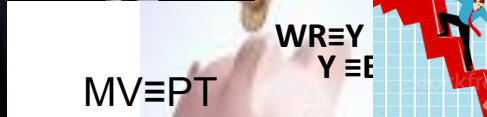
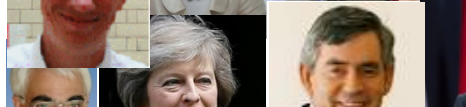




Practitioner Skills for Economists

Andy Ross FAcSS





Old Joke

‘Politicians make decisions without any evidence, businessmen make decisions on incomplete evidence and academics never make a decision as there is never enough evidence’.

How I felt as an academic entering government





A generalisation: academics are prized by their peers for rigour and professional practitioners are prized by their employers for relevance.



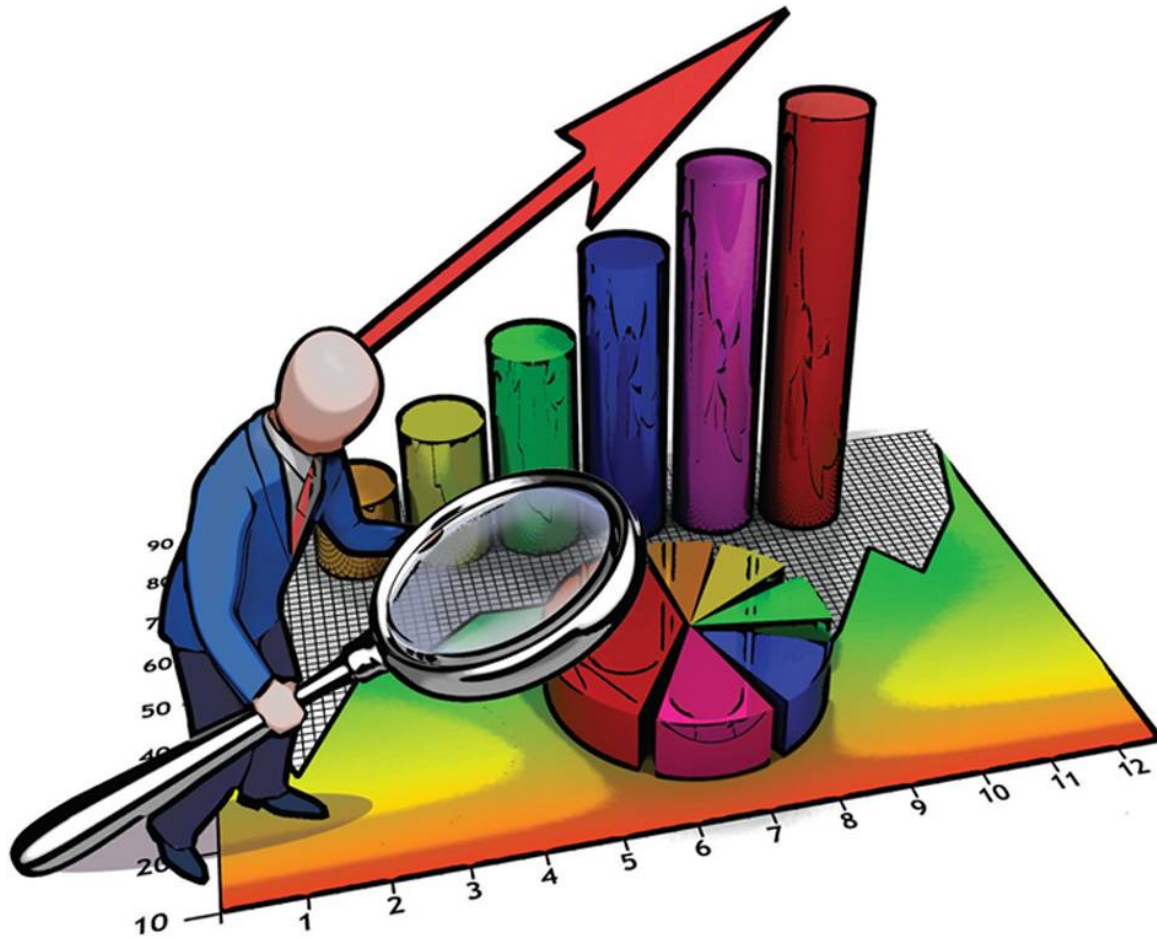
Rigour

Relevance

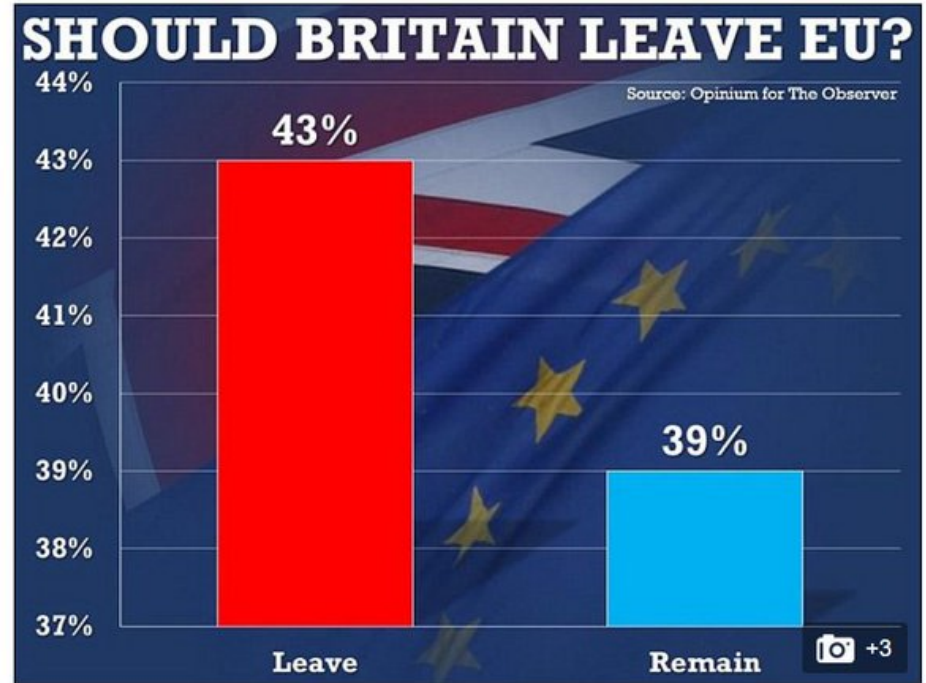
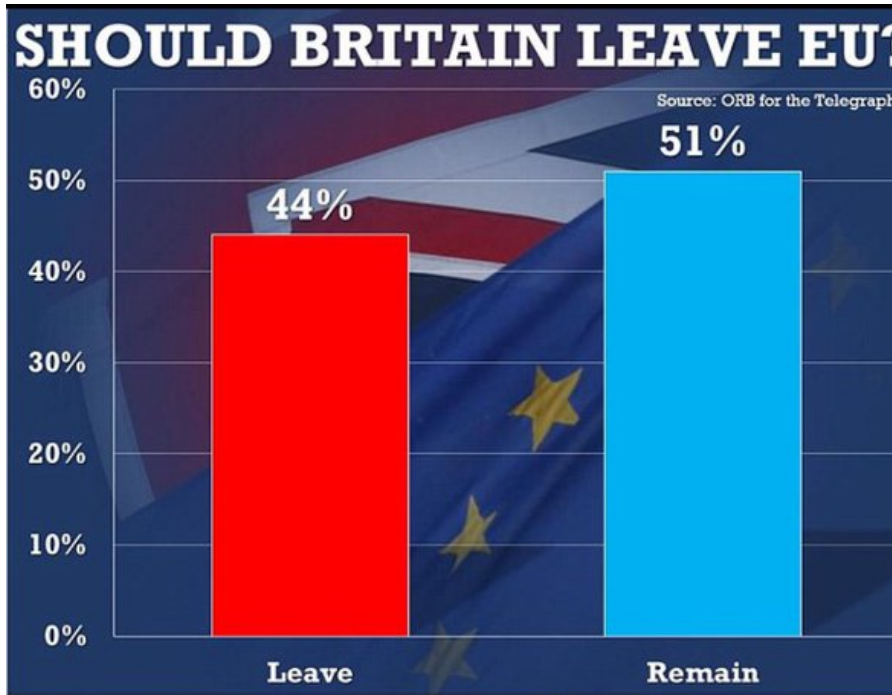




For practitioners maths is less important than insight & data skills



PRO-BREXIT: Truncating the Y Axis



From the Daily Mail

Any good analyst can find facts to support a case

tablehttp://www.supportingevidence.com/Health/Life_expectancy_v_alcohol_consump_by_country.html

Country	Annual alcohol consumption (Litres) per capita over 15 years of age	Life expectancy at birth (years)
Turkey	1.5	71
Poland	8	75
UK	11	78.5
France	14	79

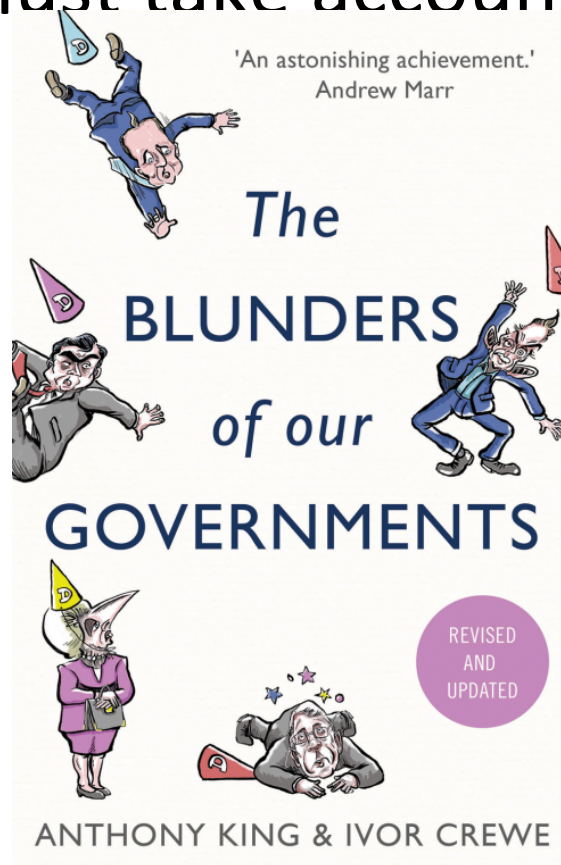
‘If all regions had grown at just the average rate then overall UK growth would have been higher’

Why did a government economist recommend that this sentence be removed from a Minister’s briefing?



Just being an economist is not enough in government

Policy economics must take account of far more than economics.





QAA Subject Benchmarks:

Employers of economists value:

Well evidenced reports and conclusions (that further their interests!)

Communicating complexity simply

History, examples and case studies

Critical judgement to evaluate context, proportionality and awareness of limitations

Synthesis

- So practise pluralistic perspectives and interdisciplinary analysis

There's more than one reason to be pluralistic

- Moral and democratic arguments
- Employability
- Develops critical facilities
- Helps pick the right tool for the job
- More aware of model limitations
- Makes you less gullible
- Makes economics more interesting

Usual objection: makes students confused- tough, real world IS confusing!

Economics is not enough!

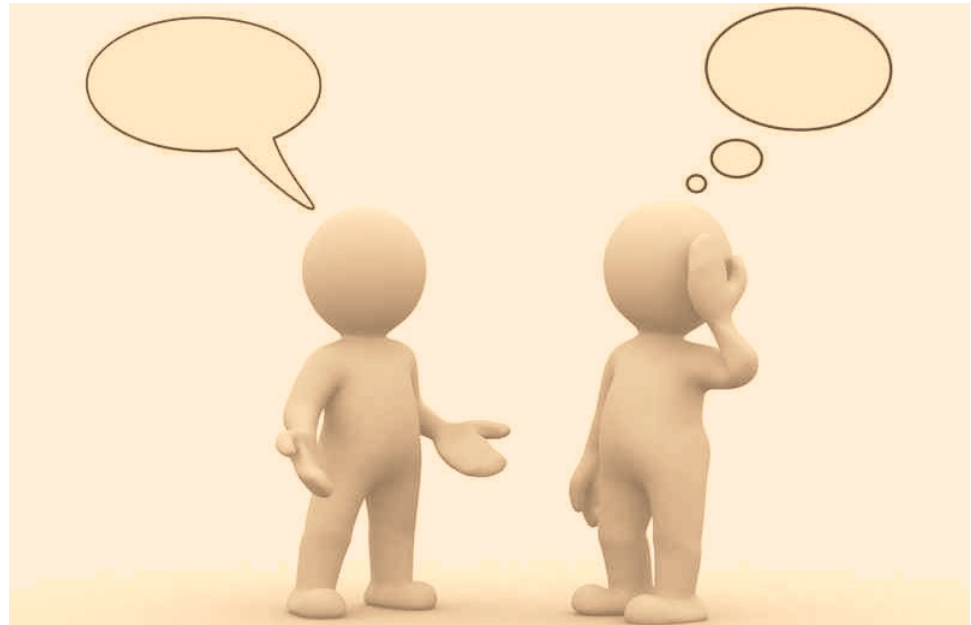
<http://blog.policy.manchester.ac.uk/posts/2017/01/economics-is-not-enough/>





What have GES done in the past year?

- Production of Briefing Material **75 %**
- Policy Advice **70%**
- Evaluation of Policy **53%**



So good communication is vital

To convince people they usually need to understand what you are saying



Lord Stern



“The economist who tells the decision maker that ‘it is all very difficult and uncertain’ is not much help and will soon find themselves not invited back”

Vicky Pryce

[http://www.instituteforgovernment.org.uk/sites/default/files/publications/
The%20dismal%20science.pdf](http://www.instituteforgovernment.org.uk/sites/default/files/publications/The%20dismal%20science.pdf)



To Non-economists it looks like:

- **The First Law of Economics:**

For every economist there exists an equal and opposite economist

- **The Second Law of Economics:**

They are both wrong



Compelling language & 'Agency'



Subject to normal statistical error



UNCLASSIFIED

Actual brief for the Development of the UK Atomic Bomb - the whole thing!

246

2.

TOP SECRET

Atomic Energy.

245

Research on Atomic Weapons.

MEMORANDUM BY THE MINISTER OF SUPPLY

I forward for the consideration of Ministers a note by the Controller of Production of Atomic Energy.

John G. Smith

Note by the Controller of Production of Atomic Energy

1. I submit that a decision is required about the development of Atomic weapons in this country. The Service Departments are beginning to move in the matter and certain sections of the Press are showing interest in it.
2. My organization is charged solely with the production of "fissile material", i.e. of the "filling" that would go into any bomb that it was decided to develop. Apart altogether from producing the "filling", the development of the bomb mechanism is a complex problem of research and development and precision engineering on which some years of research and development would be necessary.
3. I suggest that there are broadly three courses of action to choose from.
 - (a) Not to develop the atomic weapon at all.
 - (b) To develop the weapon by means of the ordinary agencies of the Ministry of Supply and the Service Departments.
 - (c) To develop the weapon under special arrangements conducive to the utmost secrecy.
4. I imagine that course (a) above would not be favoured by H.M. Government in the absence of an international agreement on the subject.
5. If course (b) is adopted it will be impossible to conceal for long the fact that this development is taking place. Many interests are involved, and the need for constant consultation with my organization (which is the sole repository of the knowledge of atomic energy and atomic weapons derived from our war-time collaboration with the United States) would result in very many people, including scientists, knowing what was going on.
Moreover, it would certainly not be long before the American authorities heard that we were developing the weapon "through the normal channels" and this might well seem to them another reason for reluctance over technical matters, not only in the field of military uses of atomic energy but also in the general "know-how" of the production of fissile material.

6. If, for national or international reasons, the special arrangements referred to in 3(c) above are thought desirable, we are at present well placed to make them. The Chief Superintendent of Armament Research (Dr. Penney) has been intimately concerned in the recent American trials and knows more than any other British scientist about the secrets of the American bomb. He has the facilities for the necessary research and development which could be "camouflaged" as "Basic High Explosive Research" (a subject for which he is actually responsible but on which no work is in fact being done). His responsibilities are at present to the Army side of the Ministry of Supply, but by special arrangements with the head of that Department he could be made responsible also to me for this particular work and I would arrange the necessary contacts with my organization in such a way as to secure the maximum secrecy. Only about five or six senior officials outside my own organization need know of this arrangement.

7. I have already discussed this matter with the Chiefs of Staff, who authorised me to say that they are in agreement with me in strongly recommending the special arrangements outlined in paragraph 6 above. If these were adopted, the Chiefs of Staff would see to it that security was not prejudiced by enquiries from the Service Departments. (The Chairman of the Defence Research Committee would of course be informed).

8. I therefore ask for direction on two points: first, whether research and development work on atomic weapons is to be undertaken; and if so, whether the arrangements outlined in paragraph 6 above are to be adopted.

J.M.E.
C.P.A.E.

Ministry of Supply.
31st December, 1946.



Useful read: 'Working with Ministers' by Christopher Jary (2015)

[http://www.civilservant.org.uk/library/2015 Working with Ministers.pdf](http://www.civilservant.org.uk/library/2015_Working_with_Ministers.pdf)

Also: The Economist style guide

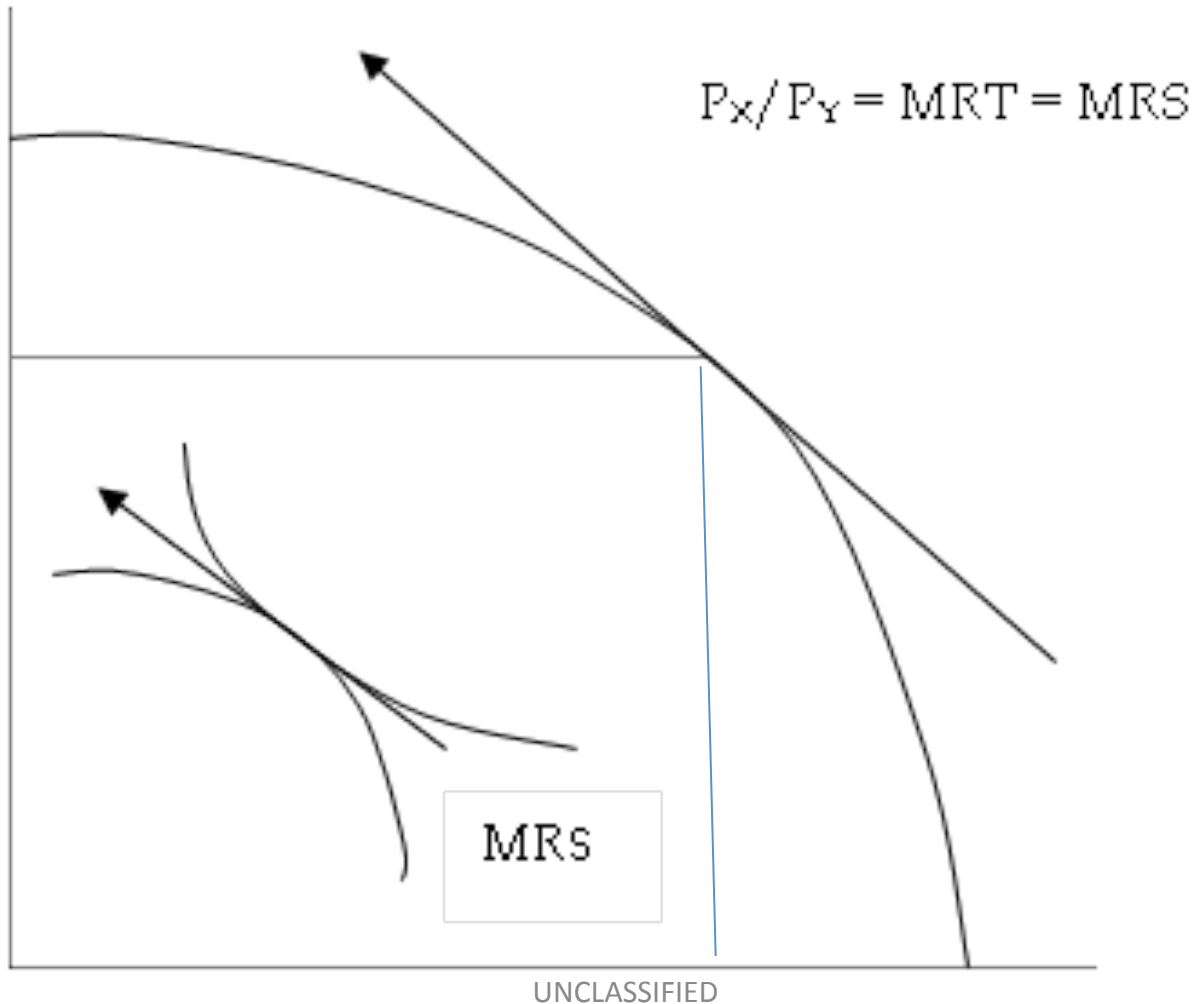
<http://www.economist.com/styleguide/introduction>

Take a basic concept Pareto-efficiency

$$L_i((x_j^k)_{k,j}, (\lambda_k)_k, (\mu_j)_j) = f^i(x^i) + \sum_{k=2}^m \lambda_k (z_k - f^k(x^k)) + \sum_{j=1}^n \mu_j \left(b_j - \sum_{k=1}^m x_j^k \right)$$

or?

Combining consumption, production and allocative efficiency



Or?

FFWT: For policy purposes:

If all markets are perfectly competition and consumers rational, with no externalities, public goods or market failure connected with uncertainty, then the resulting equilibrium would be Pareto-efficient.

‘Deviations’ from this, equity, rationality nudges and paternalistic/ethical considerations, are used to ‘justify’ micro-economic interventions

Or?

In classical liberal philosophy: In Plain English

The idea is: Well-informed individuals are the best judge of their own welfare and will transact with each other until all mutual advantage has been gained. Then the only way left to gain is at the expense of another- but that infringes property rights.





A non-Pareto improvement



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Mismatch with employers' needs?

GES frequency of use 2012

Synthesising Evidence 84.4%
Cost-benefit analysis 68 %
Analysis involving maths 53.2%
Econometric analysis 51.5%
Game Theory 15 %

The usual university prioritisation

Analysis involving maths
Econometric analysis
Game Theory
Cost-benefit analysis
Synthesising Evidence

An academic 'Problem'

As in Blume, Brandenburger and Dekel (1991), (iLexicographic Probabilities and Choice under Uncertainty, *Econometrica* 59, 61-79) let Ω denote the set of states, C the set of (pure consequences) and P the set of objective lotteries over C , while acts are mappings from Ω into P . A constant act is an act such that $x(w) = x(w')$ for all $w, w' \in \Omega$

- (a) Explain why the ranking of constant act determines the expected utility function? (Take the theorem of expected utility for objective probabilities for granted.)



In government economics is about dilemmas not lemmas

Andy Ross

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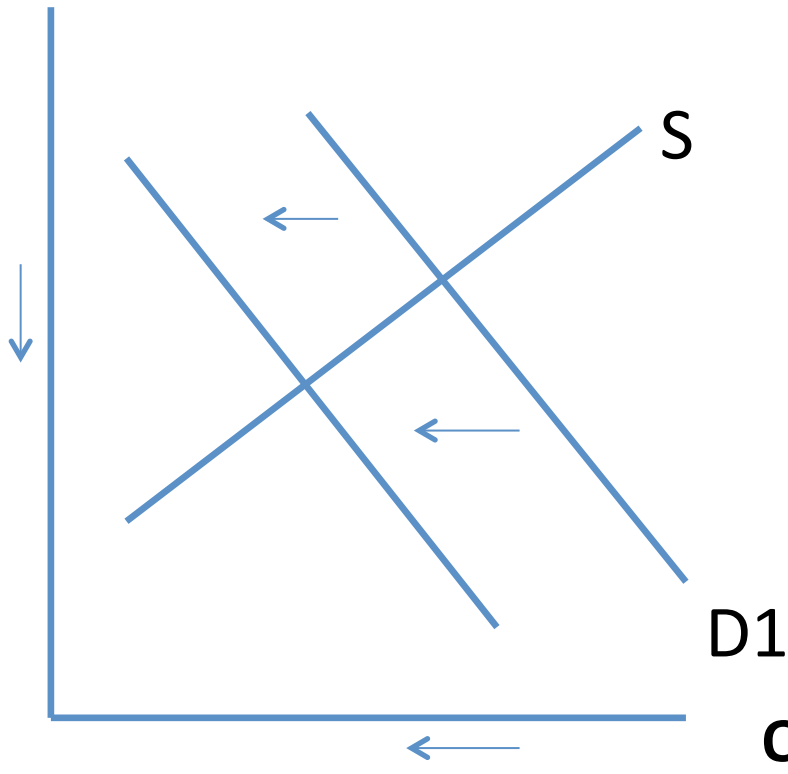
In business and government

Knowing a model/technique is not as important as knowing its limitations

**Academics do difficult things with simple things,
practitioners do simple things with difficult things.**

Simple Examples of Model Limitations

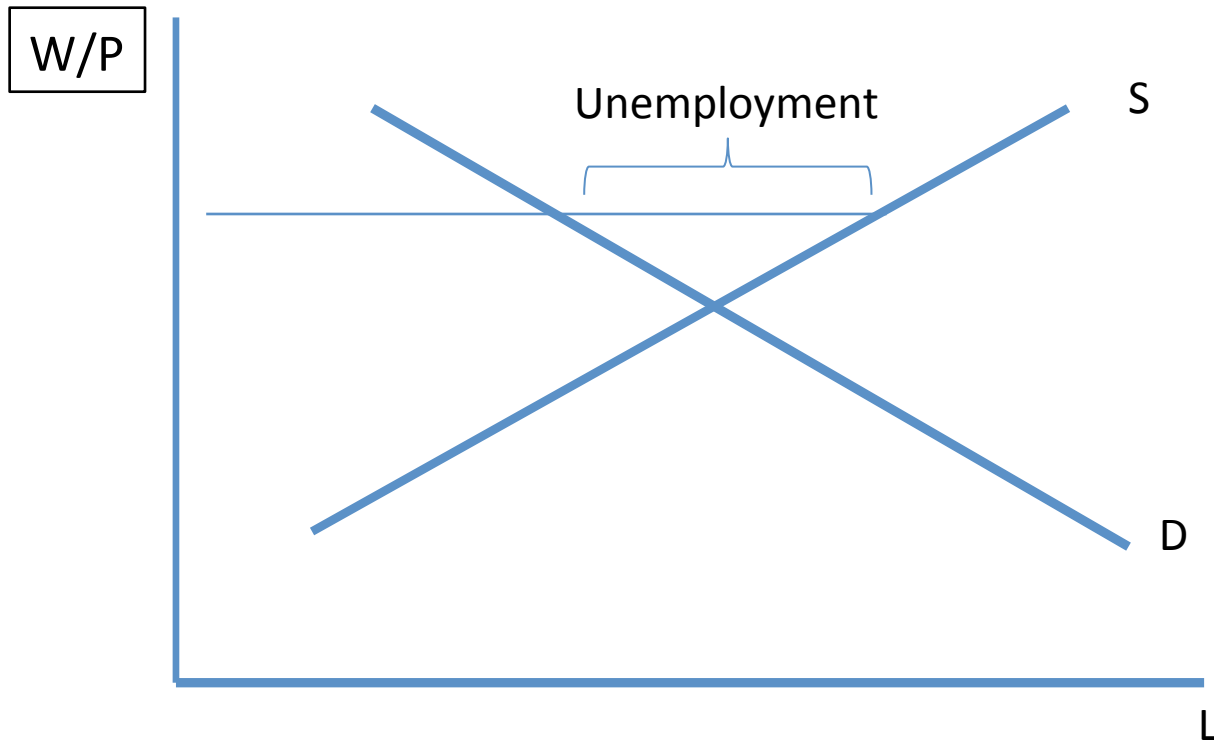
Price



Typical A-level answer:

A Food Health scare e.g. eggs, beef etc

National Minimum Wage?



Immigration?

**26 million people
in Europe are
looking for work.**

**And whose jobs
are they after?**



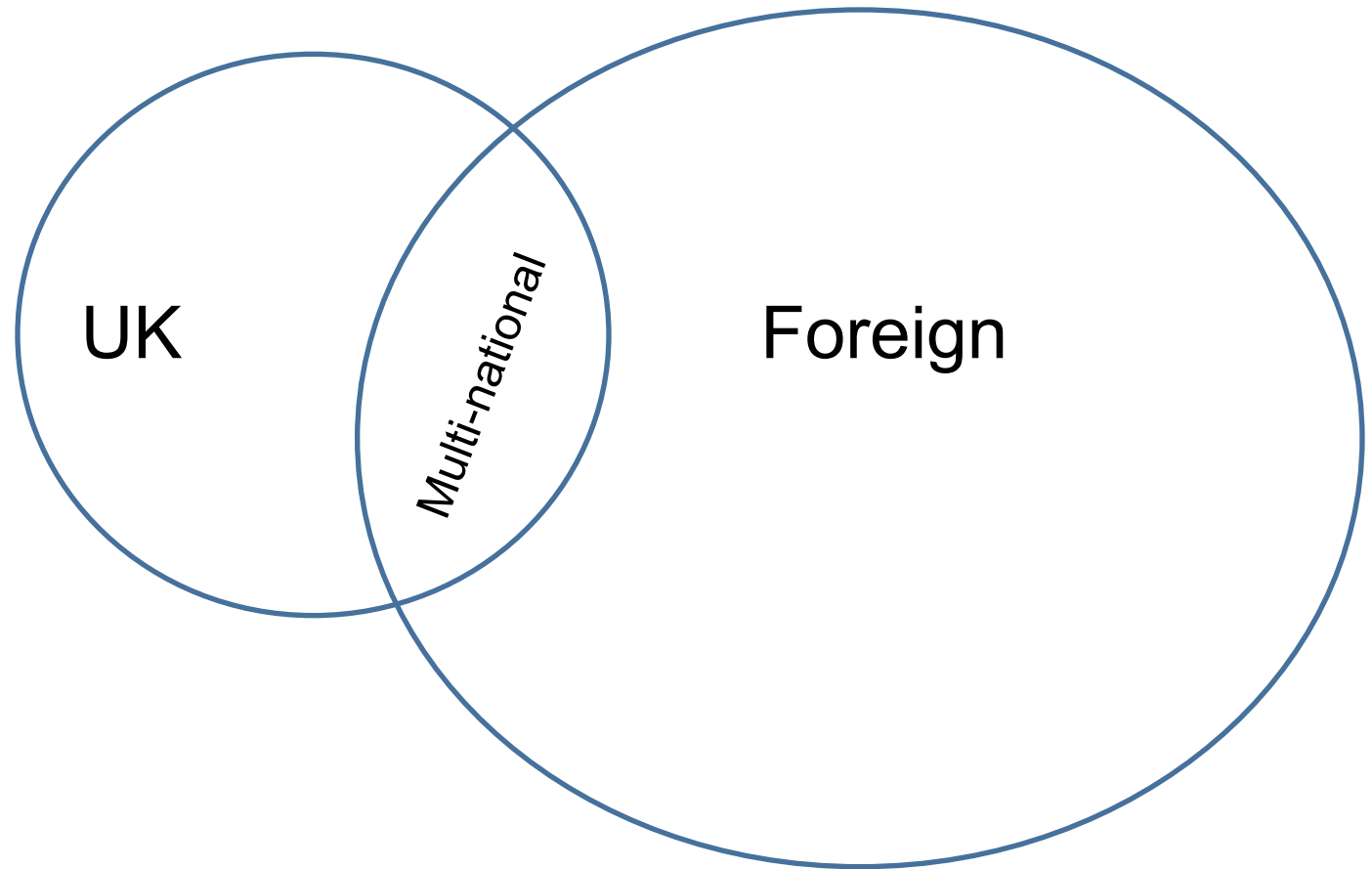
**TAKE BACK
CONTROL OF
OUR COUNTRY**



**VOTE UKIP
22ND MAY**

ukip.org

Data Errors: Foreign Owned UK Firms are more productive than UK firms so encourage Foreign Direct Investment?



Practise applying economics to what you see

- Why lights in fridges but not freezers?
- Why are males more interested in casual sex?
- Why no petrol stations in the middle of cities?
- Why are parks and lamp posts 'free'?
- We are richer but NHS is 'unaffordable'?
- What is the opportunity cost of owning a house?
- What does obesity say about utility max?
- Should we value future generations?
- How often do economists change their minds?

What SUCCESS looks like!



GES

GOVERNMENT ECONOMIC SERVICE

Making economists better
Making better use of economics

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