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# ***Introduction to Health Economics***

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# *Lecture 1:*

## *Introduction to Health Economics*

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This lecture should enable you to:

- Appreciate the essential characteristics, role and importance of economics
- Understand how economics is applied to the study of health and health care
- Identify how economics relates to other considerations within health and health care

# *Outline of Lecture*

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- What is economics about?
- What is economics NOT about?
- What is *health* economics about?
- Is health economics ethical?
- What will this module cover?

# *Economics is about ...*

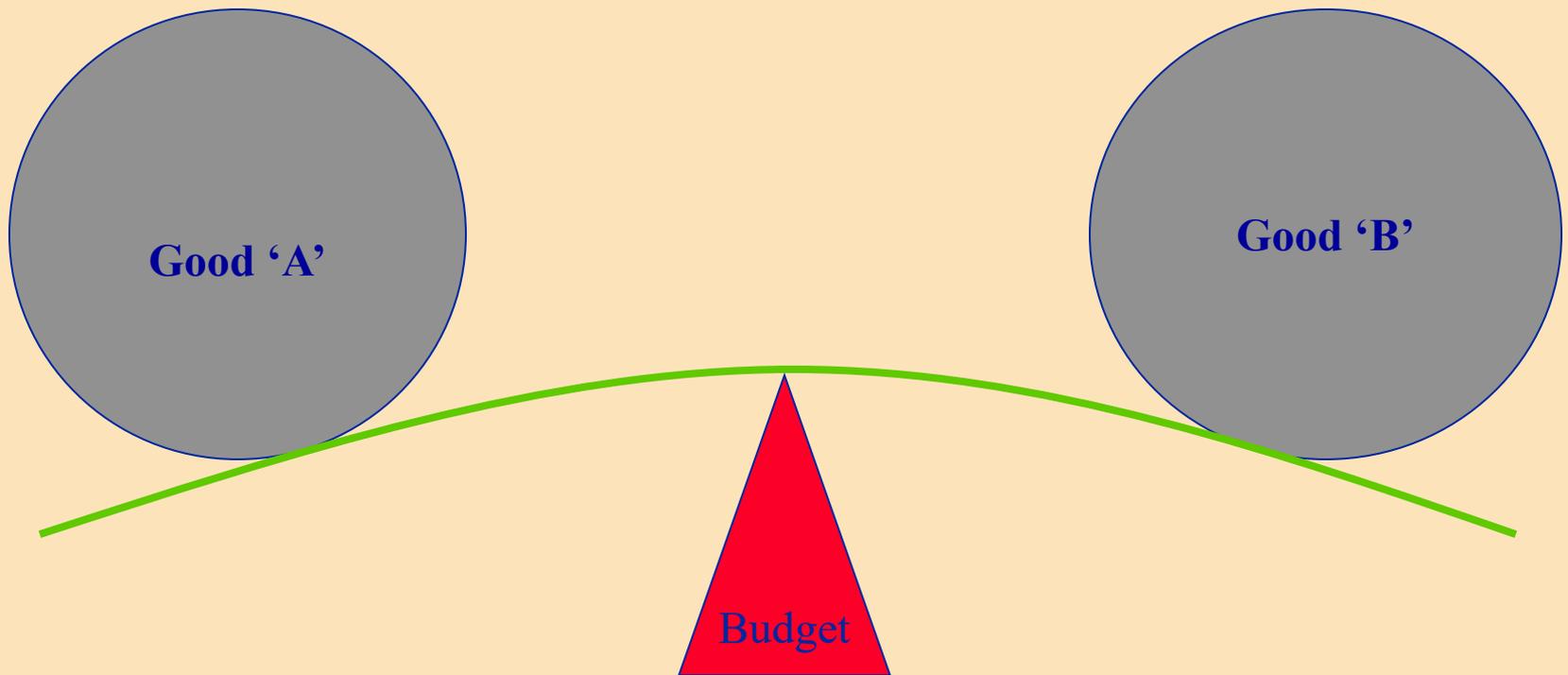
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- Limited resources
- Unlimited “wants”
- *Choosing* between which ‘wants’ we can ‘afford’ given our resource ‘budget’



# ***Economics is about choice***

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# *Personal choice...*

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- For lunch I could have a...



Whopper meal deal (small)



Tall latte and blueberry muffin (to go)



Tuna sandwich & cracked pepper crisps



Pint of Guinness & packet peanuts

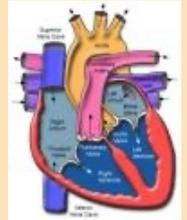
# Government choice...

- Government could fund one IVF course or...



One-third of a cochlear implant

1 heart bypass operation



11 cataract removals

150 MMR vaccinations



One-thousandth of a Challenger 2 tank

# *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!**

# ***Economics is NOT...***

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- Concerned with (saving) money
  - Store of value
  - Means of exchange
- The same as accountancy
  - Monitoring financial transactions
- Only practised by economists
  - Everyone has choices
  - Economists just think of these explicitly

# *Economics IS...*

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- Concerned with...
  - Costs (resource use)
  - Benefits
  - Choice
  - Efficiency
- Basically... ‘if I *choose X* do the *benefits* outweigh the *costs*?’
  - If ‘yes’ then doing *X* is ‘*efficient*’
  - If ‘no’ then doing *X* is ‘*inefficient*’

# *Application of economics*

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Descriptive = quantitative

Predictive = study impact of change

Evaluative = preference over situations

**Positive economics**

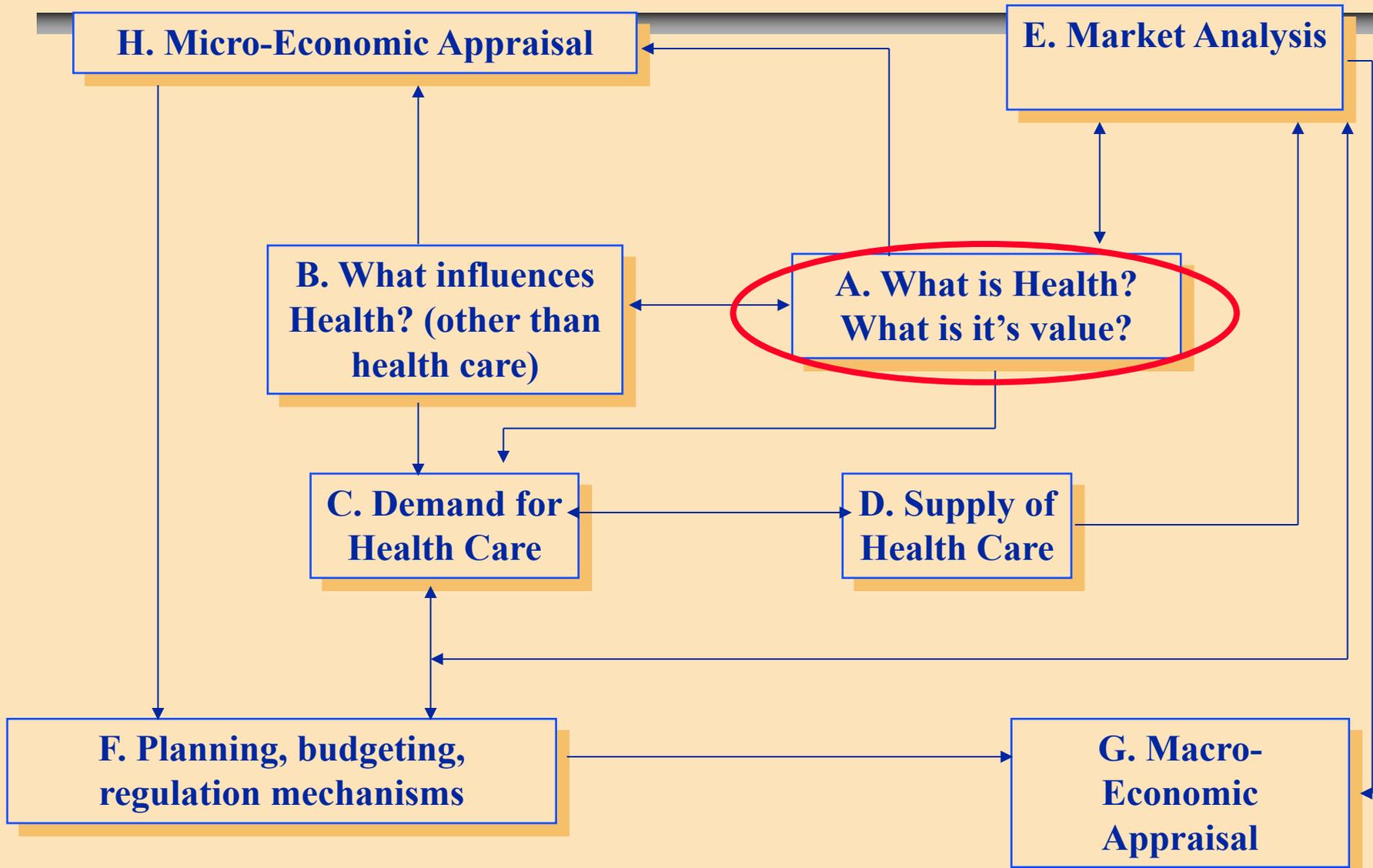
**Normative economics**

# 'Health' and economics...

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- Economics focuses on 'utility': the level of 'happiness' resulting from consumption
- Health is thus *one* component of utility. This has important implications:
  - Health is not the *sole* objective of behaviours
  - Creates trade-offs and choices between health and other objectives – e.g. education, defence etc
- Health economics is the *discipline* of economics applied to the *topic* of health
  - In practice, health economics is predominantly (but not solely) "*health care*" economics: goods and services produced (by *health sector*) primarily to affect *health status*

# Health economics 'map'



# A: Value of health

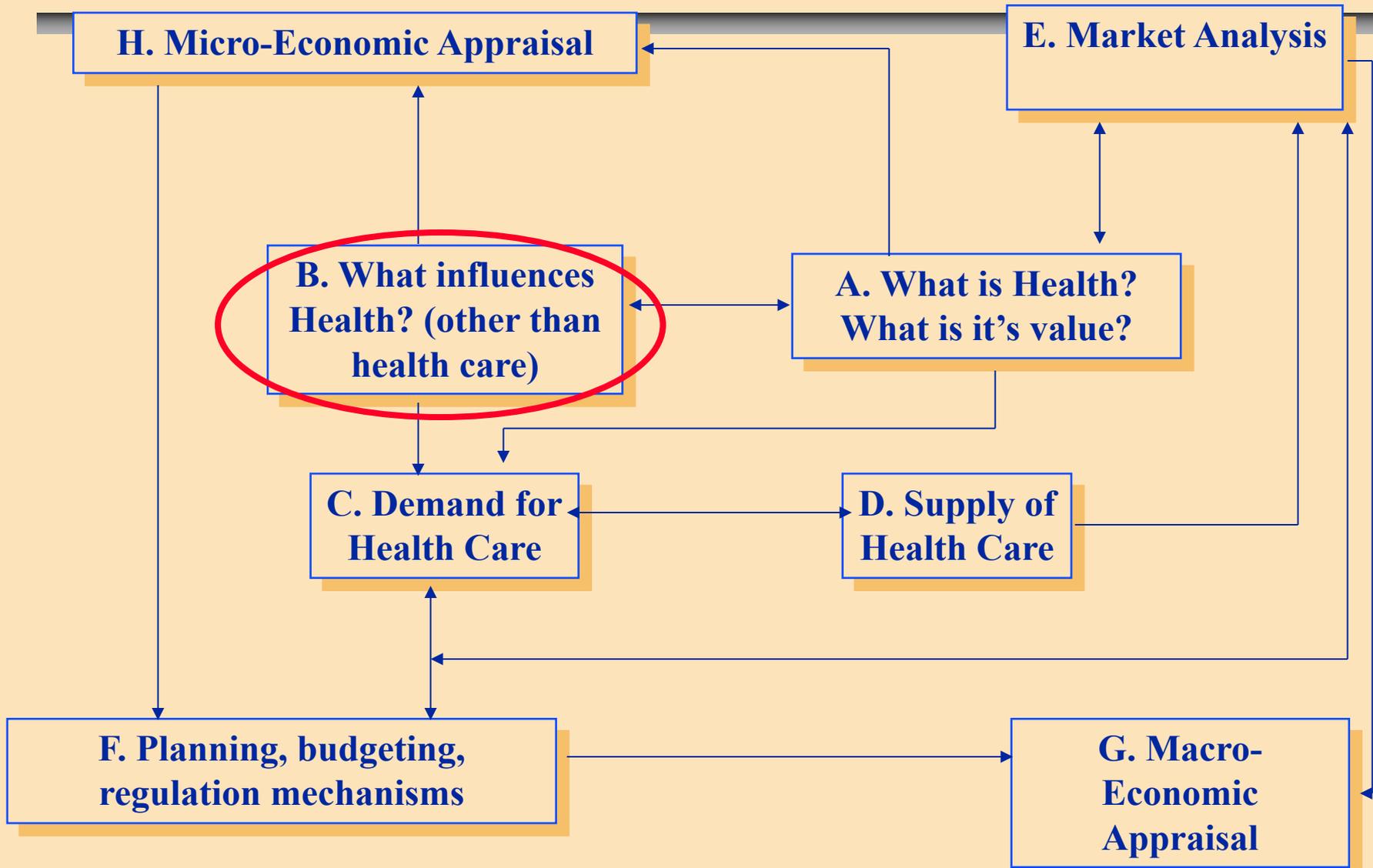
- Quality-Adjusted Life Years (QALYs) and Disability-Adjusted Life Years (DALYs)
  - Combine length and quality of life

THE WIZARD OF ID

by Brant Parker and Johnny Hart

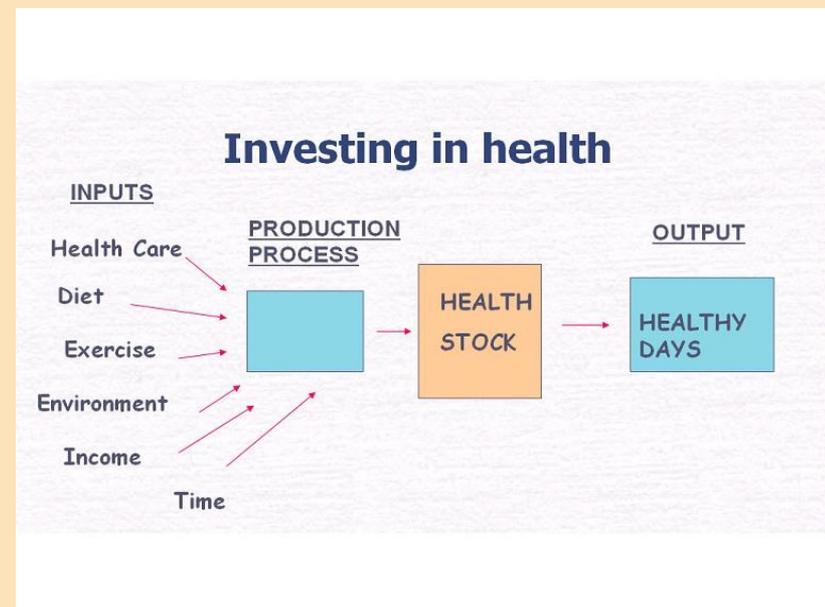


# Health economics 'map'

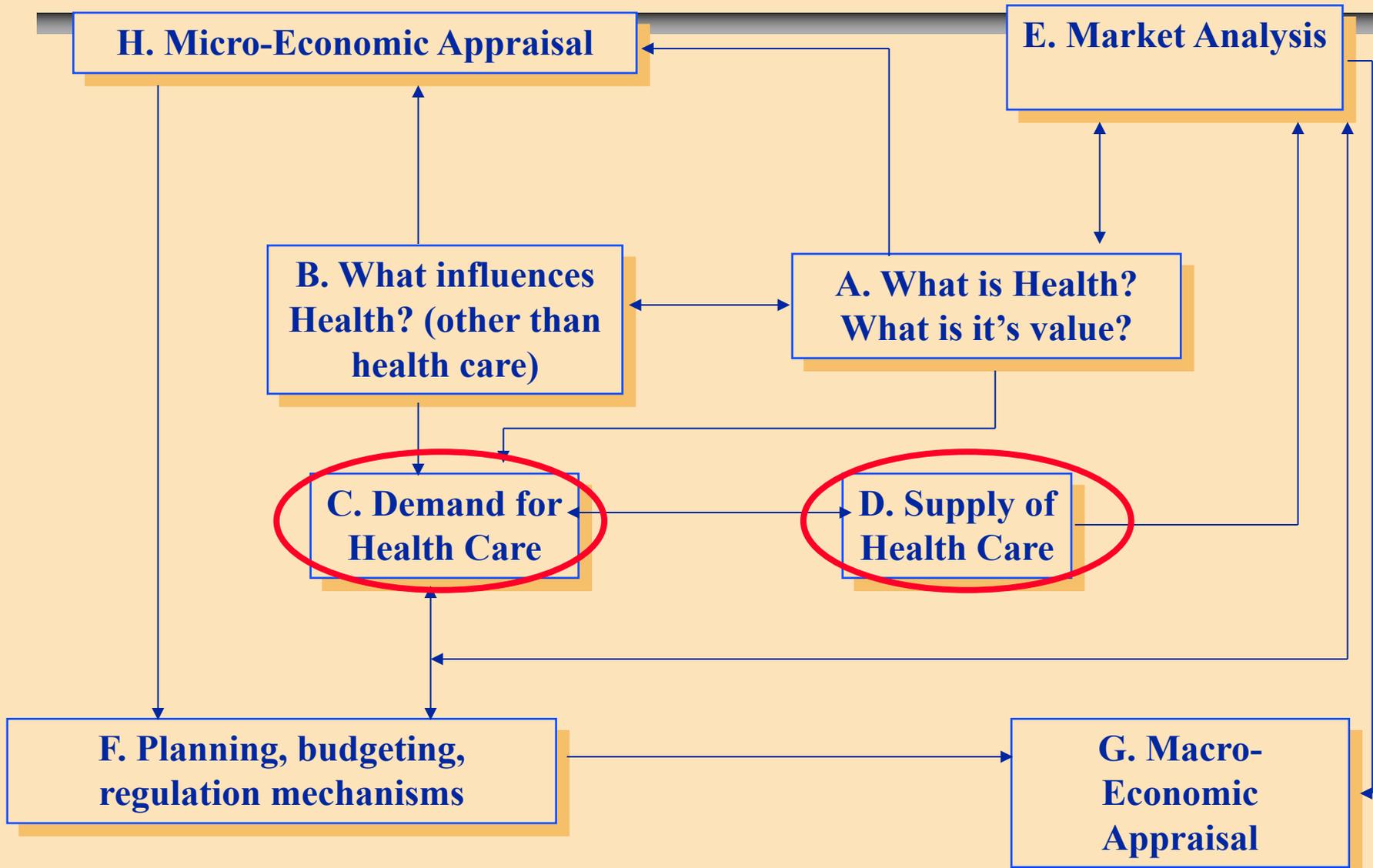


# ***B: Other influences on health***

- Economics of obesity – technology is fattening (Propper C, Health Economics, 2005; 14: 987-997)
  - Study examined the relationship between ‘price’ of food and food consumption/weight
  - Technological change has altered the relative prices of consuming calories and expending calories
    - Reduced the price of food (calories)
    - Reduced time costs of food (calorie) preparation
    - Changed the nature of work



# Health economics 'map'



# C/D: Agency

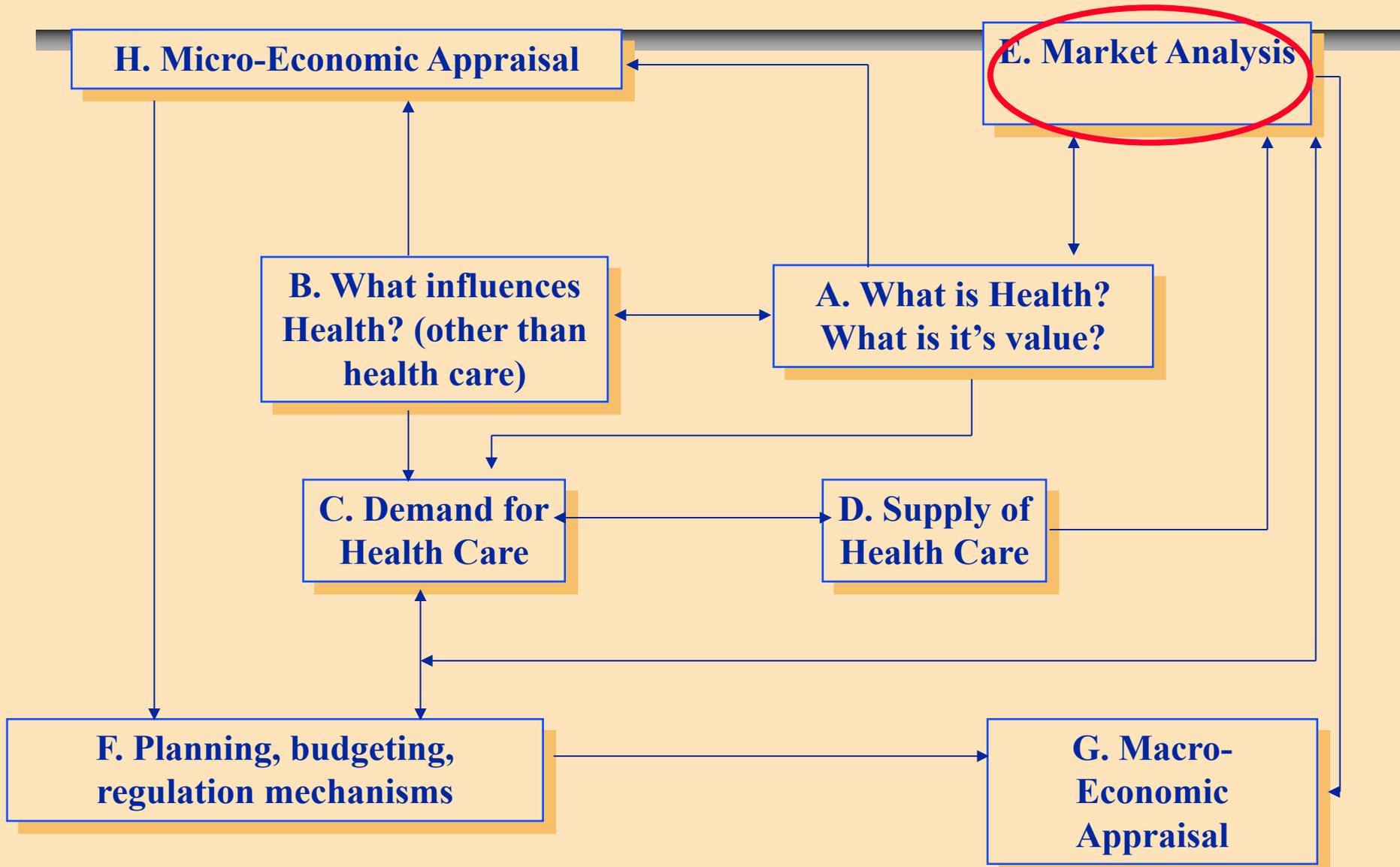
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“The doctor is there to give the patient all the information that the patient needs in order that the patient can make a decision, and the doctor should then implement that decision once the patient has made it”

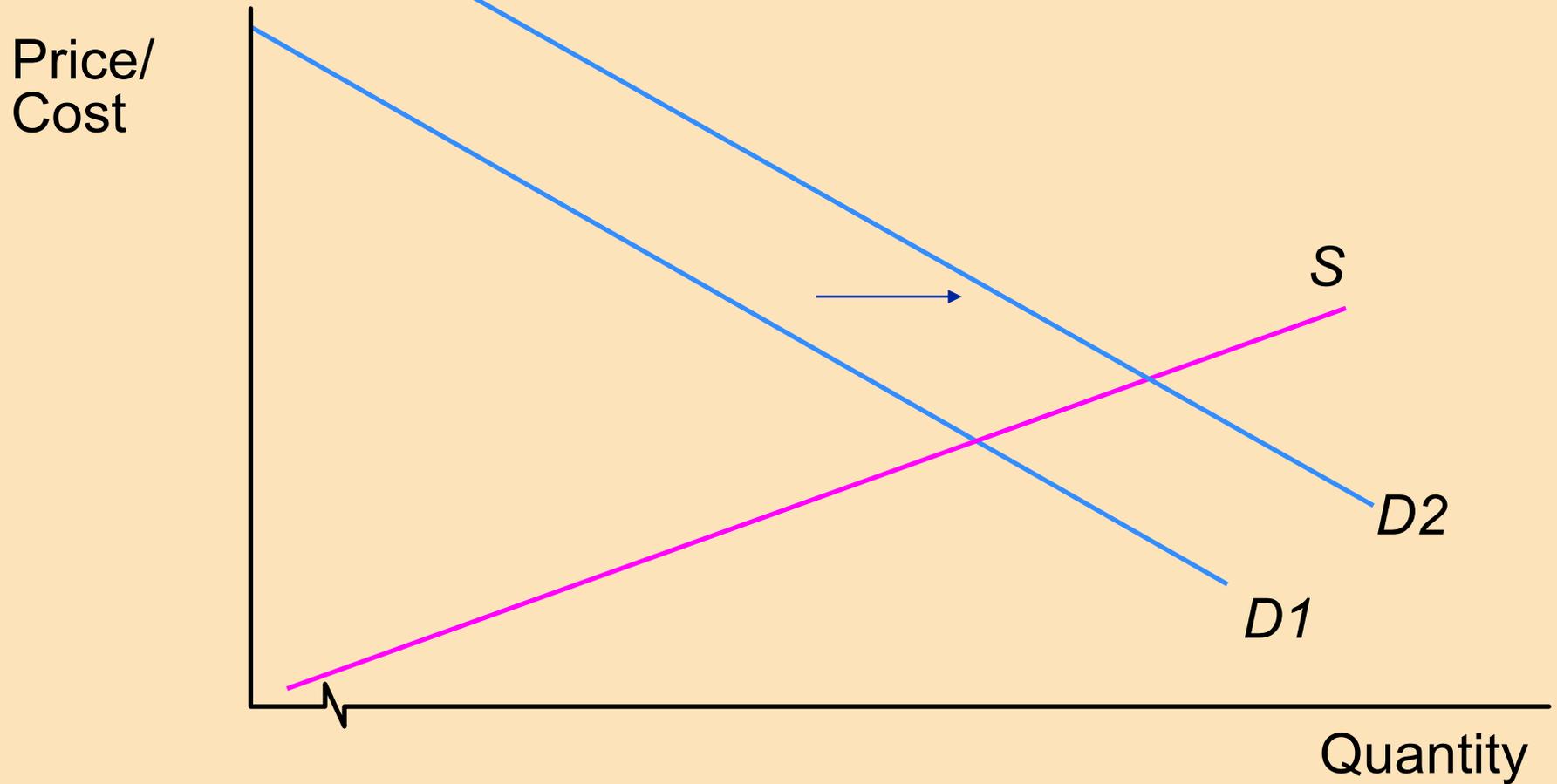
OR IS IT ...

“The patient is there to give the doctor all the information that the doctor needs in order that the doctor can make a decision, and the patient should then implement that decision once the doctor has made it”

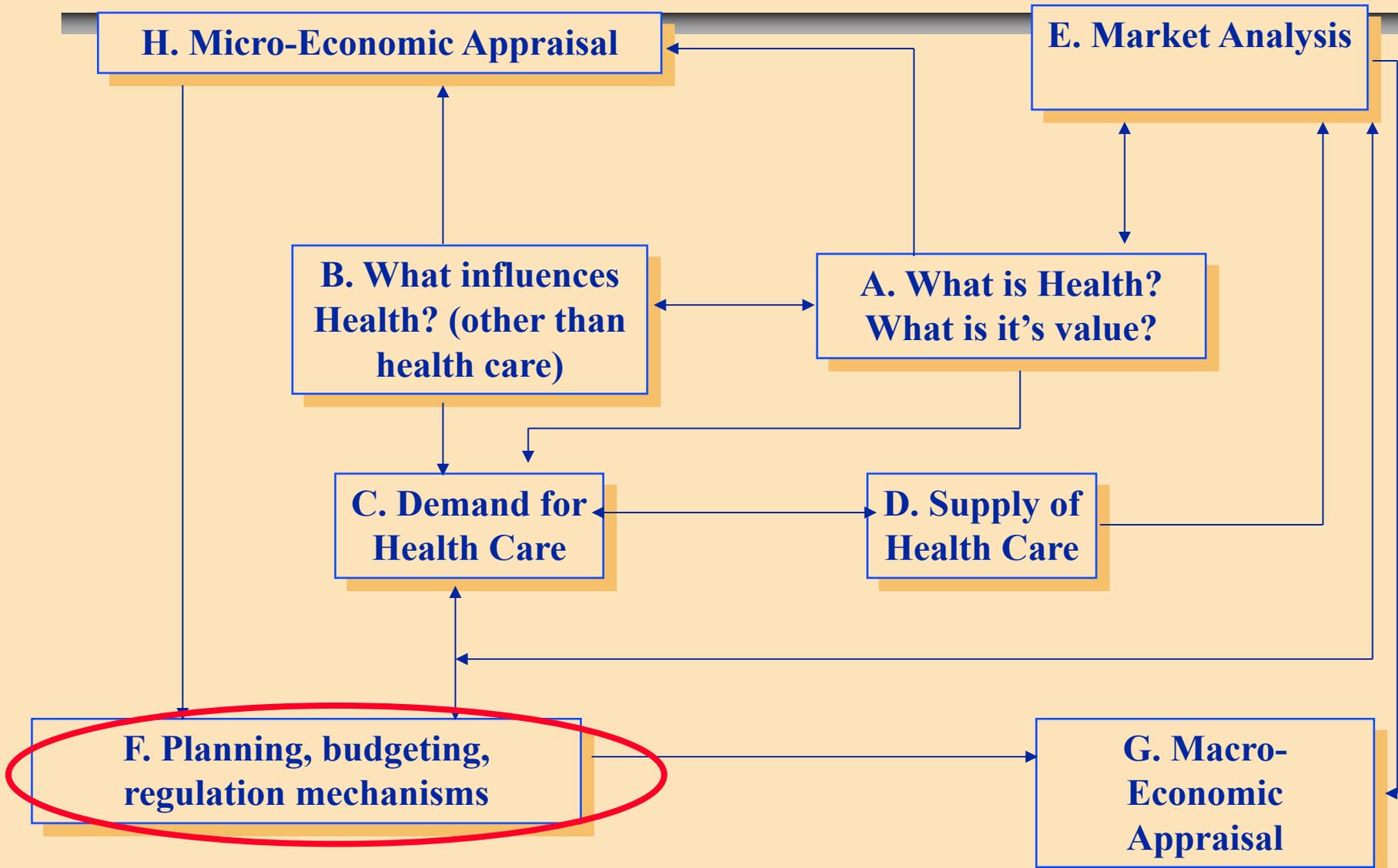
# Health economics 'map'



# *E: Supplier-induced demand*



# Health economics 'map'

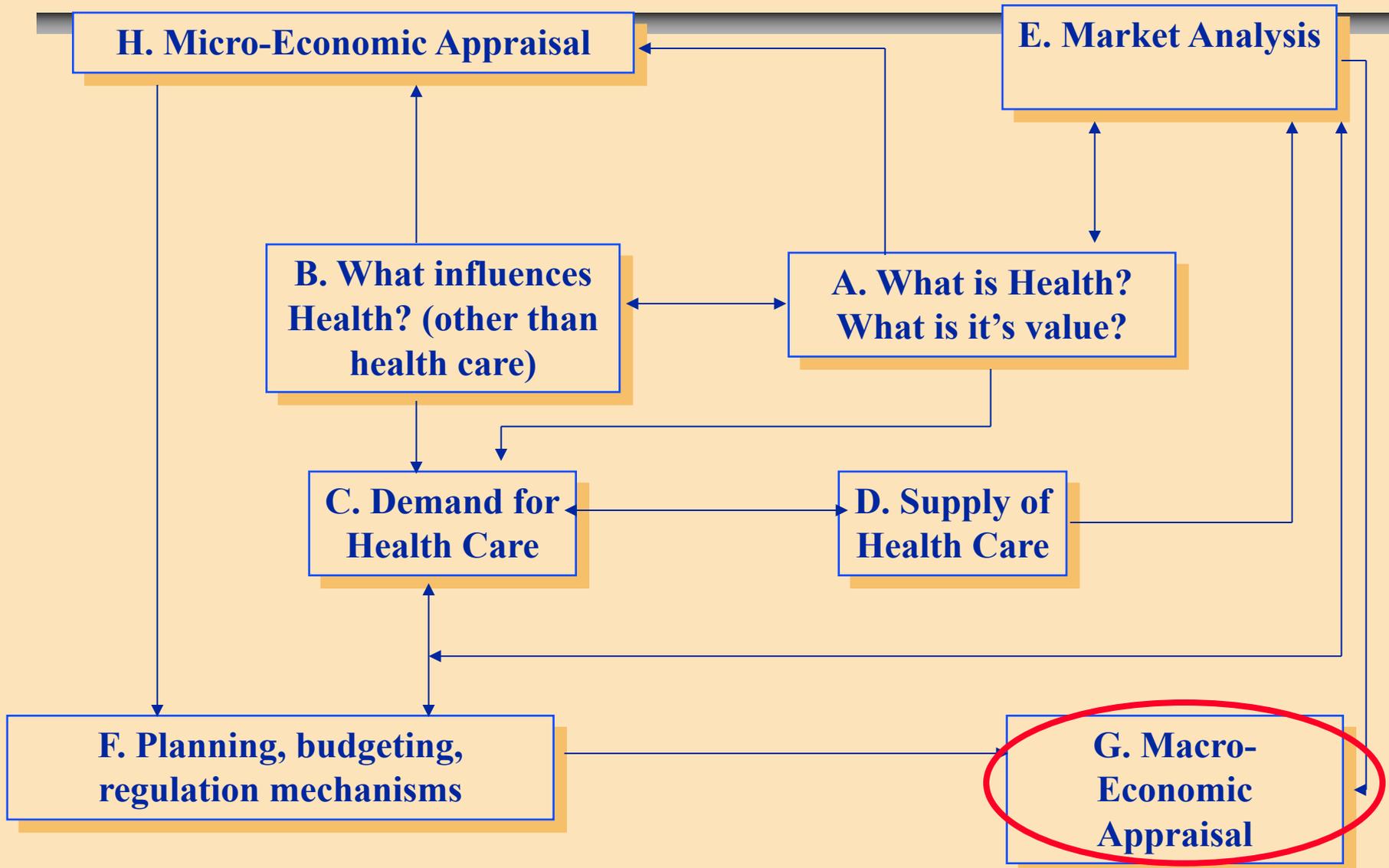


# *F: Creating incentives*

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- “The typical economist believes the world has not yet invented a problem that cannot be fixed if given a free hand to design the proper incentive scheme” (Levitt and Dubner, “Freakonomics”)
- An incentive is simply a means by which someone is persuaded to (not) do something
  - Eg. F-F-S is to treat more patients; increase price of tobacco or soft-drinks is to reduce consumption; etc
- Incentive is seen to be a means of urging people to do more of a ‘good’ thing and less of a ‘bad’ thing (a ‘perverse’ incentive is the reverse)

# Health economics 'map'

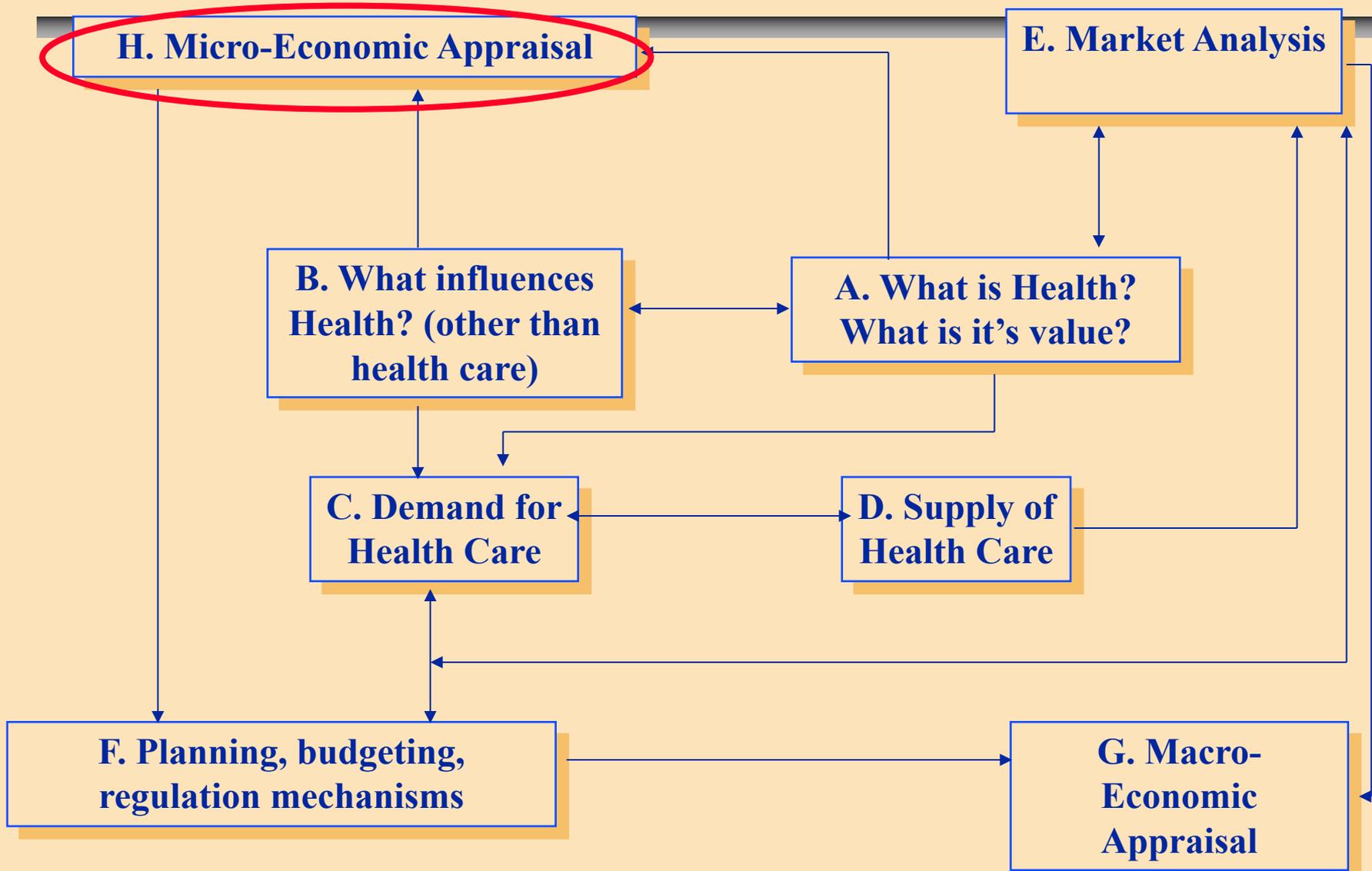


## ***G: WHO ranking of health systems***

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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	UK
9	Austria	19	Ireland
10	Japan	20	Switzerland

# Health economics 'map'



# H: Economic evaluation

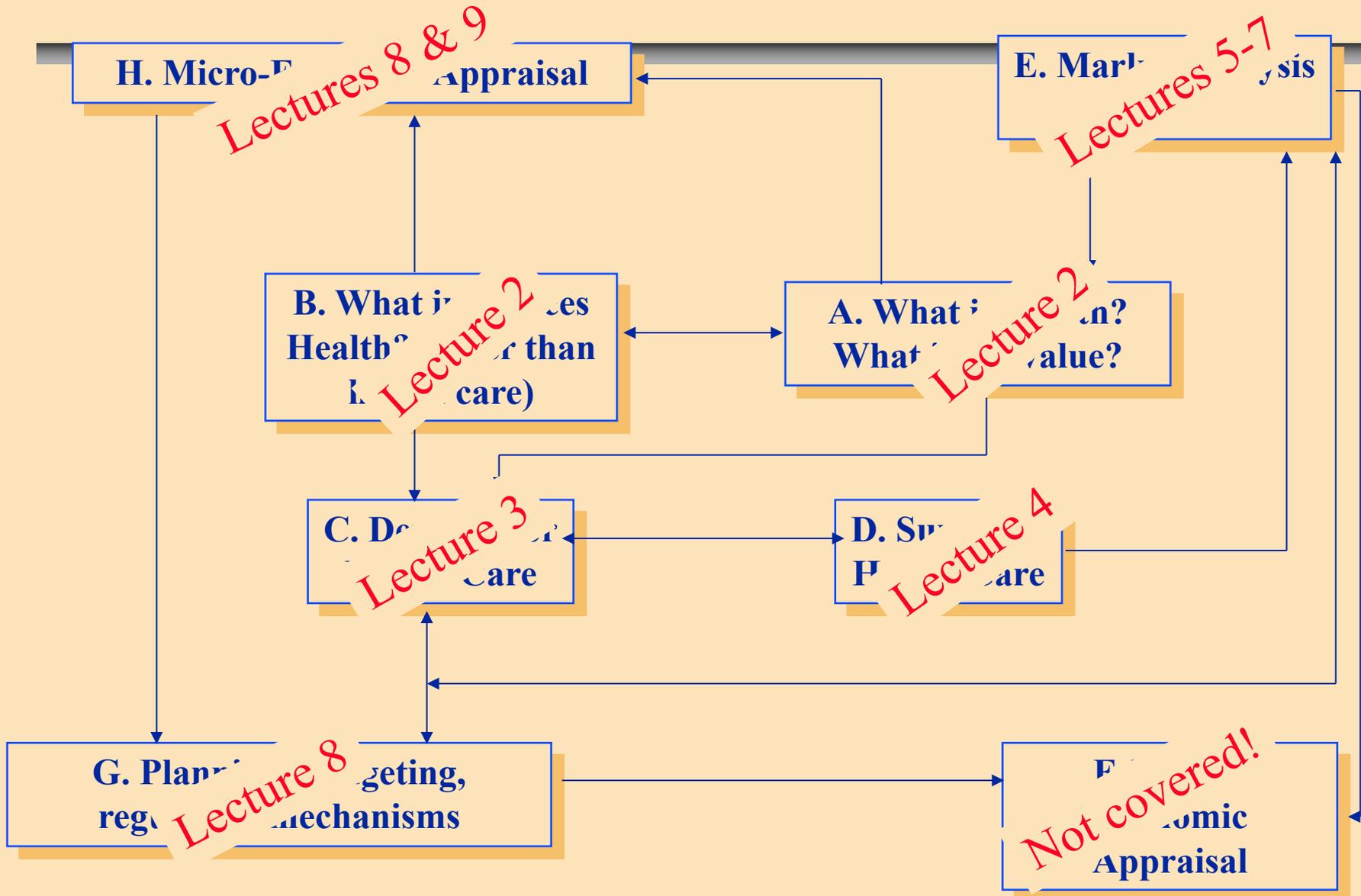
	Cost per QALY gained (£)	
GP advice to give up smoking	500	
Pacemaker implant	1,500	
Hip replacement	2,000	5 'hip QALYs'
Colorectal cancer screening	2,500	
Breast cancer screening	3,500	or
Sildenafil (Viagra)	4,000	
Heart transplantation	10,000	1 'heart QALY'?
Hospital haemodialysis	25,000	
Surgery for intra-cranial tumours	150,000	↑
Interferon for multiple sclerosis	800,000	Threshold

# *Is health economics ethical?*

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- Health economics may *appear* to be unethical because it implies some individuals being denied health care. But:
  - The need to ration is not simply the result of having a small budget. It is more fundamental than this
  - Health care is only one way of improving health – better sanitation, housing, education, environment, etc
  - Economics tends to focus on society rather than individuals, requiring divergent ethical constructs
- Unethical *not* to consider economic aspects:
  - Rationing would occur by another (opaque) means
  - Will never have enough resources to exhaust all the possibilities to produce some (small) health benefit
  - There are other things of value than ‘health’ - balance

# What will this module cover?



# *A final word...*

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- Health economics is the application of economics to the study of health and health care
- It is important because:
  - Our health is important to us
  - Health is affected by our choices
  - The health sector is very significant to the economy
  - Decisions in health (care) often determined by economic environment
- (Health) economics is not concerned with saving money, but with improving people's lives
- Health economics is quite literally a matter of life and death!