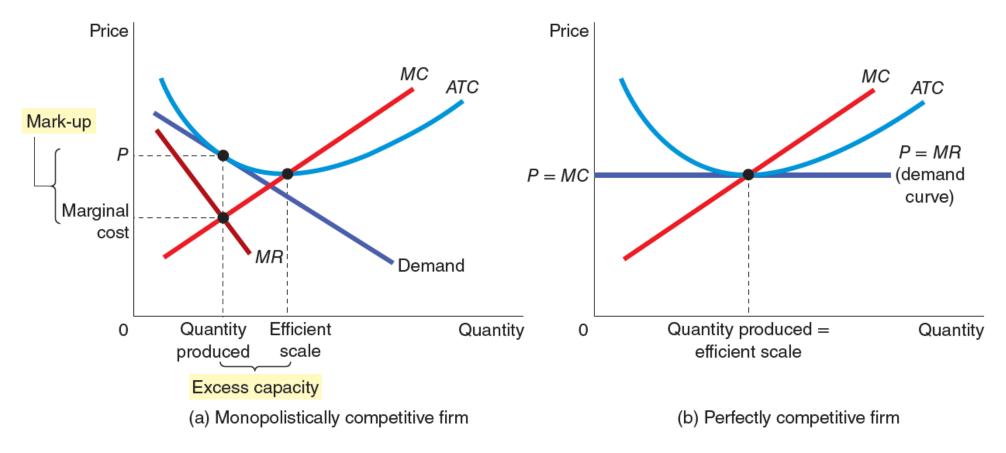
There are two noteworthy differences between monopolistic and perfect competition in the long-run: **mark-up** and **excess capacity**.

Mark-up over Marginal Cost → Deadweight loss





## **Monopolistic versus Perfect Competition**



Source: Mankiw & Taylor (2023), "Microeconomics"





## Monopolistic Competition and the Welfare of Society

- Monopolistic competition does not have all the desirable properties of perfect competition.
  - There is the **normal deadweight loss** of monopoly pricing in monopolistic competition caused by the mark-up of price over marginal cost.
  - The **number of firms** in the market may not be the "ideal" one. There may be too much or too little entry.

• The **administrative burden** of regulating the pricing of all firms that produce differentiated products would be overwhelming.





#### **Summary**

#### **TABLE 12.2**

#### Monopolistic Competition: Between Perfect Competition and Monopoly Market Structure

	Market structure		
	Perfect competition	Monopolistic competition	Monopoly
Features that all three market stru	ctures share		
Goal of firms	Maximize profits	Maximize profits	Maximize profits
Rule for maximizing	MR = MC	MR = MC	MR = MC
Can earn economic profits in the short run?	Yes	Yes	Yes
Features that monopoly and mono	polistic competition	n share	
Price-taker?	Yes	No	No
Price	P = MC	P > MC	P > MC
Produces welfare-maximizing level of output?	Yes	No	No
Features that perfect competition	and monopolistic co	mpetition share	
Number of firms	Many	Many	One
Entry in long run?	Yes	Yes	No
Can earn economic profits in long run?	No	No	Yes





## **Advertising**

When firms sell differentiated products and charge prices above marginal cost, each firm has an **incentive** to advertise in order to attract more buyers to its particular product.

 Firms that sell highly differentiated consumer goods typically spend between 10 and 20 percent of revenue on advertising.



Source: www.flickr.com





## **Advertising**

- Critique of Advertising:
  - \$\footnote{\text{Firms advertise in order to manipulate people's tastes.}}
  - Advertising impedes competition by implying that products are more different than they really are.
  - Advertising plays a major role in promoting a *consumer* society with a high ecological footprint and low level of sustainability
- Defence of Advertising:
  - Advertising provides information to consumers.
  - Advertising increases competition by offering a greater variety of products and prices.
- The willingness of a firm to spend advertising dollars can be a signal to consumers about the quality of the product being offered.



#### **Sneakers**









## Advertising and consumer society

- Advertising plays a central role in the current consumer societies:
- **Consumer society**: A society that buys and consumes goods that are not of primary importance, partially superfluous goods that many times go to satisfy needs created by advertising or other components of society (social imitation)
- **Consumerism**: The purchase of goods and services of secondary importance, in part even superfluous and in larger quantities than necessary
- ➤ Consumer societies are characterized by a high value of **the ecological footprint** and, therefore, far from a society that promotes a sustainable development

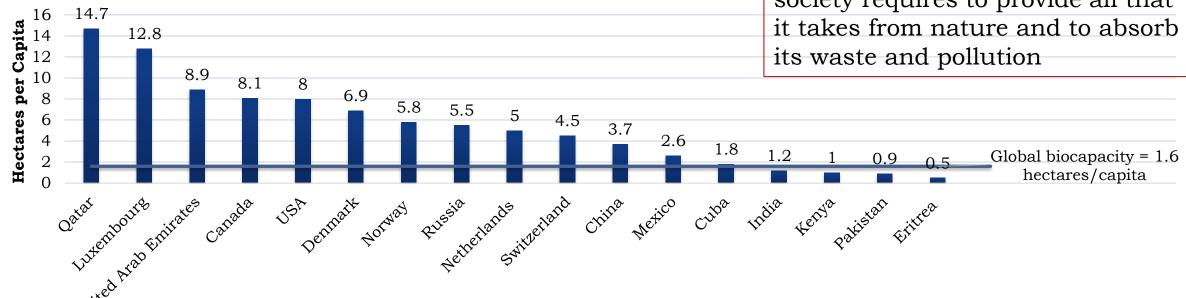


## The link between consumption and the environment

#### COUNTRIES RANKED BY ECOLOGICAL FOOTPRINT PER



The ecological footprint shows how much land area a human society requires to provide all that it takes from nature and to absorb its waste and pollution



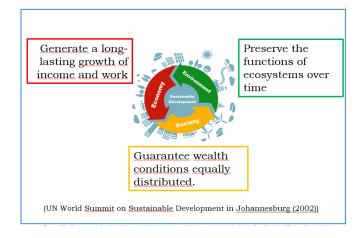


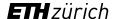
Source: https://data.footprintnetwork.org



#### Consumers and sustainable development

- We need to promote a sustainable consumption and production, we need to reduce our ecological footprint
- Consumers are
- > crucial in driving sustainable production
- > play a central role in sustainable development





#### FROM THROWAWAY SOCIETY TO CIRCULAR ECONOMY

#### THROWAWAY SOCIETY - A LINEAR ECONOMIC SYSTEM

Today's throwaway society is the result of a linear economic system. Many raw materials are extracted and products are made, used and disposed. This leads to a raw material shortage, large volumes of waste and the resultant environmental problems.

The linear economic system

#### BENEFICIAL FOR THE ENVIRONMENT? PERFORM A LIFE-CYCLE ASSESSMENT

A life-cycle assessment is the only way to ensure that projects or measures in the circular economy actually help to reduce the environmental impact. A life-cycle assessment includes all the relevant environmental effects over the full life-cycle of products.

#### CHARACTERISTICS OF CYCLABLE PRODUCTION - ECODESIGN

- · Durable, repairable, modular design and products which can be dismantled
- · No chemicals hazardous to the environment and health
- Separable, safe, recyclable materials

#### CIRCULARITY INSTEAD OF A LINEAR ECONOMIC SYSTEM

The circular economy aims to solve the problems of the throwaway society. Instead of products being thrown away after use (graphic above), cycles are created by sharing, reusing, repairing, remanufacturing, refurbishing and recycling (green arrows in the right-hand graphic). In a circular economy, products, materials and resources are used or reused for as long as possible and their value is retained. Fewer primary raw materials are consumed and less waste is generated than in the linear economic system.

The circular economy is an integrated approach which considers the cycle as a whole from raw material extraction, through design, production, distribution and a use phase which is as long as possible, through to recycling. So that products and materials remain in the cycle, all the stakeholders must view it as a whole and act accordingly.

#### PRODUCT CYCLES

Share: Several users benefit from a product and intensity of use is increased. Reuse:: A product in working order is passed on to

other users. Repair: Longevity is extended. Remanufacture, refurbish: Defective or obsolete

products are reconditioned and made to function

Using products for as long as possible is environmentally beneficial in almost all cases, because energy, water and chemicals are also needed for recycling. A product is only sent for recycling if it cannot be shared, reused, repaired, remanufactured or refurbished.

#### MATERIAL CYCLES

Recycling: Dismantle and separate products and remove pollutants so that the secondary raw materials are of high quality and can be marketed.

#### RENEWABLE AND NON-RENEWABLE RESOURCES

Renewable resources from agriculture, forestry or fisheries are used in ways which conserve the natura cycles and ecosystems.

Non-renewable resources are used in line with the vision of a circular economy, so that they are not dispersed in the environment. They then retain their quality and are used again and again in product and material cycles.

#### **USE OF RENEWABLE ENERGY**

The circular economy only uses renewable energy. It should be used as efficiently and economically as possible, because raw materials and natural resources are also required for the supply of renewable energy.



