

# General/Epistemology

**Alfred Marshall:**

**On Economics as a Science->**

"The methods required for this work are not peculiar to economics they are the common property of all sciences. All the devices for the discovery of the relations between cause and effect, described in treatises on scientific method, have to be used ... by the economist: there is no only one method of investigation which can properly be called the method of economics"

Illustrates how the tools used for economics are scientific in nature

**However, Economics differs from the 'harder' sciences->**

"here are no economic tendencies which act as steadily, and can be measured as exactly as gravitation can"

- **The practical purpose of Economics is to guide policy, to prescribe policies, economists must predict. (Economists should not only be scientists, but engineers)**

"Economics should be practical. Theory should not be judged by its assumptions but by whether it can satisfactorily predict economic behaviour in the real world." - Friedman

"God put macroeconomists on earth not to propose and test elegant theories but to solve practical problems" - Mankiw

"Its task is to provide a system of generalizations that can be used to make correct predictions about the consequences of any change in circumstances." - Friedman

- **Philosophy(Economics) influences our lives whether we are ignorant of it or not**

"Practical men who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist." - John Maynard Keynes

- **On the contentious nature of economics**

"If all the economists were laid end to end, they'd never reach a conclusion." - George Bernard Shaw

- **On the inability of economics and models to accurately predict the future**

"You cannot prove this in real time, but when economists 20 years from now write a book on the recovery, it may well be entitled, 'It could have been much better.'" - Jamie Dimon (CEO of JPM)

"Economists predicted 9 out of the last 5 recessions" - Paul Samuelson

"I believe that economists put decimal points in their forecasts to show they have a sense of humor." - William Gilmore Simms

- 'Economics is a strange discipline because it has one foot in science and one in intuition and common sense. As a consequence, everyone has a view about how to conduct economic policy' : Kaushik Basu
- 'The only function of economic forecasting is to make astrology look respectable': Galbraith
- Much of economic theory is pursued for no better reason than its intellectual attraction; it is good game: Hicks
- 'Economists have mistaken beauty for truth': Krugman
- 'The political economy is a science of tendencies only, not a matter of fact': Keynes
- 'Economic laws are not made by nature. They are made by men and we decide how the economy is to work': Roosevelt
- 'Economists should not be afraid to use the methods and language of mathematics': Walras
- 'Modern economics is sick... a sort of social mathematics in which analytical rigour is everything and practical relevance is nothing': Blaug
- 'Torture the data and it will confess': Coase
- Conventional Wisdom: -> Keynes: 'The real difficulty in changing any enterprise lies not in developing new ideas, but in escaping from old ones'
- 'Different model types are needed for different tasks': Olivier Blanchard
- 'Without knowing why things happen and why people do things, we run the risk of worthless causal 'fairy tale' theorizing, and we have given up on one of the central tasks of economics' Angus Deaton

# Market Failure

## - On the irrationality of economic agents

“Economists think about what people ought to do. Psychologists watch what they actually do.” - Daniel Kahneman

## Public Goods:

**Paul Samuelson:** “Each individual’s consumption of such a good leads to no subtractions from any other individual’s consumption of that good”

**Inge Kaul:** Idea of a global public good, which is non-excludable and non-rivalrous globally, not just in a specific area

**Amartya Sen:** ‘The success of the market does not preclude the need for fruitful and efficient action’

**Tobin:** ‘The most difficult issues of public policy are those where the goals of equality, freedom of choice and efficiency conflict’

## Common Pool Resources:

- Each individual enjoys the full benefit of using the common resource, but only bears part of the cost of that usage; incentive to over-use the resource, eventually destroying it

## Common Property Regime:

- Common-pool resource appears as a private good to an outsider and as a common good to an insider of the community
- Eg.: In the 1980s, the Nepalese government decentralized its control over the forests in the country, by instead giving local areas a financial stake in the forests-> Individuals now face higher costs

## Externalities:

- Katz and Rosen: “An externality occurs when the behaviour of one entity directly affects the welfare of another in a way that is not transmitted by market prices.”
- Types:

- **Positional:** Robert Frank; “occurs when new purchases alter the relevant context within which an existing positional good happens” -> Eg. if some job candidates begin wearing expensive custom-tailored suits, a side effect of their action is that other candidates become less likely to make favorable impressions on interviewers. From any individual job seeker's point of view, the best response might be to match the higher expenditures of others, lest her chances of landing the job fall. But this outcome may be inefficient, since when all spend more, each candidate's probability of success remains unchanged. All may agree that some form of collective restraint on expenditure would be useful
- Eg. The case for education, whereby getting a degree has become necessary -> When one person gets a degree, the relative position of others worsens, hence they do have to get a degree for the purpose of signalling (Keeping up with the Jones)
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- **Coase Theorem:** Solution to market failure is the Coase Theorem -> Establishing of property rights, which makes it an essentially private good.
  - The parties involved will come together and bargain to a solution that will be economically efficient, regardless of to whom the property right was initially allocated
  - 3 Criteria:
    - 1) Well-established property rights
    - 2) Zero transaction costs
    - 3) Well-defined externality

## Merit Goods:

- Richard Musgrave - merit goods should be provided based on need rather than ability to pay

## Theory of Second Best

- Lipsey and Lancaster: If it is unfeasible to remove one market distortion, introducing a second distortion may partially counteract the first, and lead to a more efficient outcome
- “If men were angels, then no government is necessary”: Madison

## Types of Market Failure

- 1) Common-Pool Resource
  - Non-excludable, but rivalrous
  - Tragedy of the commons (Hardin)

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## **Ways to Solve**

### **Government Solutions (Type 1)**

**Keynes:** 'The important thing for a government is not to do things which individuals are already doing and do them a little better or a little worse, but do things which are, at present, not done at all'

### **Private Solutions**

# Risk, Uncertainty, Asymmetric Information

## **Adverse Selection:**

- Due to asymmetric information, the ignorant party lacks information while negotiating contracts with the party with more information -> Leads to suboptimal outcomes in the market
- Akerlof's market for lemons

**Moral Hazard:** Change in behaviour of one party in relation to an agreement that would give them a benefit previously considered "unfair"

- Ex Ante (eg. reckless driving)
- Ex Post (eg. requesting unnecessary health screenings after an accident)

Role of technology: can reduce adverse selection, but cannot really reduce moral hazard

## Theory of the Firm

- **About the importance of advertising**

"Doing business without advertising is like winking at a girl in the dark. You know what you are doing, but nobody else does." ~Steuart Henderson Britt

- **About the importance of cost competitiveness**

"Beware of little expenses. A small leak will sink a great ship." - Benjamin Franklin

Bertrand Competition Model -> Price Competition

Cournot Model -> Simultaneous competition on the basis of output quantity

Stackelberg Model -> Sequential competition on the basis of quantity

- Leader and Follower

**Weiss (1989)** found that price increased with competition

**Robert Wilson: Strategic Entry Deterrence**

- “Strengthen the incumbent’s options to exclude”
- **Bonano** -> Offering a large product line up to leave new entrants to niche products
  - Eg. Kellogg’s
- **Chamberlin**: Product differentiation

Advertising

- **Kaldor**: Advertising is only of a persuasive nature

## Firms’ Policies

**Strategic Entry Deterrence (Type 1) -> Wilson: ‘Strengthen the incumbent’s options to exclude’**

Geroski - “The average entrant is basically a tourist and not an immigrant, enjoying a life that is often nasty, brutish and above all short” -> These policies aim to protect incumbents against hit-and-run entrants

1) Limit Pricing:

- Incumbent firms offer their goods at a price lower than their AC -> The highest price that existing firms charge without fear of attracting new firms
- Bain’s Model of Limit Pricing -> ‘Firms do not maximize profits in the short run due to fear of *potential entry* of new firms attracted by the maximum profits’
- Aims to discourage entry of new firms into market

2) Predatory Pricing/Undercutting:

- According to OECD, defined as ‘deliberate strategy of driving competitors out of the market by setting very low prices or selling below AVC’
- Can be difficult to prove -> Use of Areeda-Turner Law to test whether price is below variable cost
- Eg: Walmart in 2000 was found to be artificially undercutting prices
- In order to make the threat credible, firms can invest in extra spare capacity
- Predatory pricing is essentially the *Chicken Game*

- First-mover advantage

### 3) Brand Proliferation:

- Filling up product space to deny competitors slots -> Crowding out the market
- Possibility of *cannibalization* -> Reduction in sales volume of one product due to introduction of new product by the same producer -> Eg: Introduction of the iPod reduced sales for the Macintosh for Apple
- **Bonano**: 'Offering a large product line up to leave new entrants to niche products'

### 4) Distributive and supplier agreements:

- Aim of prevent other firms from obtaining resources

## Increasing Revenue (Type 2)

### 1) Research and Development + Product Differentiation

- Improving products -> Make good price inelastic
- According to the Council of Foreign Relations, since the 1970s, the US has gained a disproportionate share of the world's wealth through technological innovation and capacity -> R&D by firms as a form of growth
- Kronos Effect -> Companies that establish early dominance in a period of disruptive innovation will do everything in its power to maintain its first-mover advantage
- Hotelling Law -> In some markets, product differentiation (Chamberlin) may not be the way forward -> Eg. Petrol Stations -> Minimal differences in products
- Free-rider problem in R&D
- **Confusopoly: Adams**-> 'A group of companies with similar products who intentionally confuse customers instead of competing on price' such that ultimately, the decision is made on emotional factors (Larsen) -> Eg. Mobile phone plans; mobile plan providers

### 2) Advertising

- **Bagwell**: Persuasive advertising as the 'attempt to affect demand by changing buyers' tastes and brand loyalty'
- Advertising may be a demerit good (it is overproduced, due to the negative externalities in production) - Recent work by **Anderson and de Palma** has shown that there is information overload, the problem when ads crowd out other ads -> Allocative inefficiency + Waste of resources + Ineffective -> **Shapiro** shows that advertising leads to suboptimal outcomes



- Alternatively, firms offering similar products may choose not to advertise -> Free rider problem

	To Advertise	Not to Advertise
To Advertise	200, 200	350, 100
Not to Advertise	100, 350	250, 250

**Reducing Costs (Type 3)**

- 1) Outsourcing
  - **Milberg:**





# International Economics

## **Alchian-Allen Theorem:**

- When the same absolute cost (eg. transportation) is added to a low-price, low-quality good and a high-price, high-quality good, the relative DD for the latter increases, as its relative price falls

## **Armington Assumption:**

- Assumption that the country of origin makes products differentiated, as opposed to homogenous products in global markets
- Now a common assumption

## **Availability Theory**

- Kravis (1956); countries import what they do not have domestically, and export what they do
- Relates to other theories

## **Backus-Smith Puzzle**

- Contrary to theoretical predictions if international markets were complete, correlations of consumption growth across countries are lower than correlations of output growth across countries

## **Balassa-Samuelson Effect**

### **Penn Effect**

- Law of one price argues that the same good cannot sustain 2 different prices in an efficient, open market which would cause prices to converge. However, due to the lack of an efficient open market, price differentials can exist. Prices tend to be higher in countries with higher income and vice-versa. Implication: Exaggerates the difference in real GDP between countries.
- However, given that the Penn effect occurs in the same direction as PPP deviations, this mitigates the differences in SOL between countries. Eg. India's poor can continue to survive despite being far below the global subsistence level of income as relative price levels are also low in the country where average HH Y are low.
- PPP = nil Penn effect

## **Bastable's Test**

- One of two conditions needed for infant-industry protection to be welfare-improving; the protected industry must be able to pay back an amount equal to the national losses during time of protection

### **Bicycle Theory**

- Bergsten (1975); If further trade liberalization is not achieved, past liberalization will collapse

### **Branden-Spencer Model**

- In some situations, government subsidies to domestic firms in order to help them against foreign producers can actually boost national welfare

### **Dependency Theory**

- Less developed countries are poor because they are exploited by developed countries through international trade and development

(forms the basis for the North South Model; South is dependent on the North for capital while North is independent - South can never surpass the North in degree of development)

### **Eaton-Kortum (EK) Model**

### **Factor Price Equalization Theorem**

- One of the consequences of the HO model; free trade will cause factor prices in different prices to become equal, assuming other assumptions are held

### **Flying Geese Paradigm**

- Changing comparative advantage

### **Home bias in Trade**

- Trefler(1995): A preference for products produced in their own country compared to otherwise identical imports

### **Immiserizing Growth**

- Bhagwati: Economic growth that makes the country worse off
  - Growth that expands exports and worsens terms of trade such that real income falls

### **Kindleberger Spiral**

- Dramatic downwards spiral of trade during Great Depression

### **Le Chatelier Principle**

- Constraints on some variables reduce the movements of others
- Explains why elasticity is constrained in the SR - fixed cost constraints in SR

### **North-South Model**

- North represents developed, south represents less developed

### **New Trade Theory**

- Krugman: Greater importance to trade based on economies of scale

### **Pauper Labor Argument**

- That domestic wages will be depressed by importing from low-wage countries

### **Quid pro quo FDI**

- Bhagwati: FDI in response to the threat of protectionism -> Foreign firm aims to create jobs in the domestic market, and lessens the threat that its exports will be restricted

### **Spaghetti Bowl**

- Bhagwati: Complication which arises from the application of domestic rules of origin in FTAs across nations
- TPP can also fall prey to this

### **Trilemma of the World Economy**

- Dani Rodrik: Choice of two between deep economic integration, national sovereignty, democratic policies

### **Strategic Trade Theory**

- Lester Thurow: Some industries need to be protected

**Kipling:** 'Oh, East is East, and West is West, and never the twain shall meet.' -> Globalization has corrected this

**Friedman:** 'Globalization is the emergence of a global market as opposed to national markets'

**Bhagwati:** 'Economic globalization constitutes the integration of national economies into the international economy through trade, foreign direct investment, short-term capital flows, labour flows, and flows of technology'

**Milanovic:** 'Globalization has always been inherently Janus-like, showing to some the face of limitless progress and wealth, while others see only a soulless giant hurling their lives to and fro.'

**Krugman:** 'Protectionism is a fallacy of aggregation, a prisoners' dilemma where each country is better off intervening, but everyone would be better off if no one intervened'

**Rajan:** 'After all, beggar-thy-neighbour policies will succeed only in making us all beggars'

**Kaldor-Hicks Efficiency** -> While not everyone gains from trade, the potential gains are significant enough that those who can gain can compensate the losers and still be better off (This is obviously an ideal, but in Globalization and its Discontents, this is precisely what Joseph Stiglitz asserts)

## Globalization:

- **Bhagwati** (In Defence of Globalization) and **Stiglitz** (Globalization and its Discontents) assert that the issue with globalization is its poor management, due to the lack of institutional frameworks, especially in the case of the IMF
- According to **Shanguan**, economic globalization is an irreversible trend due to the growing reliance on science and technology-> Creates dependence on developed countries

### Positive Effects:

- 1) Economic Growth
  - Greater inter-dependency -> Developing and developed countries both can obtain the resources which they require

### Negative Effects:

- 1) Increased global vulnerability
  - Ian Goldin: 'Greater openness and integration necessarily increase the potential for cascading crises and amplification of shocks'
  - Especially for developing countries
  - The rising consumption of products such as food, energy, and medicine enhances the externalities of individual choices, with the connectivity of global systems increasing these effects' range and impact.
- 2) Inefficiency of Global Governance
  - Unlike climate change or health pandemics, good economic policies are not universal in the sense that first and foremost, they benefit/harm the domestic country first

- Therefore, according to Dani Rodrik, the problems brought about by globalization 'have little to do with a lack of global cooperation and cannot be fixed by rule-making by international cooperations'
- Hence, the focus of global efforts should not be things like the Washington Consensus, which are economic policy prescriptions (which tend to be restrictive), but instead, according to Rodrik, focusing on 'enhancing democratic decision-making rather than constraining it'

### 3) Failure in developed economies

- In developed economies, for those at the very bottom of the skills chain, incomes have barely increased
- According to **Jomo Kwame Sundaram**: 'developed countries should not expect further gains from the process of globalization'

### 4) Labour flows

- **Skidelsky** calls free migration 'a shibboleth of the failed neo-liberal project of maximizing market-based resource allocation'