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# ***Health Economics and Financing***

# ***Learning outcomes***

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- On completion of the unit the student will be able to:
  - Critically appraise pharmaco-economic evaluations
  - Prepare a business case for the introduction and evaluation of a novel pharmaceutical service designed to improve pharmaceutical care within the NHS; considering local health needs & inequalities, government targets and government strategies for health and pharmacy

# ***Delivery***

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- Workshops & Lectures
- No directed study
- Expectation of significant reading around topic
- Reading list provided on Blackboard is exhaustive

# *Topics*

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- Pharmacoeconomics
- Healthcare organisation
- Managing the pharmaceutical budget
- Procurement & influencing skills

# Assessment

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- Critical appraisal of pharmaco-economic evaluation
  - Open book
  - Unseen paper
  - Use previously seen and tested checklist
- Business case development (1,500 words)
  - Coursework
  - Based on PCT where born
  - Local health needs assessment
  - Description, including costs, of new pharmaceutical service
  - Designed to meet government targets for health
  - Proposed pharmaco-economic evaluation

# ***Lecture 1: Economics, Health and Health Economics***

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- What is economics?
- What isn't economics?
- What is “Health”?
- What is “Health Economics”?
- Key Economic Concepts
  - Opportunity cost
  - Efficiency

# *Economics is about ...*

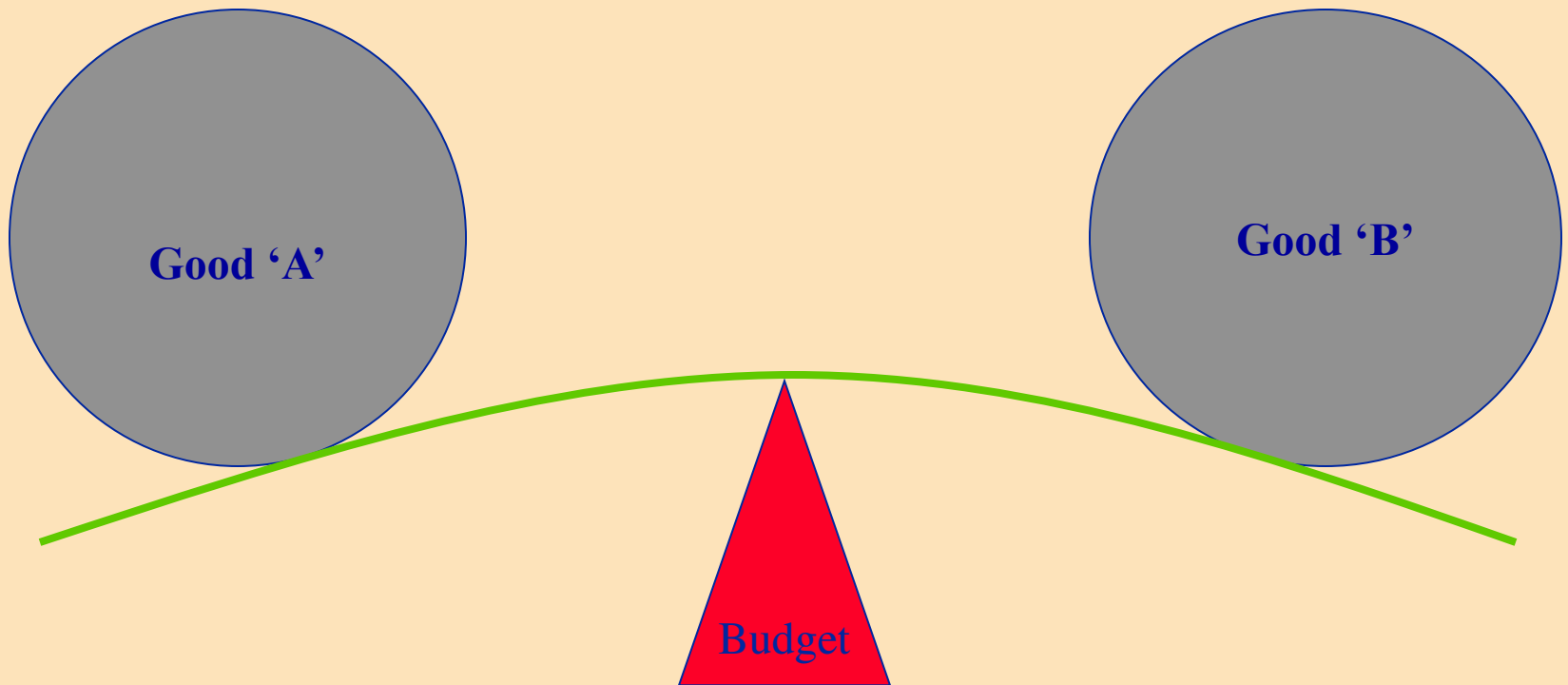
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- Limited resources
- Unlimited “wants”
- *Choosing* between which ‘wants’ we can ‘afford’ given our resource ‘budget’



# ***Economics is about choice***

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# ***Concept 1: opportunity cost***

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“The value of forgone benefit which could be obtained from a resource in its next-best alternative use.”

# ***Example of opportunity cost***

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## Possible Health Expenditure in a Year

Paediatric Care (No Children Treated in '000's)	Care of Elderly (No of Elderly Treated in '000's)	Opportunity Cost of Treating Children in Terms of Elderly Patients Forgone
0	30	0
1	28	2
2	24	6
3	18	12
4	10	20
5	0	30

# *Implications of opportunity cost*

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- Deciding to *do* A implies deciding *not* to do B (i.e. value of benefits from  $A > B$ ).
- Cost can be incurred without financial expenditure.
- Value not necessarily determined by “the market”.

# *Economists view of the world...*

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- Pessimist: bottle  $\frac{1}{2}$  empty
- Optimist: bottle  $\frac{1}{2}$  full
- Economist: bottle  $\frac{1}{2}$  wasted

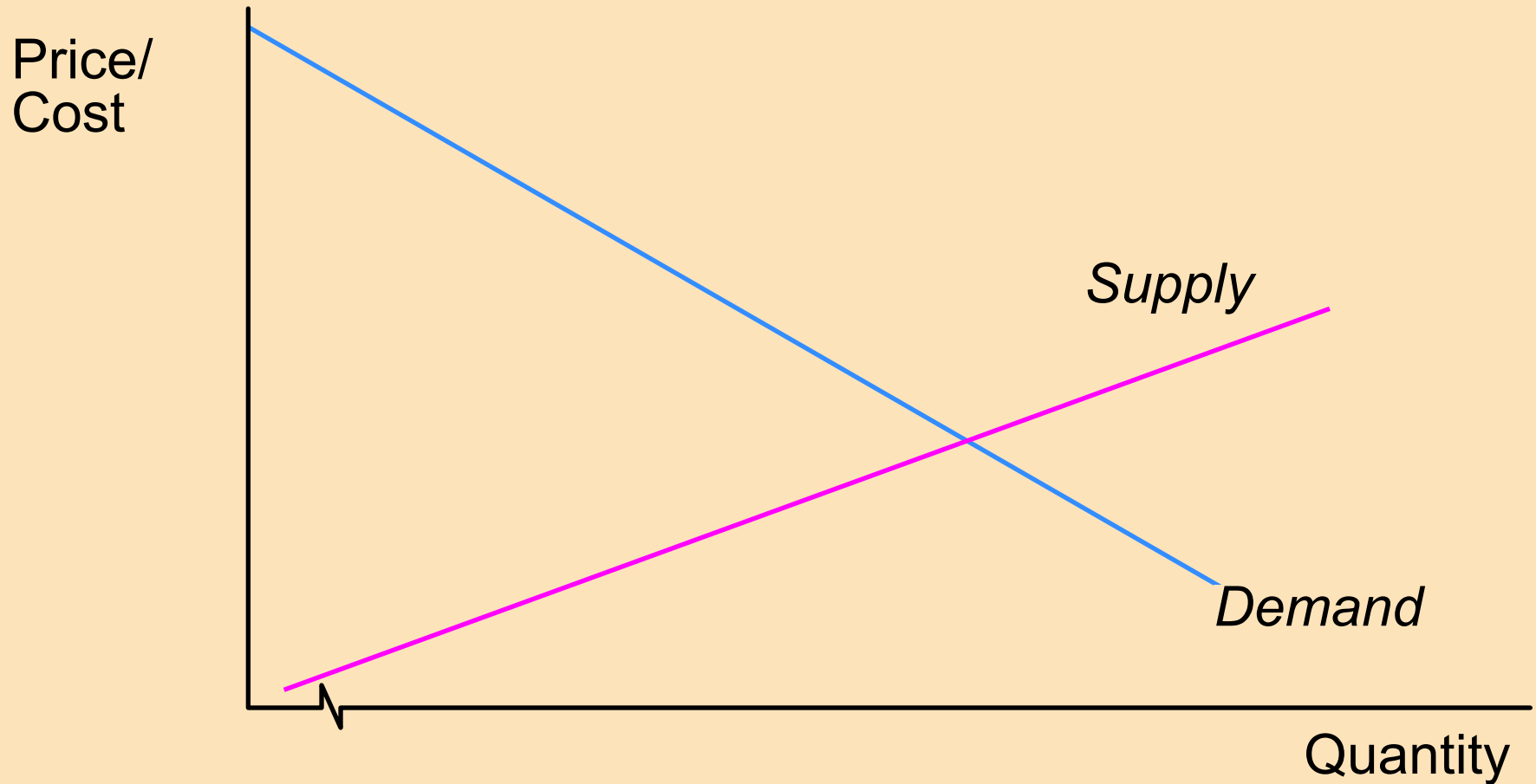
**inefficient!**

# Concept 2: efficiency

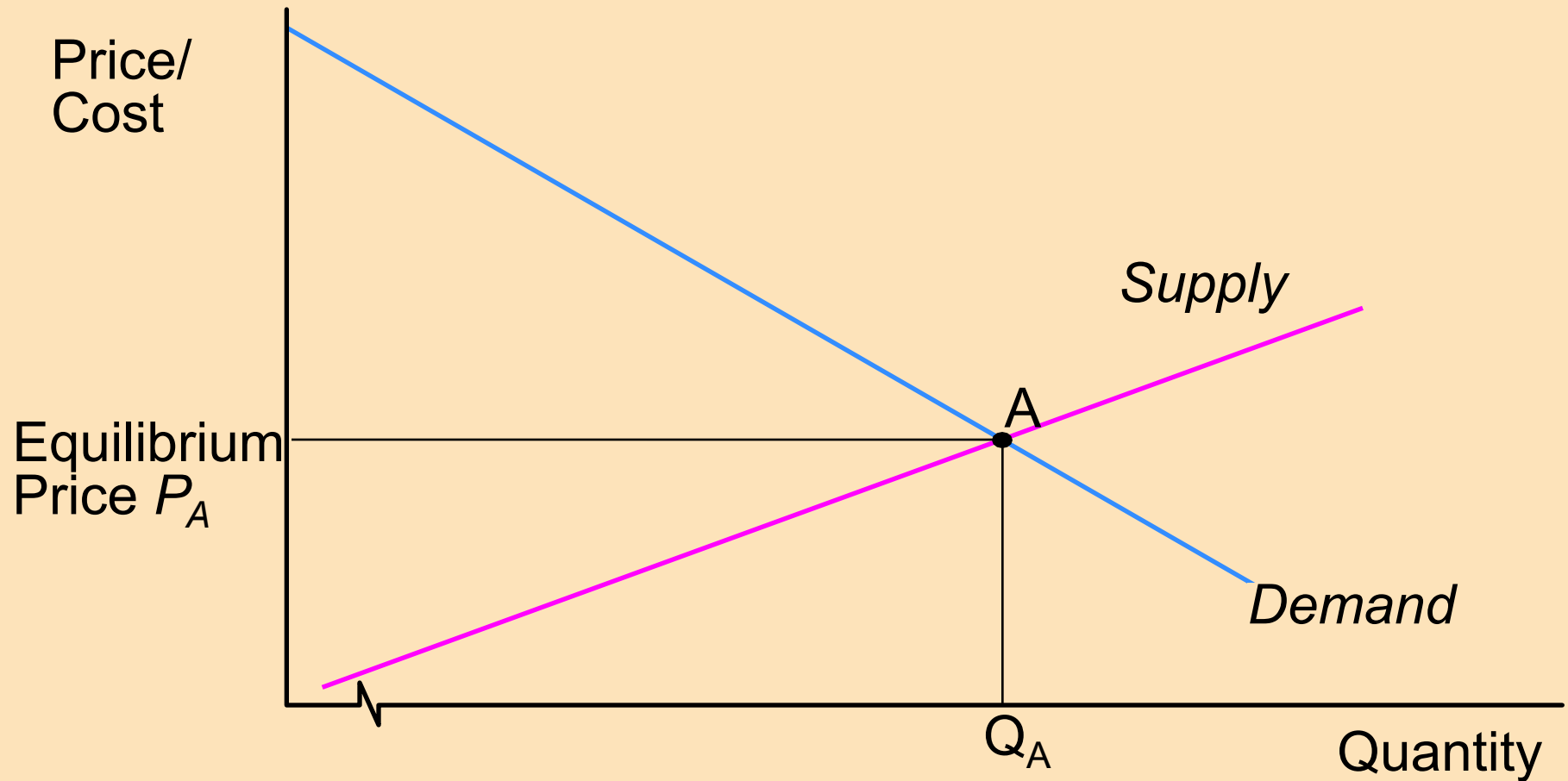
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- **Efficiency** = maximising benefit for resources used
- **Technical Efficiency** = meeting a given objective at least cost (resources)
- **Allocative Efficiency** = producing the pattern of output (supply) that matches the pattern of consumer want (demand)

# *Efficiency and 'the market'*



# *Efficiency and 'the market'*



# ***Topic versus discipline***

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**Topic** = area of study

**Discipline** = conceptual apparatus

Health economics is the *discipline* of economics applied to the *topic* of health.



# ***Some misconceptions***

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- Economics is ...
  - concerned with money
  - the same as accountancy
  - only practised by economists
  - objective

# *Economics and money*

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- Economics is concerned with...
  - *costs (resource use)*
  - benefits
  - choice
  - efficiency
  
- Money is...
  - store of value
  - means of exchange

# ***Economics and accountancy***

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- Economics is concerned with...
  - costs (resource use)
  - *benefits*
  - choice
  - efficiency
  
- Accountancy is concerned with...
  - monitoring financial transactions

# *The ‘practice’ of economics*

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- Economics is concerned with...
  - costs (resource use)
  - benefits
  - *choice*
  - efficiency
  
- Everyone...
  - weighs the relative benefits of each course of action and choose the action which maximises well-being

# ***Economics and objectivity***

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- All decisions are based on subjective value judgements (or judgements of subjective value!)
- Economics makes these explicit

# *What is 'health'?*

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- World Health Organisation:
  - Health is a “state of complete physical, mental and social well-being”
- “*Health* Economics” is often “*Health Care*” Economics
- Usually “health” in health economic (evaluation) is health *status* according to some measure

# Health status example: EQ-5D

By placing a tick in one box in each group below, please indicate which statements best describe your own health state today.

## Mobility

- I have no problems in walking about ☐
- I have some problems in walking about ☐
- I am confined to bed ☐

## Self-Care

- I have no problems with self-care ☐
- I have some problems washing or dressing myself ☐
- I am unable to wash or dress myself ☐

## Usual Activities (e.g. work, study, housework, family or leisure activities)

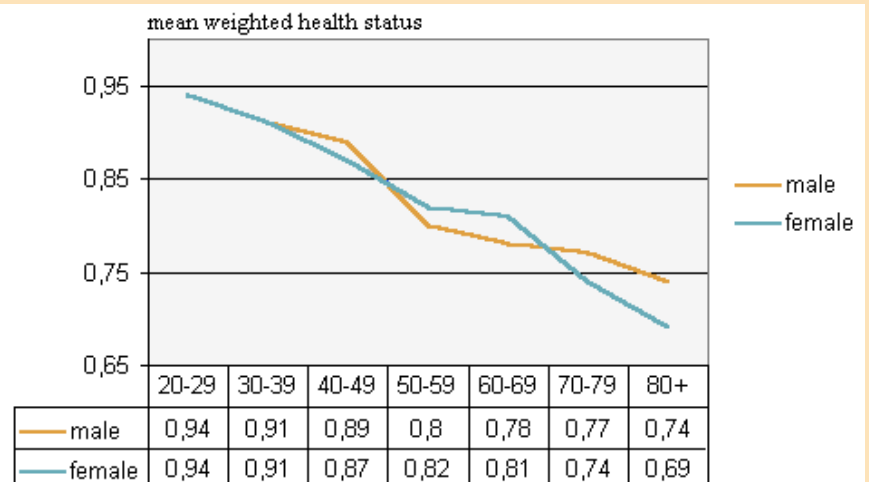
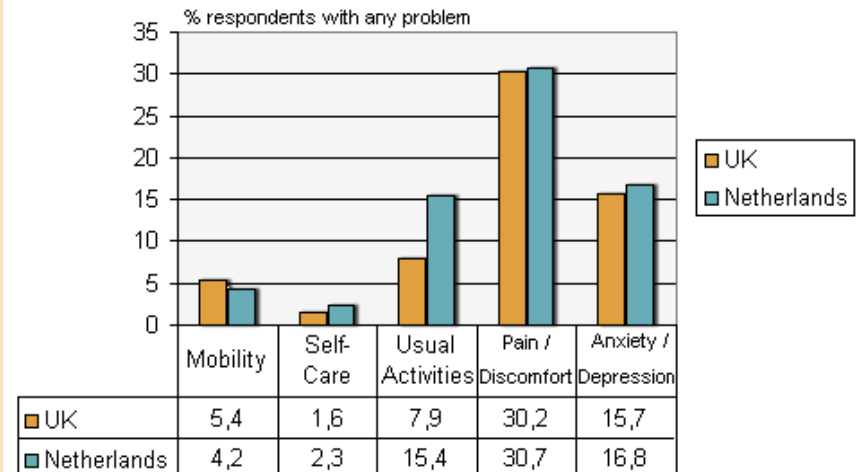
- I have no problems with performing my usual activities ☐
- I have some problems with performing my usual activities ☐
- I am unable to perform my usual activities ☐

## Pain/Discomfort

- I have no pain or discomfort ☐
- I have moderate pain or discomfort ☐
- I have extreme pain or discomfort ☐

## Anxiety/Depression

- I am not anxious or depressed ☐
- I am moderately anxious or depressed ☐
- I am extremely anxious or depressed ☐



# ***Applying economics to health (care)***

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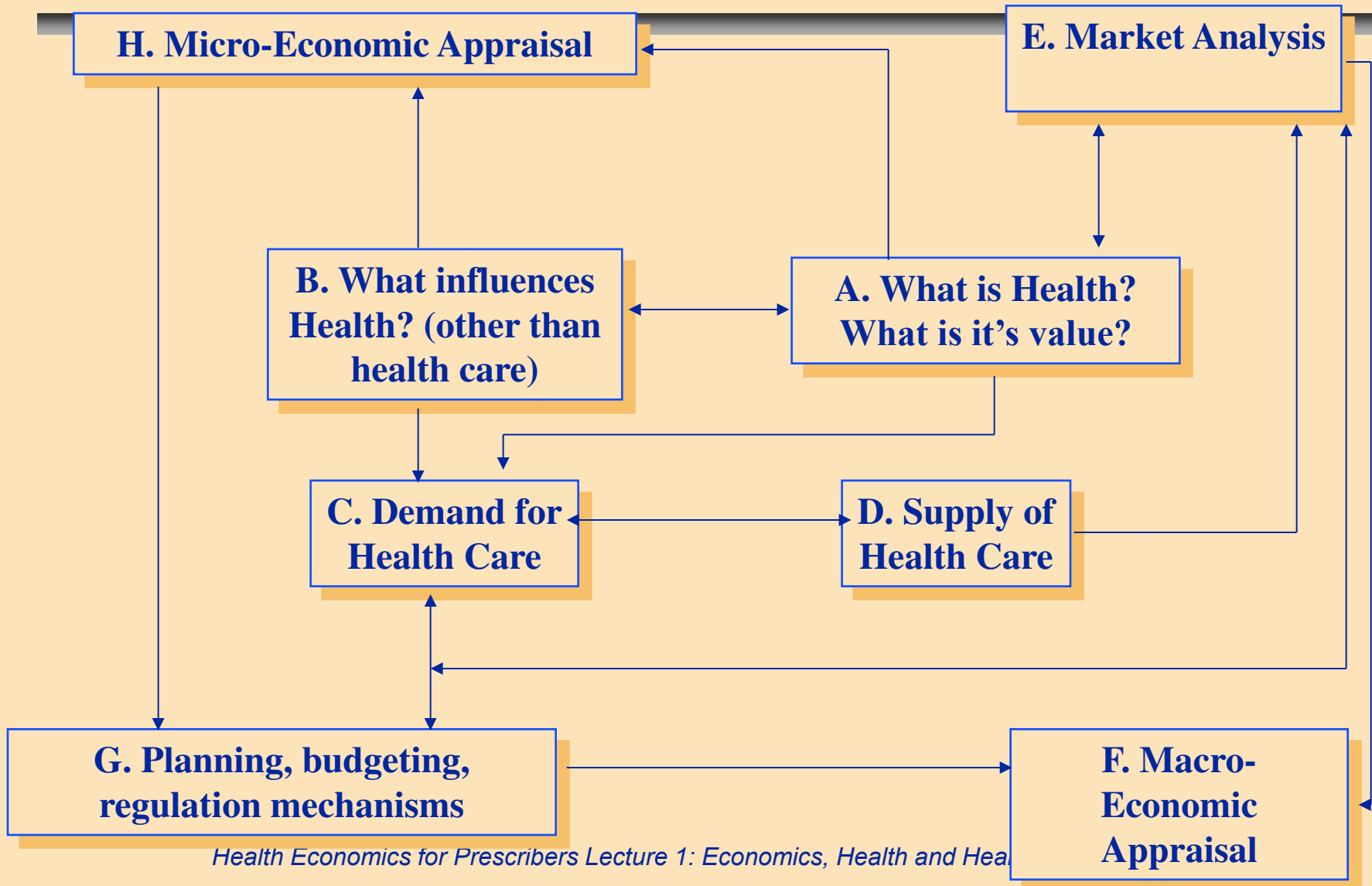
**Descriptive**      =      quantification

**Predictive**      =      identify impact of  
change

**Evaluative**      =      relative preference  
over situations



# Health economics 'map'



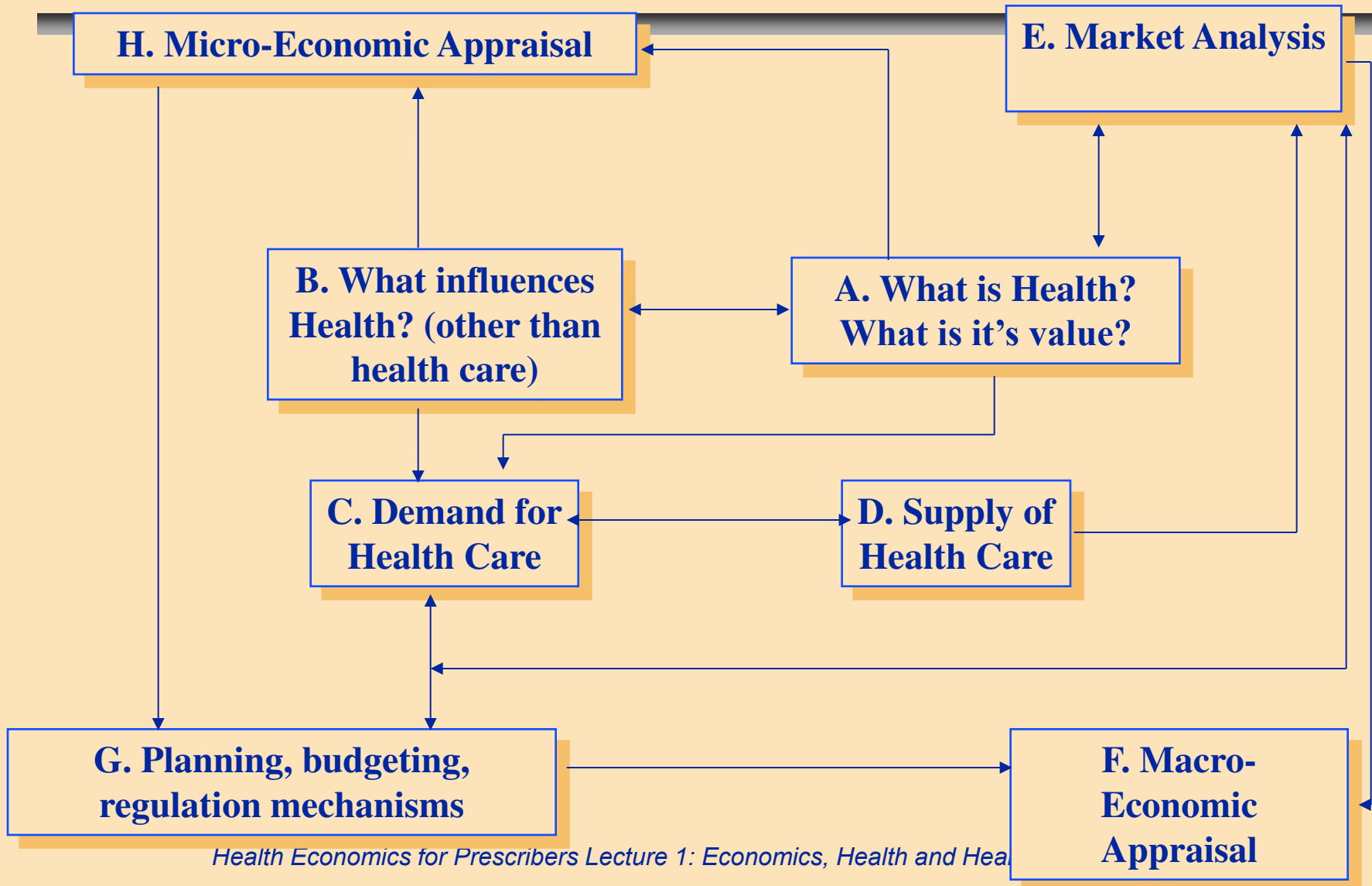
# A: Value of health

## THE WIZARD OF ID

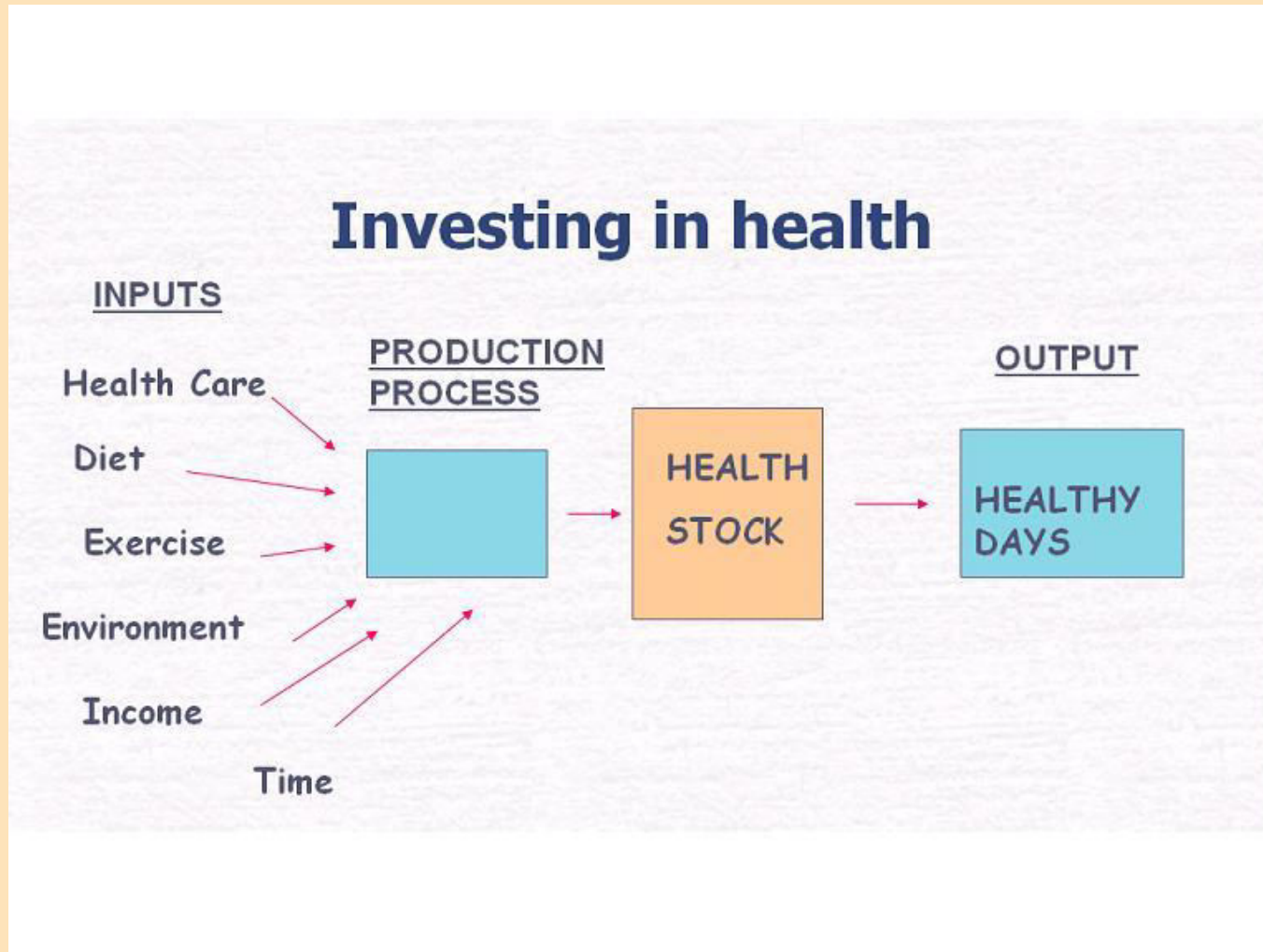
by Brant Parker and Johnny Hart



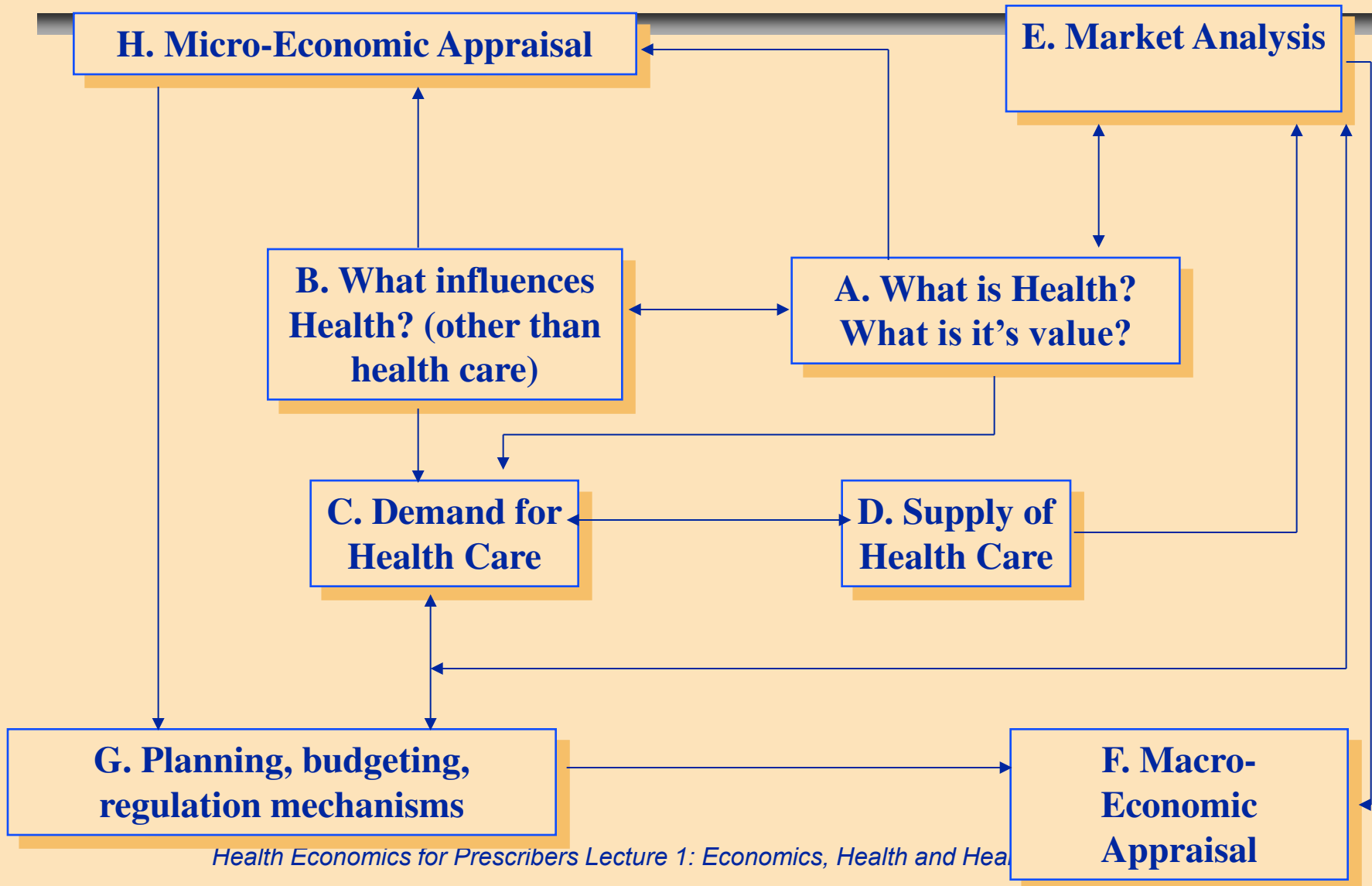
# Health economics 'map'



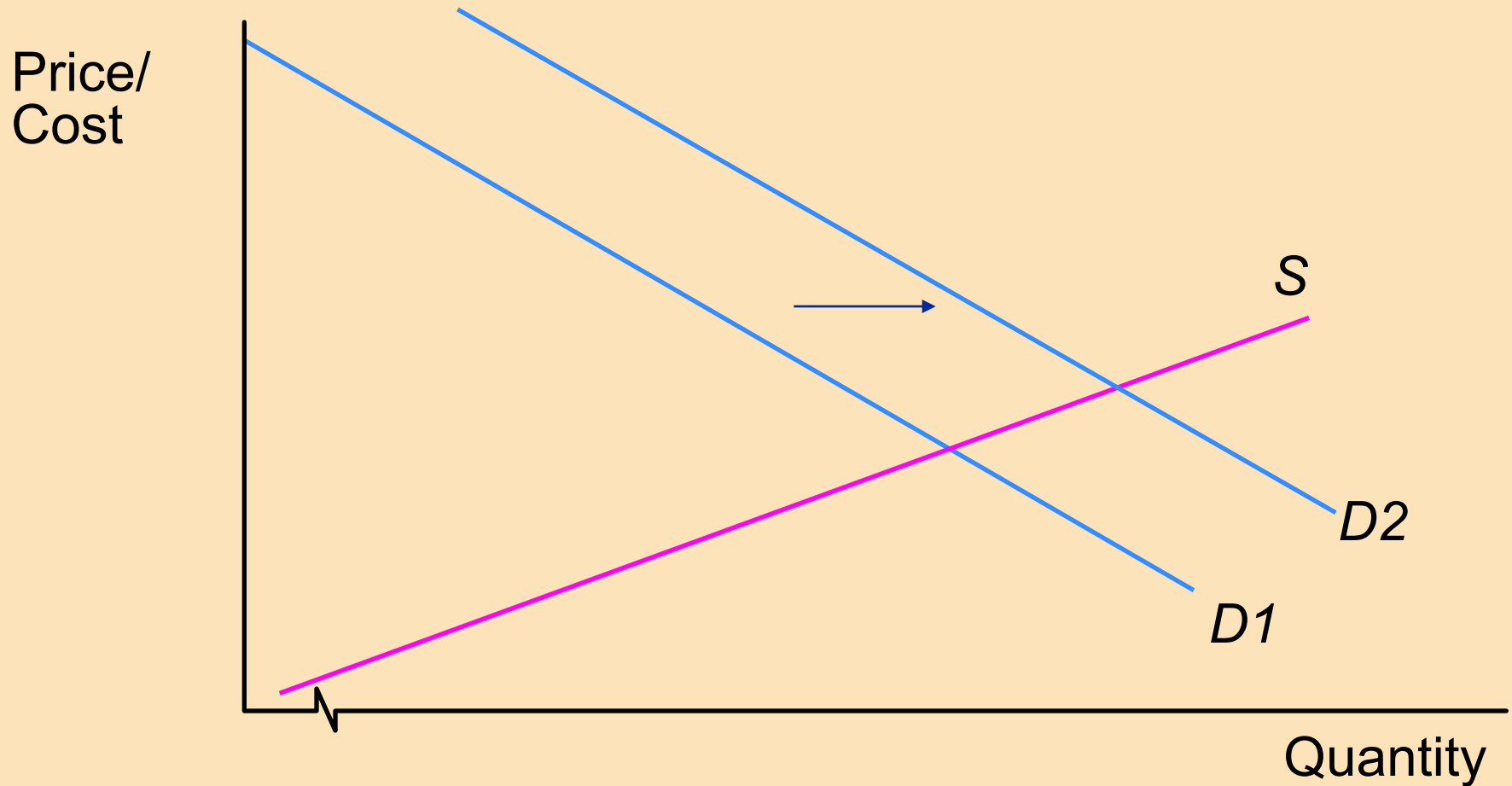
# ***B: Demand for health (Grossman)***



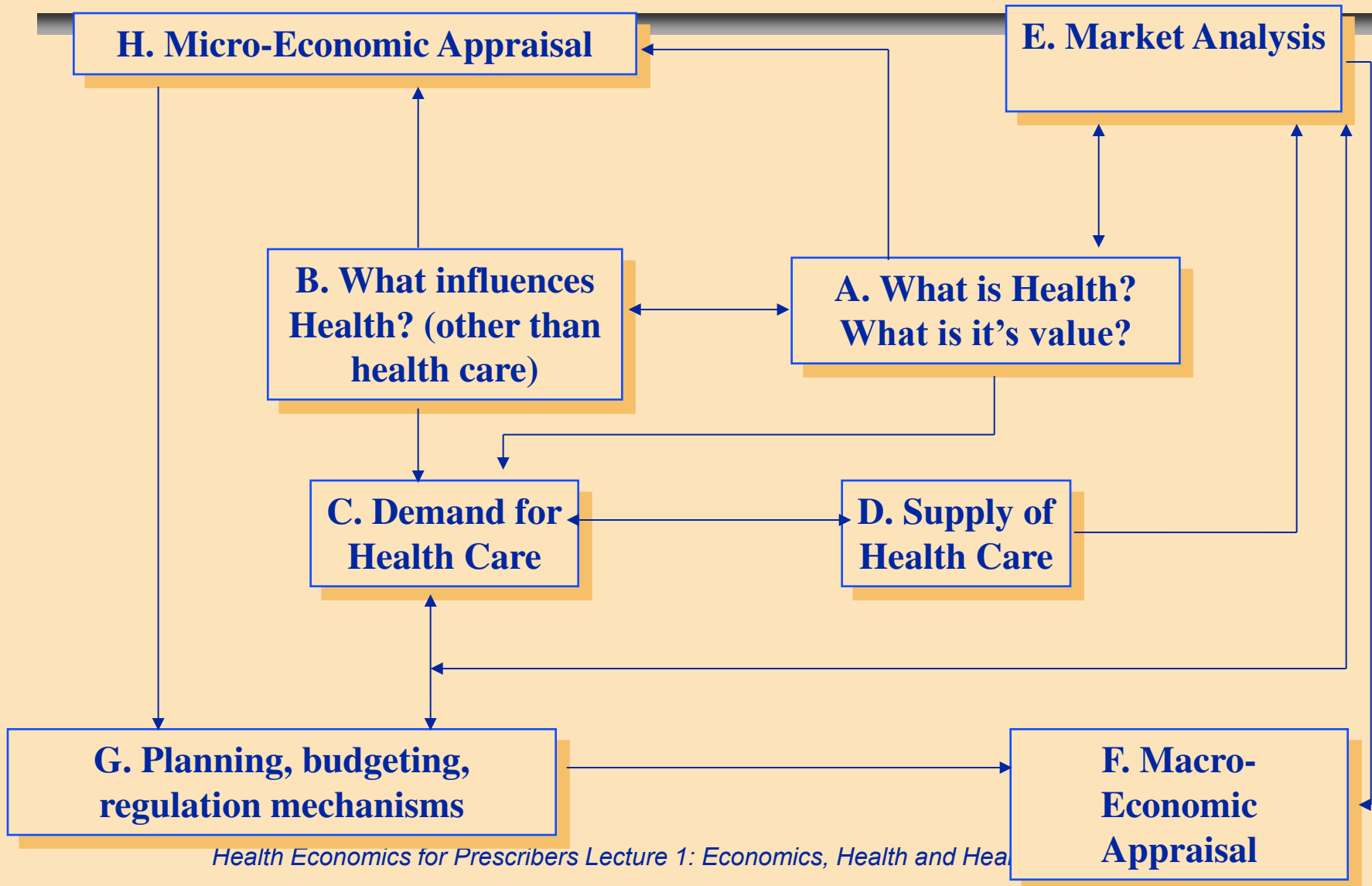
# Health economics 'map'



# ***C/D/E: Supplier-induced demand***



# Health economics 'map'



## ***F: WHO ranking of health systems (top 20)***

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1	France	11	Norway
2	Italy	12	Portugal
3	San Marino	13	Monaco
4	Andorra	14	Greece
5	Malta	15	Iceland
6	Singapore	16	Luxembourg
7	Spain	17	Netherlands
8	Oman	18	<i><b>UK</b></i>
9	Austria	19	Ireland
10	Japan	20	Switzerland



# Health economics 'map'

