Late pre-classical economics (ca. 1500 – 1776)

• Mercantilism (16th – 18th centuries)

• Physiocracy (ca. 1750 – ca. 1789)
General characteristics of the period

• increase in economic activity
• markets become more important
• still pre-industrial economies, agriculture is the most important sector of the economies
• economic thought is developing from simple applications toward more complicated views of the economy
Main mercantilist ideas

• very diverse views on economic problems
• no systematic accounts of the entire economy
• the main economic problem: best economic policies for promoting the power and wealth of the nation, policies for increasing the power and prosperity of the nation
• assumed that the total wealth of the world is fixed and constant (zero-sum game assumption)
• the goal of the economic activity is production, not consumption
• in general, equated nation’s wealth with overall production of the nation
Mercantilism (16th – 18th centuries)

• ideas produced in all European countries
• mercantilist writers were mostly merchant businessmen, bankers, practitioners of the economy etc.
• focused on economic questions related to the writers’ particular private interests
• huge growth in the quantity and quality of economic literature
Mercantilist ideas, cont.

- Mercantilists advocated encouraging production, increasing exports and holding down domestic consumption.
- They insisted on low wages of laborers to give the economy competitive advantage in international trade; wages should be set on the subsistence level; higher wages would lead to a decrease in labor supply and fall in the national output.
- So in result, they advocated the poverty of the masses.
- They insisted on the notion of the positive balance of trade.
- Balance of trade is the difference between the monetary value of exports and imports. A **positive balance of trade** is known as a **trade surplus** and consists of exporting more than one imports.
Positive balance of trade

• mercantilists argued that in order to increase its wealth a nation should in the first place achieve a positive balance of foreign trade

• therefore, a country should increase exports and discourage imports by means of tariffs, quotas, subsidies, and taxes

• secondly, the government should stimulate national production by intervening in the economy, especially to help economic sectors producing export goods.
Why mercantilists argued for the positive balance of trade?

• Early mercantilists (bullionists) defined nation’s wealth in terms of its holdings of precious metals like gold or silver (bullion).

• A positive balance of foreign trade, would lead to a flow of precious metals into the economy, to settle the trade balance.

• Therefore, it would increase nation’s wealth understood as the amount of bullion.
Why mercantilists argued for the positive balance of trade?

• According to them, monetary factors (money supply) are the chief determinants of the economic activity measured in real (non-monetary) terms (the level of production or real output).

• Therefore, they thought that changes in the quantity of money generate changes in the level of production or real output.

• Hence, a positive balance of trade (that is a flow of money into the economy) would increase overall production or real output, and therefore contribute to the increasing wealth of nation.
Theoretical achievements of mercantilists

- explicit recognition of the possibility of objective, scientific analysis of the economy
- understood that government intervention is limited by the economic laws
- implicitly used some economic “laws”, like the law of supply and the law of demand
- used the concept of an economic man and the profit motive
- recognized some errors of their predecessors

... but none of mercantilist writers were able to produce an integrated view of the operation of market economy (the process of price formation and resource allocation).
Thomas Mun, *England’s Treasure by Foreign Trade*, 1664

- classic example of English mercantilist literature
- wealth of nation=stock of precious metals
- argued for a positive balance of trade
- refuted some crude mercantilist notions; allowed for importation of cheap raw materials; denied that England should have a positive balance of trade with each country – what is important is to have a positive balance of trade with the rest of the world.

- First economic writer to advocate the measurement of economic phenomena like population, national income, exports, imports and the capital stock of England
Bernard Mandeville (c. 1670-1733), *Fable of the Bees, or Private Vices, Public Benefits*, 1714

- argued against the view that the good society and economy requires that people behave virtuously (altruistically)

- egoism and selfishness are moral vices, but public benefit can result from them, if they are properly channeled by the government
David Hume (1711-1776)
David Hume, *Political Discourses*, 1752

- Price specie-flow mechanism – positive balance of trade leads to an increase in the specie within (English) economy, which in turn leads to a rise in the level of prices in this economy (with a positive balance of trade).

- In effect, exports in England will decrease and imports will increase because England prices will be relatively higher than those of other economies.
Hume’s price specie-flow mechanism

• The opposite tendencies will prevail in an economy with an initial negative balance of trade.

• This process will ultimately lead to self-correction of the trade balance in all countries in the long-run.

• Therefore, mercantilist policy of maintaining a positive balance of trade is self-defeating, it is impossible to have a positive (or negative) balance of trade in the long-run.
Hume’s other contributions to economics

• idea, that economic freedom is a necessary condition for political freedom

• Hume’s fork (or Hume’s dictum) - "you cannot deduce ought from is"—that is, value judgments cannot be made purely on the basis of facts.
Physiocracy

- Short-lived movement, active from ca. 1750 to ca. 1780
- Considerable influence on subsequent economic thought
- First school of economic thought in the history of economic thought for three reasons:
  1. Physiocracy developed exclusively in France
  2. Short-lived movement, 1750-1780
  3. Intellectual leader of the group: Francois Quesnay (1694-1774)
Francois Quesnay (1694-1774)
Francois Quesnay (1694-1774)

• Quesnay was a medical doctor in French king’s court

• Made analogies between economics and medicine, e.g. circulation of money/circulation of blood

• Physiocracy = the rule of the nature, the authority of nature
Philosophical ideas of Physiocracy

• Natural order vs. positive order

• Natural order is being made up of beneficial and self-evident rules, created by God, that govern the operation of society and the economy.

Examples:
- right to acquire property through labor
- the right to pursue one’s own interest
- the right to survival
- duty to respect other persons and property of others
- the right to voluntary exchange, etc.
Natural vs. positive order

• Positive order is human legislation.

• Positive order should be consistent with natural order, if economy is to be prosperous.
Economic situation of 18th century France

- Economic underdevelopment – old technology in agriculture

- Severe economic and financial problems (shortages of food, hunger, large military expenditures)

- Immense popularity of state interventionism (price-fixing, large number of taxes, direct coercion of producers)
Theoretical achievements of Physiocracy

• Assumptions of physiocratic model:

  – The sole origin of wealth is in agriculture
  – Idea of natural or net product
  – Net product is the surplus in agriculture production over the costs of production
  – Net product is created only in agriculture (it results from the productivity of nature, land)
  – Other sectors of the economy (trade, manufacturing etc.) are sterile, they do not produce net product
Quesnay’s *Tableau economique*, 1758

- Assumptions:

  5 million – value of the agricultural production

  3 million – costs of production in agriculture (1 – depreciation of fixed capital, 2 – wages)

  2 million – net product
Tableau Économique

Objets à considérer: 1°. Trois sortes de dépenses; 2°. leur source; 3°. leurs avantages; 4°. leur distribution; 5°. leurs effets; 6°. leur reproduction; 7°. leurs rapports avec elles; 8°. leurs rapports avec la population; 9°. avec l'Agriculture; 10°. avec l'industrie; 11°. avec le commerce; 12°. avec la masse des richesses d'une Nation.

**Dépenses Productives relatives à l'Agriculture, etc.**

Avances annuelles pour produire au revenu de 600 ilots 600

Productions

**Dépenses du Revenu,** l'impôt potent, se passe aux Dépenses productives et aux Dépenses stériles.

Avances annuelles pour les Charges des Dépenses stériles, soit 300

**Dépenses Steriles relatives à l'Industrie, etc.**

Avances annuelles

REPRODUIT TOTAL... 600 il de revenu; de plus, les fruits annuels de 600 il et les intérêts des avances préférées du Laboureur, de 300 il, que la terre restitue. Ainsi la reproduction est de 1'300 il compris le revenu de 600 il qui est la base du calcul, abstraction faite de l'impôt prélevé, et des avances qu'exige sa reproduction annuelle, &c. Veuillez l'Explication à la page suivante.
Quesnay’s (simplified) model from *Tableau economique, 1758*

- **Farmers**
  - 2
- **Landowners**
  - 2
- **Arstisans** (sterile class)
  - 1

Connections:
- A
- B
- C
- D
- E
Insights from *Tableau economique*

- Flow of incomes between social classes (sectors)
- Creation and circulation of the net product
- Interrelatedness, independence of all sectors of the economy
Tableau in practice

- If tax of 25 000 would be imposed on farmers and artisans then the net product would fall by 50 000.

- Fall in productivity would reduce net product
Physiocratic economic policy

• Competition leads to the best price
• The burden of taxes is shifted to the land
• So, there should be only a single tax – levied on land (about one third of the net product)
• Economy is largely self-regulating
• Laissez-faire policy
• Abolish all mercantilist regulations
Classical economics (1776 – 1890)

• Interested mainly in long-run economic processes (economic growth; distribution of income over time etc.)

• Optimistic about the workings of free markets (markets are in some sense optimal mechanisms)
Main classical economists

• Adam Smith (1776-1790), *Wealth of Nations*, 1776

• David Ricardo (1772-1823), *Principles of Political Economy and Taxation*, 1817

• John Stuart Mill (1806-1873), *Principles of Political Economy*, 1848
Economists related to classical economics

- Thomas Robert Malthus (1766-1834): demographic theory used by classicals

- Heterodoxy versus orthodoxy

- Karl Marx (1818-1883): borrowed some classical ideas, but rejected most of others
Adam Smith (1723-1790)
Adam Smith

• Economist, philosopher, wrote also on law, rhetoric and even astronomy
• Professor of Moral Philosophy at Glasgow University from 1752 to 1764
• Interested in broad social questions, not only economic ones
• Influenced by his teacher Francis Hutcheson (1694-1746) and by his personal friend philosopher-economist David Hume (1711-1776)
Adam Smith

• Smith, after Hutcheson, argued against the view of Mandeville that egoistic private actions of individuals in the economy have to be regulated by the government to produce public benefits.

• Often called “the father of economics”, because he was able to synthesize his and previous achievements into one coherent, integrated system explaining how markets function, how economic growth operates, what policies accelerate economic growth etc.
Adam Smith

• Main economic work:


• Wrote also on: rhetoric, the law, and even astronomy
Adam Smith’s theory of morals

- Theory of Moral Sentiments, 1759 (1790)
- Deals with criteria on which moral judgements should be based
- How it is that selfish (by nature) people can be restrained from hurting and harming one another?
- It is possible because of sympathy – desire to please others possible because of empathy
Smith’s theory of morals

• But sympathy is too weak, and further guidance is needed...

• This is given by moral rules and legal laws

• So, sympathy, moral rules and legal laws are all needed for society to flourish – conclusion from *The Theory of Moral Sentiments*
Smith’s Wealth of Nations

- In WN Smith asks if successful society is possible without feelings of sympathy

- Still, he assumes a framework of justice i.e. legal laws, and

- Morality of people (i.e. they are keeping their promises, care about their reputation etc.), but not altruism (sympathy)
Subject and methodology of the *Inquiry into the nature and causes Wealth of Nations*

- Main problem – causes of the national income, forces of the economic growth and policies for encouraging growth

- Methodology – deductive reasoning combined with historical description
Smith’s economic policy

• Contextual economic policy – policy prescriptions are based not only on economic theory, but also on historical, political and institutional circumstances (prescriptions are contextual)

• Non-contextual economic policy – policy prescriptions based only on economic theory

• Ricardian vice – tendency in modern economics to deduce policy conclusions only on the basis of highly abstract theoretical models
Smith’s assumptions in matters of economic policy

• humans are rational and self-interested

• competitive markets exist (free movement of the factors of production)
Smith’s economic policy

• There is a natural process at work in the economy, which leads from private self-interest to the public good for society.

• The process is describes as working through invisible hand (of markets)
Smith’s invisible hand

As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can.

He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it.

By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes interest of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.
Reconstruction of ‘invisible hand’ passage in modern terms

• Economic agents are self-interested
• Agents maximize their objectives (e.g. profits)
• In international trade they prefer investing home than abroad (for security reasons) if rates of return are similar
• There is a free international trade

• Invisible hand mechanism leads to a good (or even optimal) situation for the whole society, understood as:
  1) the greatest possible stock of capital (engine of economic growth)
  2) optimal allocation of resources in the economy
What is invisible hand mechanism?

• Invisible hand = process of market competition

  • Competition among capitalists result in commodities being produced at the minimal cost covering opportunity costs of the factors of production (the lowest feasible cost).

  • If profits above a normal rate of return exist in any sector of the economy, other firms will enter these industries and profits will fall to zero (optimal allocation of resources between sectors)

• Capitalists driven by the profit motive produce commodities that are desired by consumers.
Smith’s arguments for laissez-faire

• Did not prove rigorously that markets without interventionism (a system of laissez-faire) lead to the optimal allocation of resources
• For example, did not prove that producers employ the optimal combination of factors of production or that consumers buy the optimal bundle of commodities
• But pointed to (and analyzed informally) some steps in such a reasoning
• Opposed monopoly – realized that monopoly prices are higher than competitive prices
Smith’s arguments for laissez-faire

• Used ‘theoretical’ invisible hand argument

• But also used contextual, non-theoretical ones (reviewed past mercantilist regulations and analyzed their efficiency)
Smith’s view on the role of the government

- Adam Smith advocated only qualified (not complete) laissez-faire policy; he saw some exceptions from laissez-faire:
  - system of justice;
  - national defence;
  - provision of „public goods” (roads, bridges, navigable canals, post-office, basic education etc.)
Smith’s impact on economic policy

- Provided a detailed analysis and understanding of benefits of free markets and process of competition
- Supported laissez-faire policy
- Influenced the theory and practice of economic policy in England and the whole industrialized world from 19th century on, especially in the US
- Laissez-faire policy as an economic worldview of the American society.
- Promoted also all around the world
Smith’s attitude toward social classes

• Capitalists play a key role in the economy – they accumulate capital, which is the main force of economic growth

• Labor class receives wages at the subsistence level

• Landowners spend their incomes on unproductive expenses, buy luxury goods etc.
Theoretical acheivements of A. Smith

• Theory of economic growth
• Theory of international trade
• Value theory (theory of relative prices)
• Distribution theory
Smith’s theory of economic growth

• Wealth of a nation = an annual flow of goods

• Consumption, not production is the ultimate end of economic activity

• Wealth of nations should be measured in per capita terms
What are the causes of the wealth of nations?

Wealth of a nation

Productivity of labour

Division of labour

The extent of the market

Accumulation of capital

Ratio of productive to unproductive labor
Benefits from the division of labour - pin factory example

- Without specialization productivity was: 20 pins a day per worker
- With extensive specialization productivity rose to 4800 pins a day per worker
- Negative consequences of the division of labour: monotony, dehumanization, becoming machines tied to a production process
Smith’s value theory

• The problem: what determines the relative prices of goods in the economy?
• ‘Value in exchange’ versus ‘value in use’
• Value in exchange = price of a good
• Value in use = power of a good to satisfy human wants, total utility from consumption of this good
Water-diamond paradox

• How it is possible that:
  1. the value in exchange (price) of a diamond is so high, while its value in use (total utility) is so low for consumers.
  2. the value in exchange (price) of water is so low, while its value in use (total utility) is so high.
• So, there seems to be no connection between value in exchange and value in use
• Paradox solved: Price is equal to MU, not TU
Smith’s theories of exchange value

• Developed two theories:
  1. labour cost theory of value
  2. cost of production theory of value
• Introduced two analytical states (models) of the economy:
  - Primitive economy (only one factor of production – labour)
  - Advanced economy (three factors of production – capital, labour and land)
Labour cost theory of value

• Exchange value is determined by the quantity of labour required to produce the unit of a good: $p_1/p_2 = a_1/a_2$
• How to measure this required quantity of labour?
• Which person’s labour?
• Not only time (hours of work) matters, when you are to measure quantity of labour – what about stress, difficulty or displeasures characteristic of various kinds of labour?

• The theory has problem when applied to the model of primitive economy and it is completely irrelevant for advanced model.
Cost of production theory of value

• Relative prices of two goods = relative total cost of production of those goods:
  \( \frac{p_1}{p_2} = \frac{TC_1}{TC_2} \),

  where TC is the sum of wage rate, land rent and profit rate paid in the process of production of a good

• Applicable only in the long-run in the situation of perfectly elastic supply

• And a question arises, what determines wages, profits and land rents?
Smith’s distribution theory

• What determines the payments to factors of production – profit rate, wage rate, and land rent rate?

• ‘Wages fund theory’ of wage rate

Wage rate = wage fund / N, where N is the number of labourers, and wage fund is fixed.

• Smith’s theories of profit

Profit is composed of two parts = pure interest return and return for risk
Smith on profits in capitalism

• Rate of profit is falling over time in capitalism, because of 3 reasons:

1. Competition in labour market will increase wages, and profits will go down
2. Competition in the commodity markets will tend prices of goods to fall, and profits will fall as well
3. Investment opportunities are limited in number in capitalism
Summary of Adam Smith’s economics

• Extremely influential, especially in economic policy (laissez-faire)
• Not only an economist
• Interested mainly in understanding the process of competition, workings of the free market, and causes of economic growth
• Supporter of (qualified) laissez-faire: policy of government non-intervention (3 exceptions)
• Contextual economic policy
• His theories of economic growth, value and distribution inspired later classical economists
• Provided a grand vision of the free market economy, guided by the invisible hand, that leads from private interests to social optimum.