

Health Economics and Policy (9cfu)

<https://sites.google.com/a/uniroma1.it/deboradigioacchino/>

- Timetable: *Tuesday and Wednesday 10-12 Thursday: 12-2pm*
- Class attendance and assignments (group and individual)
- **Course material** elearning - course id 12259 (selfenrolment at <https://elearning.uniroma1.it/enrol/index.php?id=12259&lang=en>)
- Main Reference
 - ▣ Bhattacharya, Hyde and Tu “*Health Economics*” Palgrave MacMillan
 - ▣ Other readings and Data
 - OECD, World Bank, WHO ...
- Pre-requisite: Microeconomics
- Office hours: by appointment, TUE 4-5pm

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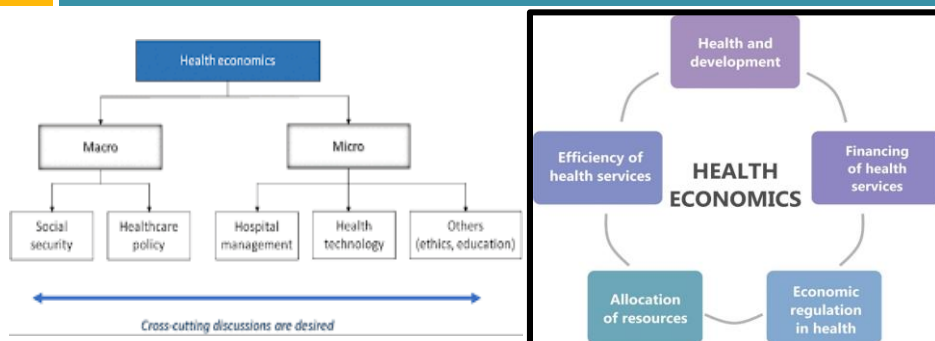
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- Exam1 (Winter session)
 - ▣ Class participation, Assignments and Presentation (40%)
 - ▣ Oral Exam (60%)
- Exam2 (Summer and Fall + non-attending students)
 - ▣ Written Exam (40%): questions and analytical problems
 - ▣ Oral Exam (60%)

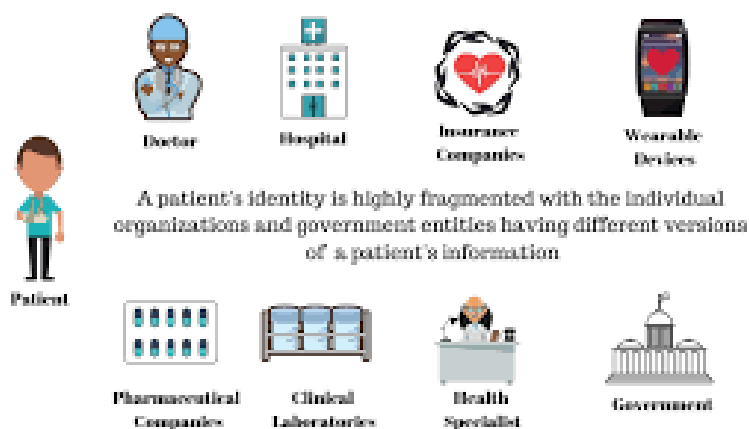
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Health Economics

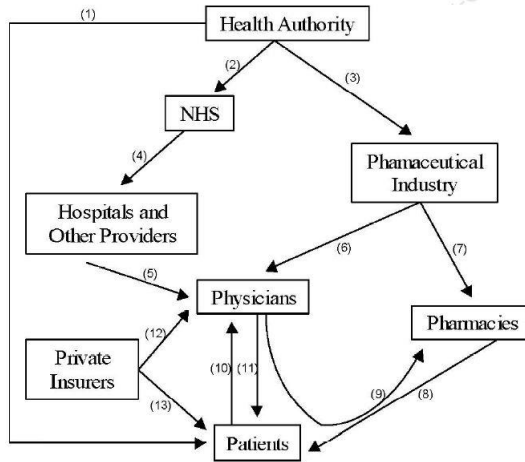


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Actors in the Health Sector

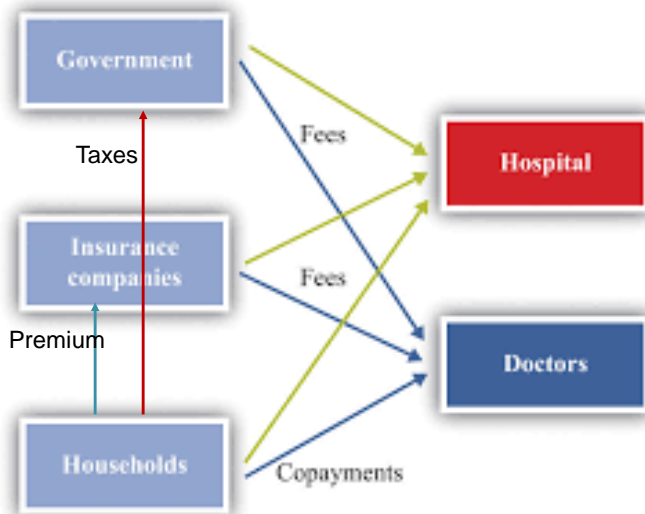


The organization of the health care market



The agents in a health care system

Follow the money



Positive vs normative questions

- **Normative questions**
 - ▣ Does everyone deserve access to health care, even if they cannot pay?
 - ▣ Should people be compelled to purchase insurance?
 - ▣ When is it ethical to deny care to a dying patient?
 - ▣ Should the government ban certain unhealthy foods?
- **Positive questions**
 - ▣ How much would it cost to provide free checkups and drugs for everyone in a population?
 - ▣ Do strict patent protections for new drugs spur innovation?
 - ▣ How much would consumers save if doctors were not required to have medical degrees or medical licenses?
 - ▣ Would a tax on saturated fat make a nation healthier?
- Economic reasoning *cannot* answer normative questions, but it can answer positive questions, and that can help us form **opinions** about normative questions.

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Assignment for Thursday 6 Oct.

- **Questions**
 - ▣ How should health insurance markets work?
 - Completely Private, Universal Public, Compulsory, Employer-sponsored, Means-tested
 - Does everyone deserve access to health care, even if they cannot pay? Pro and Cons of Universal Health Insurance
 - Should people be compelled to purchase insurance?
 - ▣ How should health care provision be financed?
 - General taxation vs Social health insurance
 - Countries adopt different health policy models. Pro and Cons

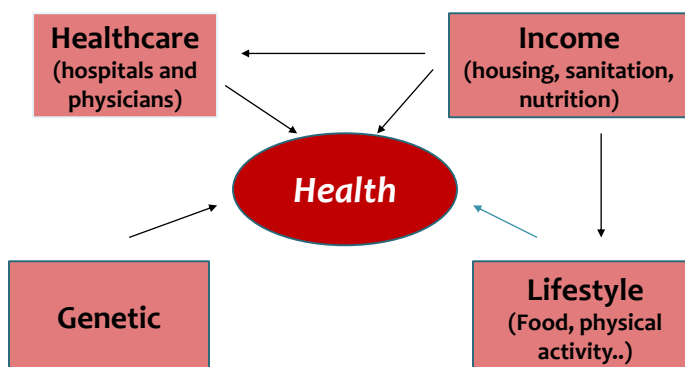
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Health, healthcare and health insurance

- **What is health?**
- **What's special about health?**
 - ▣ Uncertainty and externalities (contagious)
 - ▣ Asymmetric information and the principal-agent relationship
- **What is the relationship between health and healthcare?**
- **What's special about healthcare?**
 - ▣ Demand is unpredictable
- **Why healthcare insurance?**
 - ▣ Uncertainty about health and healthcare needs and risk aversion → demand for insurance

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Health and healthcare



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Health and economics

What is economics?

- ▣ Economics is about trade-offs.
- ▣ Individuals and collective choices under constraint.

Why health economics?

- ▣ Is health economics unethical?
- ▣ Opportunity cost.

The economics of health

- ▣ Health: determinants and effects.

The economics of healthcare

- ▣ Demand and Supply.

The health insurance market

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Countries

<https://www.oecd.org/health/health-data.htm> and <https://k.data.worldbanorg/>

- ▣ In 2018, health expenditures as a share of GDP in the OECD was 8.8% (17% in the US); in Italy 8.7% and **in your country?**
- ▣ In the 1970 the OECD* average was 4.6% (6% in the US). In 1988 in Italy was 6.6% and **in your country?**
- ▣ In 2018, Government health expenditures as a share of GDP in OECD was 6.6% (14.3% in the US); in Italy 6.4% and **in your country?**
- ▣ In 2018, Government health expenditures as a share of current health expenditures in OECD was around 75% , in Italy 74% and **in your country?**

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Current health expenditure (% of GDP)

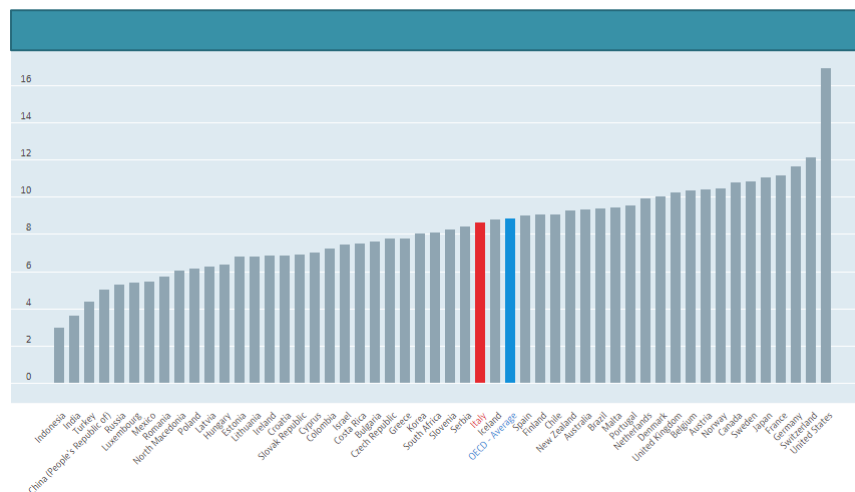
World Health Organization Global Health Expenditure database (apps.who.int/nha/database).

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Health spending Total, % of GDP, 2019 or latest available

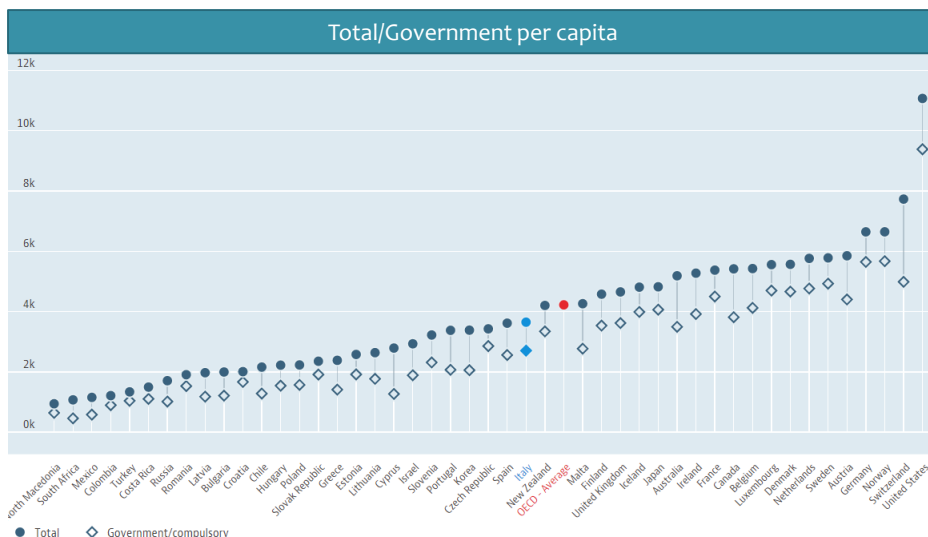
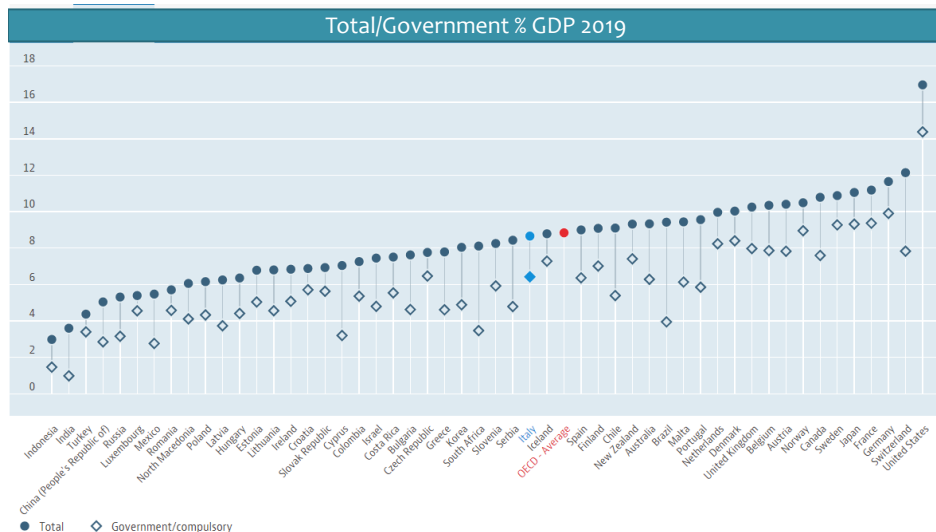
Source: Health expenditure and financing: Health expenditure indicators



Source: OECD

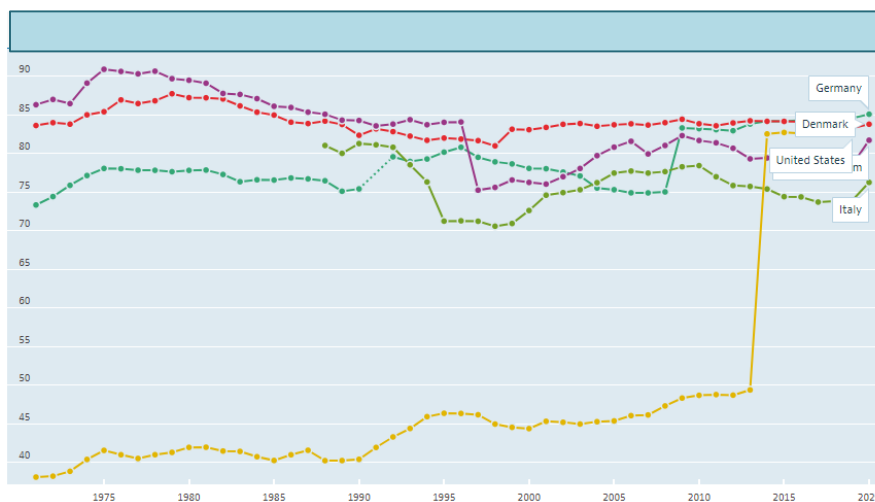
Health spending Total / Government/compulsory, % of GDP, 2019 or latest available

Source: Health expenditure and financing: Health expenditure indicators



Health spending Government/compulsory, % of health spending, 1971 – 2020

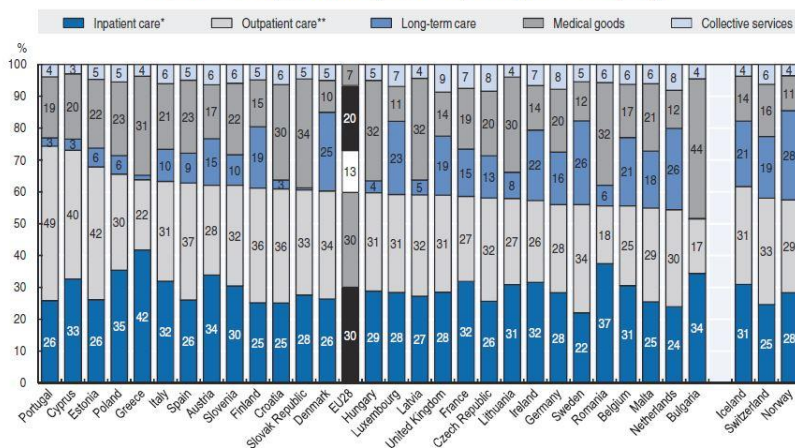
Source: Health expenditure and financing: Health expenditure indicators



<https://data.oecd.org/healthres/health-spending.htm#indicator-chart>

- Health Spending, Total / Government/compulsory / Out-of-pocket, % of GDP, 2021 or latest available
- <https://data.oecd.org/chart/6Onc>
- Health Spending, Total, % of GDP, 1988 – 2021
- <https://data.oecd.org/chart/6OwD>
- Pharmaceutical spending Total, % of health spending, 2021 or latest available
- <https://data.oecd.org/chart/6Onf>
- Pharmaceutical spending Total, % of health spending, 1970 – 2021
- <https://data.oecd.org/chart/6Ong>

5.6. Health expenditure by function, 2016 (or nearest year)



* Refers to curative-rehabilitative care in inpatient and day care settings.

** Includes home care and ancillary services.

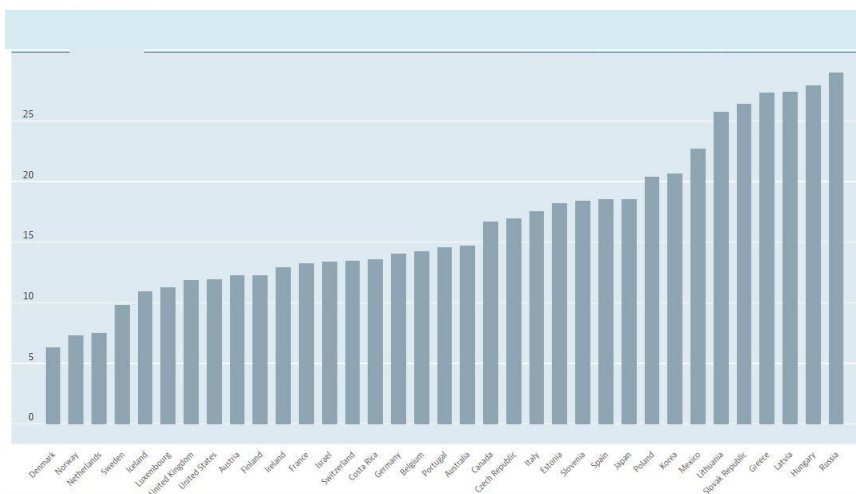
Note: Countries are ranked by the sum of inpatient and outpatient care as a share of current health expenditure.

Source: OECD Health Statistics 2018, <https://doi.org/10.1787/health-data-en>; Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933835440>

Pharmaceutical spending Total, % of health spending, 2018 or latest available

Source: Health expenditure and financing: Health expenditure indicators



Health expenditures

- ▣ Expenditure % PIL
- ▣ Expenditure per-capita
- ▣ Composition of health expenditures
- ▣ Financing: public vs private
 - Share of public

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Does more **Health Spending** result
in better **Health Outcomes**?

Health outcomes

- System level
 - ▣ E.g. longevity
- Disease level
 - ▣ E.g. survival rates for specific cancers
- Sub-sector level
 - ▣ E.g. number of hospital dispatches

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Individuals

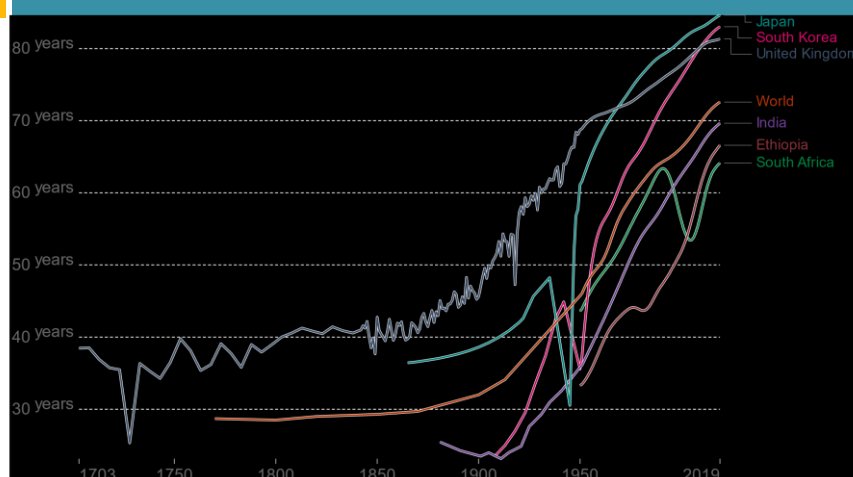
- Two famous (randomised experiments): RAND HIE and OREGON
- The results of the two random experiments suggest that healthcare demand is price-sensitive, but more healthcare not always translates into better health.

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Countries

Life expectancy, 1703 to 2019

Our World
in Data



Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019)

OurWorldInData.org/life-expectancy • CC BY

Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

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<https://data.oecd.org/healthstat/life-expectancy-at-birth.htm#indicator-chart>



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- Life expectancy at birth Men / Total / Women, Years, 2021 or latest available
- <https://data.oecd.org/chart/6Onk>
- Potential years of life lost Total, Per 100 000 inhabitants aged 0-69, 2020 or latest available
- <https://data.oecd.org/chart/6Onl>
- Deaths from cancer Total, Per 100 000 persons, 2020 or latest available
- <https://data.oecd.org/chart/6Onm>
- Alcohol consumption Total, Litres/capita (aged 15 and over), 2021 or latest available
- <https://data.oecd.org/chart/6Ono>

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Healthy life expectancy vs. health expenditure per capita, 2014

Healthy life expectancy, defined as the average number of years lived free from disability or disease burden, versus average per capita health expenditure measured in 2011 international-\$.
 Our World in Data



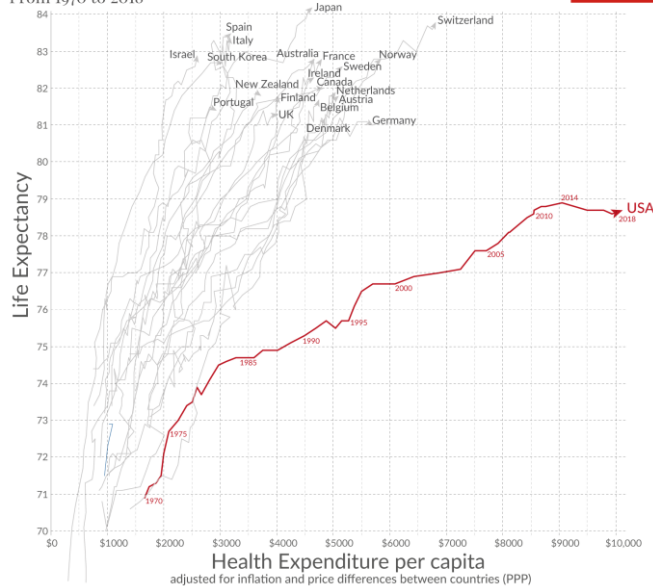
Source: IHME (2017), World Bank – WDI

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Life expectancy vs. health expenditure

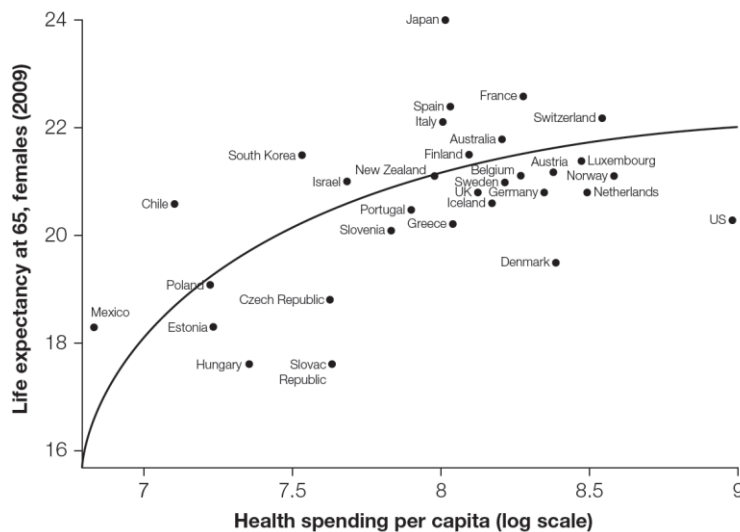
From 1970 to 2018

Our World in Data

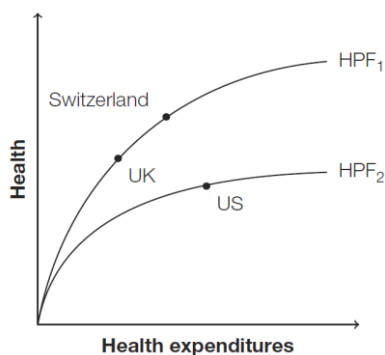
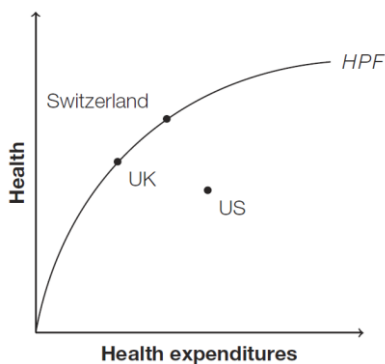


Data source: OECD — Note: Health spending measures the consumption of health care goods and services, including personal health care (curative care, rehabilitative care, long-term care, ancillary services, and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Licensed under CC-BY by the author Max Roser.
 OurWorldinData.org – Research and data to make progress against the world's largest problems.

Life expectancy and health spending



Differing inherent levels of health



Assignment for Tuesday 10 Oct.

- **Basic Micro**
 - ▣ Consumer's choice and Demand Function
 - ▣ Cost minimization and profit maximization
 - ▣ Market Equilibrium
 - in Perfect Competition
 - In monopoly
- **Public policy**
 - ▣ Equity and Efficiency
 - ▣ Theorems of welfare economics and Market failures

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