University College London.

Department of Economics.

ECON1006

HISTORY OF ECONOMIC THOUGHT

MODULE HANDBOOK, 2012-13

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ECON1006 History of Economic Thought.

Aims:

This new module provides students with an exciting opportunity to participate in the revival of interest in the history of economic thought which is now occurring in response to the current financial and economic crisis.

- The module will accordingly relate the study of economic ideas of the past to current debates and discussions on the unfolding events of the present.
- The module will show how reassessing the ideas of the past provides a unique opportunity to think 'outside the box' and address economic issues which had become unfamiliar within economic theory as it has existed in recent times.
- The module will show how the history of economic thought not only provides the best possible introduction to the study of economics, but is also a fundamental aspect of the formulation of economic ideas which can adequately address the issues of the present.
- The module will acquaint students with carefully chosen selections from some classic texts of economic thought which they will be able to cite throughout their student career and beyond.
- The module will have strong career relevance, in providing students with the ability to engage in informed discussion with specialists and non-specialists alike on issues currently receiving widespread attention in the media and public debate generally.

Objectives:

On completing this module, students will have gained:

- an understanding of the context of the original formulation of some fundamental analytical methods and theoretical concepts in use by economists today;
- an understanding of the changing context of the application of these methods and concepts in subsequent periods up to the present;
- an understanding of the applicability or otherwise of these methods and ideas in relation to the specific characteristics of the world economy today;
- an acquaintance with some classic texts of economic thought and an ability to cite them in their application of economic analysis;
- an ability to think critically about the limits of economic analysis in a broader socio-economic context;
- an awareness of the relation of economics to other social science disciplines;
- an ability to bring their awareness of the history of economic ideas to bear on their assessment of wider economic discussions and debates on economic affairs of topical interest today;
- an ability to engage in informed discussion with specialists and non-specialists alike on issues currently receiving widespread attention in the media and public debate generally, which will be particularly relevant in job interviews, etc.

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ECON1006. History of Economic Thought.

Topic 1. Some roots of economic analysis. *Lecture outline.*

1.1 Balance of trade and 'wealth of nation'

The issue of imbalances between surplus and deficit countries is nothing new; on the contrary, it was the subject of some of the first systematic discussions of economic issues in early modern times, being a burning issue in that period when 'mercantilist' issues dominated discussion of economic affairs. Initially, discussion held to the traditional standpoint that a country's wealth consists of precious metals ('bullionism'), but it moved forward, as illustrated by the work of Thomas Mun (written 1621), to prioritise the amassing of a trade surplus.

1.2 The Quantity Theory of Money

Price inflation associated with the influx of precious metals into Europe from the Americas in the sixteenth century led to early formulations of the Quantity Theory of Money, i.e. the idea that the effect of a change in money supply is limited to a proportionate changes in the price level. This idea appeared to undermine the arguments in favour of a bullionist policy. However, 'mercantilists' argued that, just as too little money was a hindrance to trade, so also, conversely, an increase in the money supply could "quicken" trade, i.e. increase the number of transactions taking place, thus neutralizing inflationary pressure.

1.3 Efficiency in production

An early attempt to analyze efficiency in production was made by William Petty (1623-87), who identified 'living compactly', or population density, as the source of Holland's remarkable economic advance. Such spatial compactness, he argued, provides conditions for economies of scale, division of labour and technological progress. In an age when the state was the principal economic agent and the market was viewed with suspicion, his ideas were put forward to underpin proposals for state action. These proposals included policies to increase the population, and a programme of forced inward immigration from Ireland to England to compact the latter's population and so give it equivalent advantages to those of Holland.

Textbook readings: Rima: 33 (mercantilism); 34-8 (balance of trade), 39-40 (quantity theory of money); 40-1 (production).

Prescribed readings from Mun, Petty, etc,

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1. SOME ROOTS OF ECONOMIC ANALYSIS

1.1 Balance of trade and 'wealth of nation'

1.2 The Quantity Theory of Money

1.3 Efficiency in production

1.1 Balance of trade and 'wealth of nation'

'**Mercantilism**' (unfashionable term – no single school of thought) / pre-classical economic thought: characteristics;

- Wealth-getting no longer considered sinful
- Government ('prince') the principal economic agent
- Commercial wars between nation states.
- Increases in nations' wealth a 'zero sum game'
- Colonialism; beginnings of slave trade.
- Beginnings of systematic analysis of economic issues.
- Initial discussions on nature of 'wealth of nation'.

2

What is 'wealth of nation'? An initial answer:

- '**Bullionism**': Wealth identified with **gold** / precious metals.
- Zero sum game:
  - England has no gold mines, so 'get' gold from Spain; 'letters of marque', etc.
    - An early estimate of England's national income (Petty, early 1670s) includes £60,000 "taken from the Spaniards".

3

Wealth of nation: a more subtle definition.

A more elaborate form of 'mercantilism' developed beyond bullionism to identify wealth with **trade surplus**.

Antonio Serra. *A brief treatise on the causes which can make gold and silver plentiful in kingdoms where there are no mines.* 1613.

Thomas Mun. *England's treasure by foreign trade.* 1621 [published 1664].

4

Balance of trade.

Precious metals ('specie') were the means of international payment.
→ balance established through **specie movements.**

e.g. Mun's example:

Exports	£22,000	Imports	£20,000
		Balance / inward specie flow / "kingdom enriched"	£ 2,000
BALANCE:	£22,000		£22,000

The two columns **balance** by definition / accounting identity / assumption.
Note: Same for "a private man"; "excess", "frugal".

5

Trade surplus / favourable balance of trade (BOT).

Today's definitions:

Balance of Trade (BOT):
goods exports and imports ('**visibles**') only.

Balance of Payments (BOP):
BOT + '**invisible**' exports and imports: services, freight, tourism, etc.
+ interest payments, capital movements, etc., etc.

Either way, there is always *by definition* a '**balance**', through international payments.

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Trade surplus / favourable balance of trade (BOT).

BOT / BOP distinction not yet made by Mun; in 'trade', he includes not only goods but also all aspects of merchants' mark-up: insurance, freight, "**merchant gains**", etc., i.e. 'invisibles'.

(1) Exports	(3) Imports
(2) "merchant gains", etc. (= 'invisible exports')	(4) Payments to foreigners for their "merchant gains", etc. (= 'invisible imports')
	(5) Balance (movements of specie)
1 + 2	3 + 4 + 5

The two columns balance by definition / accounting identity / assumption:

1 + 2 = 3 + 4 + 5

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Trade surplus / favourable balance of trade (BOT), *contd*

(1) Exports	(3) Imports
(2) "merchant gains" ('invisible exports')	(4) 'invisible imports'
	(5) Balance (movements of specie)
1 + 2	3 + 4 + 5

Policy conclusions:

Bullionists: 'get' gold from Spain, etc.; prevent gold exports.

→ Ensure (5) > 0 and *maximise*!

Mercantilists: OK to export gold in the course of expanding trade, e.g. buying goods for re-export.

i.e. Maximise (1+ 2) - (3 + 4)

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Balance of Trade (BOT) / BOP.

12d (penny, pence) = 1s. (shilling). 20s. = £1.

Examples of merchant's mark-up (Mun):

Exported from England to Italy	Fetched from England by Italian merchants	Shipped to Italy by England's merchants	Merchant's mark-up
Corn, per quarter	25s.	50s	25s = 100%
Red herrings, per barrel	20s.	40s	20s. = 100%

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Balance of Trade (BOT) / BOP.

12d (penny, pence) = 1s. (shilling). 20s. = £1.

Examples of merchant's mark-up (Mun), *contd*:

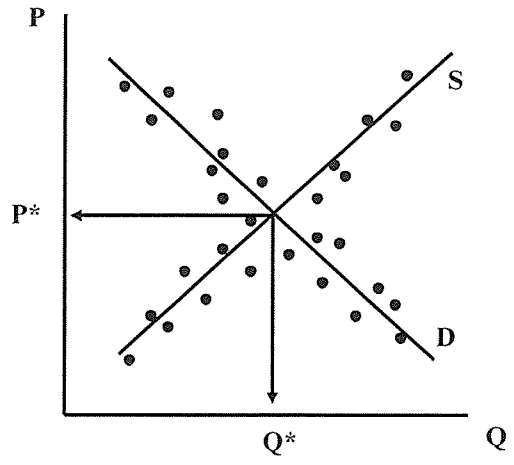
"Remote or far countries" – trade "far more profitable", e.g.

	Price in England	Bought from the Dutch in Amsterdam	Mark-up	Bought in East Indies	Mark-up
Pepper, per pound	2s = [24d.]	20d. [1s 8d.]	4d. [= 16.7%]	3d.	21d. [= 700%]

Note: Unequal trade acknowledged!

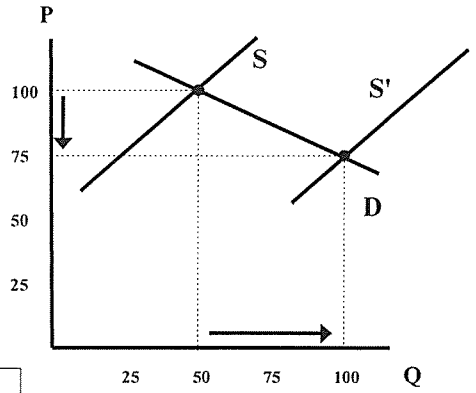
10

Supply and Demand Curves



Supply, demand, competition: Mun's example.

"twenty five in the hundred less in the price...



Theme: Note the **international** context of these beginnings of S & D analysis!

...may raise above fifty upon the hundred in the quantity vented..."

1.2 The Quantity Theory of Money (QTM)

Topical issue in early modern period: influx of precious metals from Americas in 16th century → rise in prices.

- → first clear statements of QTM, i.e. M↑ → P↑

Problem for bullionists: this would mean price inflation, whereas, even for Mun, etc., more gold is in general good.

But mercantilist argument: this inflationary pressure could be neutralised:

- Lack of M (i.e. gold, silver) is an obstacle to trade.
- Equivalently, more M "quickens trade" / "drives trade", i.e. stimulates an increase in transactions (T).

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Quantity Theory of Money (QTM) in early modern period, *contd*

'Quickening' / 'driving' trade in terms of Fisher (1911) Equation of Exchange:

Assume $V = \underline{V}$, (as was normally assumed), we have:

$$M.\underline{V} = P.T \quad \text{so that} \quad P = M/T.\underline{V}$$

Gold / silver from Americas → $M_1 > M_0$

BUT this "quickens trade" → $T_1 > T_0$

If we assume that M and T increase **proportionately**, then:

$$M_1/T_1 = M_0/T_0$$

We thus have:

$$P_1 = M_1/T_1.\underline{V} = M_0/T_0.\underline{V} = P_0$$

i.e. Increase of precious metals does not necessarily lead to price inflation.

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1.3 Efficiency in production

Beginnings of 'transition':

from '**mercantilism**' – focus on **trade**

to **classical** – focus on **production**.

Mun: "**artificial**" trade more profitable than "natural".

('Arts' = manufactures, technology.)

Benefits of large population / **number of people** / 'populationism'.

Particularly those in "arts".

Early 17th century: promotion of **technological progress.**

"Advancement of useful learning" (Bacon).

Agricultural technology, etc.

Efficiency in production, *contd*

Topical issue: **Holland**: small country, but a leading commercial power.

William Petty (1623-87) **on the benefits of spatial compactness**

- An early attempt at a theory of productivity.
- Focussed on fact that Holland was most dynamic European economy **and most densely populated**.

William Petty (1623-87) on the benefits of spatial compactness, *contd*

Petty's argument: Spatial compactness of population (as in Holland) – "living compactly" – gives conditions for:

Economies of scale.

Though note: administration / 'social overheads' rather than production process itself.

Technological progress.

London the supreme example.

Division of labour.

Specialisation, etc.. (Nothing new in itself – ancients too!)

William Petty (1623-87) on the benefits of spatial compactness, *contd*

Petty's **policy proposals to increase compactness**:

"Multiply the people", i.e. encourage higher birth rate.

Wealth of nation lies in high population – popular idea at the time.

Forced inward migration to England from Ireland ('**transplantation**').

→ Give England same advantages of population compactness as Holland.

'Wealth of nation': what it is / its source, and how to increase it.

'Mercantilism'	(1): Bullionism	Gold / precious metals	'Get' it from the Spanish, prevent gold exports.
	(2): Mun, etc.	Trade surplus	Gold exports OK if for re-exports / expanding trade
'Mercantilism' / 'Transitional'	Petty, etc.	Number of people, particularly those in 'arts'	Encourage higher birth rate. Welcome immigration (forced, Petty)
		Beginnings of emphasis on increasing productivity	Improve technology. (Bacon) Compact the population.(Petty)
Classical Political Economy:	Physiocrats	Powers of nature	Ensure high proportion of expenditure is 'productive' rather than 'sterile'
	Adam Smith	Organisation of production process / division of labour	Encourage extension of market; this allows further division of labour
	Ricardo	Accumulation of capital / industrialisation	Ensure surplus product is not all appropriated by landlords as rent.
Neo-classical economics	Traditional / 'liberal'	Focus on a different question; allocation of given resources by market	*(1) Laissez-faire!*
	'New'		(2) Prevent market failure

Some themes:

Overseas / 'open economy':

- Beginnings of economic discussions concern surplus and deficit **internationally**.
- Same for early QTM and Supply and Demand analysis.
- War finance dominant in fiscal debates.
- State to be analysed in same way as individual?

Crisis:

- Trade crisis with Holland in 1620s.
- Civil wars in England.
- War generally: kind of cycle!

1. ROOTS OF ECONOMIC ANALYSIS – *summary.*

1.1 Balance of trade and 'wealth of nation'
From 'bullionism' to Mun, etc. Importance of overseas trade. Beginnings of Supply and Demand analysis.

1.2 The Quantity Theory of Money
Arguments against and for bullionism. Velocity of circulation.

1.3 Efficiency in production
Beginnings of 'transition' from 'mercantilism' to classical tradition. *Example*: Petty, Holland, and spatial compactness.

ECON1006. Topic 1: Some roots of economic analysis.
Readings.

1.1 THE BALANCE OF TRADE

[**Mun**: *Trade surplus brings in treasure:]* The ordinary means therefore to encrease our wealth and treasure is by Forraign Trade, wherein wee must ever observe this rule; to sell more to strangers yearly than wee consume of theirs in value. For suppose that when this Kingdom is plentifully served with the Cloth, Lead, Tinn, Iron, Fish and other native commodities, we doe yearly export the overplus to forraign Countries to the value of twenty two hundred thousand pounds; by which means we are enabled beyond the Seas to buy and bring in forraign wares for our use and Consumption, to the value of twenty hundred thousand pounds; By this order duly kept in our trading, we may rest assured that the Kingdom shall be enriched yearly two hundred thousand pounds, which must be brought to us in so much Treasure; because that part of our stock which is not returned to us in wares must necessarily be brought home in treasure.
For in this case it cometh to pass in the stock of a Kingdom, as in the estate of a private man; who is supposed to have one thousand pounds yearly revenue and two thousand pounds of ready money in his Chest: If such a man through excess shall spend one thousand five hundred pounds per annum, all his ready mony will be gone in four years; and in the like time his said money will be doubled if he take a Frugal course to spend but five hundred pounds per annum; which rule never faileth likewise in the Commonwealth...

[**Mun**: *'Invisible exports' – 100% merchants' mark-up:]* The value of our exportations likewise may be much advanced when we perform it our selves in our own Ships, for then we get only not the price of our wares as they are worth here, but also the Merchants gains, the changes of ensurance, and fraight to carry them beyond the seas. As for example, if the Italian Merchants should come hither in their own shipping to fetch our Corn, our red Herrings or the like, in the case the Kingdom should have ordinarily but 25s for a quarter of Wheat, and 20s for a barrel of red herrings, whereas if we carry these wares our selves into Italy upon the said rates, it is likely that wee shall obtain fifty shillings for the first, and forty shillings for the last, which is a great difference in the utterance or vent of the Kingdoms stock.

[**Petty**: *a 'bullionist' item on an early estimate of England's balance of trade:]* The value of Silver, and Gold, taken from the Spaniards Sixty thousand pounds.[1]

[**Mun**: *Export of money (i.e. precious metals) beneficial if it is to expand trade:]* It would be very beneficial to export money as well as wares, being done in trade only, it would encrease our Treasure...
The Exportation of our Moneys in Trade of Merchandize is a means to encrease our Treasure.
This Position is so contrary to the common opinion, that it will require many and strong arguments to prove it before it can be accepted of the Multitude, who bitterly exclaim when they see any monies carried out of the Realm; affirming thereupon that wee have absolutely lost so much Treasure, and that this is an act directly against the long continued laws made and confirmed by the wisdom of this Kingdom in the High Court of Parliament, and that many places, nay Spain it self which is the Fountain of Mony, forbids the exportation thereof, some cases only excepted.
...we have no other means to get Treasure but by forraign trade, for Mines wee have none which do afford it...
if we only behold the actions of the husbandman in the seed-time when he casteth away much good corn into the ground, we will rather accompt him a mad man than a husbandman: but when we consider his labours in the harvest which is the end of his endeavours, we find the worth and plentiful encrease of his actions.

[**Mun**: *Particular profitability of trades in "remote or far countries":]* Also wee ought to esteem and cherish those trades which we have in remote or far Countreys, for besides the encrease of Shipping and Mariners thereby, the wares also sent thither and receiv'd from thence are far more profitable unto the kingdom than by our trades neer at hand: As for example; suppose Pepper to be worth here two Shillings the pound constantly, if then it be brought from the Dutch at Amsterdam, the Merchant may give there twenty pence the pound, and gain well by the bargain; but if he fetch this Pepper from the East-indies, he must not give above three pence the pound at the most, which is a mighty advantage, not only in that part which serveth for our own use, but also for that great quantity which (from hence) we transport yearly unto divers other Nations to be sold at a higher price: whereby it is plain, that we make a far greater stock by gain upon these Indian Commodities, than those Nations doe where they grow, and to whom they properly appertain, being the natural wealth of their Countries.

[**Mun**: *Price and international competition:]* In our exportations we must not only regard our own superfluities, but also we must consider our neighbours necessities, that so upon the wares which they cannot want, nor yet be furnished thereof elsewhere, we may (besides the vent of the Materials) gain so much of the manufacture as we can, and also endeavour to sell them dear, so far forth as the high price cause not a less vent in the quantity. But the superfluity of our commodities which strangers use, and may also have the same from other Nations, or may abate their vent by the use of some such like wares from other places, and with little inconvenience; we must in this case strive to sell as cheap as possible we can, rather than to lose the utterance of such wares.
For we have found of late years by good experience, that being able to sell our Cloth cheap in Turkey, we have greatly encreased the vent thereof, and the Venetians have lost as much in the utterance of theirs in those Countreys, because it is dearer.
And on the other side a few years past, when by excessive price of Wools our Cloth was exceeding dear, we lost at the least half our clothing for forraign parts, which since is no otherwise (well neer) recovered again than by the great fall of price for Wools and Cloth.
We find that twenty five in the hundred less in the price of these and some other Wares, to the loss of private mens revenues, may raise above fifty upon the hundred in the quantity vented to the benefit of the publique. For when Cloth is dear, other Nations doe presently practise clothing, and we know they want neither art nor materials to this performance. But when by cheapness we drive them from

this employment, and so in time obtain our dear price again, then do they also use their former remedy.

[**Mun** *on morality of commercial rivalry:]* ...if any man allege the Dutch proverb, Live and let others live; I answer, that the Dutchmen notwithstanding their own Proverb, doe not onely in these Kingdoms, encroach upon our livings, but also in other forraign parts of our trade (where they have power) they do hinder and destroy us in our lawful course of living, hereby taking the bread out of our mouth, which we shall never prevent by plucking the pot from their nose, as of late years too many of us do practise to the great hurt and dishonour of this famous Nation; We ought rather to imitate former times in taking sober and worthy courses more pleasing to God and suitable to our ancient reputation.

[**Mun**: *Producing for export – 'artificial', as opposed to 'natural', wealth:]* The revenue or stock of a Kingdom by which it is provided of forraign wares is either Natural or Artificial. The Natural wealth is so much only as can be spared from our own use and necessities to be exported unto strangers. The Artificial consists in our manufactures and industrious trading with forraign commodities

[**Mun** *on customs, manufacture exports, employment:]* It were policie and profit for the State to suffer manufactures made of forraign Materials to be exported custome-free, as Velvets and all other wrought Silks, Fustians, thrown Silks and the like, it would employ very many poor people, and much encrease the value of our stock yearly issued into other Countreys, and it would (for this purpose) cause the more foraign Materials to be brought in, to the improvement of His Majesties Customes.
I will here remember a notable increase in our manufacture of winding and twisting only of forraign raw Silk, which within 35 years to my knowledge did not employ more than 300 people in the City and suburbs of London, where at this present time it doth set on work above fourteen thousand souls...

[**Mun**: *Number of people, particularly those who live by the 'arts', make the country rich]* ...in all things we must endeavour to make the most we can of our own, whether it be Natural or Artificial, And forasmuch as the people which live by the Arts are far more in number than they who are masters of the fruits, we ought the more carefully to maintain those endeavours of the multitude, in whom doth consist the greatest strength and riches both of the King and Kingdom: for where the people are many, and the arts good, there the traffique must be great, and the Countrey rich.

[**Mun**: *Profitability of 'arts' much greater than 'natural wares':]* The Italians employ a greater number of people; and get more money by their industry and manufactures of the raw Silks of the Kingdom of Cicilia, than the King of Spain and his Subjects have by the revenue of this rich commodity. But what need we fetch the example so far, when we know that our own natural wares doe not yeild us so much profit as our industry? For Iron oar in the Mines is of no great worth, when it is compared with the employment and advantage it yields being digged, tried, transported, brought, sold, cast into Ordnance, Muskets, and many other instruments of war for offence and defence, wrought into Anchors, bolts, spikes, nayles and the like, for the use of Ships, Houses, Carts, Coaches, Ploughs, and other instruments for Tillage. Compare our Fleece-wools with our Cloth, which requires shearing, washing, carding, spinning, Weaving, fulling, dying, dressing and other trimmings, and we shall find these Arts more profitable than the natural wealth...

1.2 THE QUANTITY THEORY OF MONEY

[**Navarro**, *sixteenth-century Spanish scholastic writer: early statement of Quantity Theory of Money:]* Other things being equal, in countries where there is a great scarcity of money all other saleable goods, and even the hands and labour of men, are given for less money than where it is abundant. Thus we see by experience that in France, where money is scarcer than in Spain, bread, wine, cloth, and labour are worth much less. And even in Spain, in times when money was scarcer, saleable goods and labour were given for very much less than after the discovery of the Indies, which flooded the country with gold and silver. The reason for this is that money is worth more where and when it is scarce than where and when it is abundant.[2]

[**Mun**: *Inflation from presence of "much money" (i.e. precious metals) in country benefits landlords but harms country ('public') as a whole:]* all men do consent that plenty of mony in a Kingdom doth make the native commodities dearer, which as it is to the profit of some private men in their revenues, so is it directly against the benefit of the Publique in the quantity of the trade; for as plenty of mony makes wares dearer, so dear wares decline their use and consumption... And although this is a very hard lesson for some great landed men to learn, yet I am sure it is a true lesson for all the land to observe, lest when wee have gained some store of mony by trade, wee lose it again by not trading with our mony... the current of Merchandize which carries away their Treasure, becomes a flowing stream to fill them again in a greater measure with mony.

[**Mun**: *Futility of 'bullionist' policies:]* whatsoever courses we take to force money into the Kingdom, yet so much onely will remain with us as we shall gain by the ballance of our trade.

[**Petty** *on money needed to 'drive trade':]* There is a certain measure, and proportion of money requisite to drive the trade of a Nation, more or less then which would prejudice the same.[3]

[**Petty** *on velocity of circulation:]* It may be asked... whether the same six millions [of money] (which we hope we have) would suffice for such revolutions and circulations thereof as trade requires? I answer yes; for the expence being 40 millions, if the revolutions were in such short circles, viz., weekly, as happens among poor artizans and labourers, who receive and pay every Saturday, then 40/53 parts of 1 million of money would answer those ends: but if the circles be quarterly, according to our custom of paying rent and gathering taxes, then ten millions were requisite. Wherefore supposing payments in general to be of a mixt circle between one week and 13, then add 10 millions to 40/52, the half of the which will be 5½, so as if we have 5½ millions, we have enough.[4]

[**Petty** *on velocity of circulation: another version:]* Is there any way to know how much Money is sufficient for any

Nation?
Answ. I think it may pretty well be guessed at; viz. I think that so much Money as will pay half a Years Rent for all the Lands of England, and Quarters Rent of the Houseing, and a Weeks Expence of all the People, and about a Quarter of the Value of all the exported Commodities, is sufficient for that purpose. Now when the States will cause these things to be computed, and the Quantity of their Coins to be known, which the new Coining of their old Money will best do, then it may also be known whether we have too much or too little Money.[5]

1.3 EFFICIENCY IN PRODUCTION

[**Mun** *on Holland:]* it seems a wonder to the world, that such a small Countrey, not fully so big as two of our best Shires, having little natural Wealth, Victuals, Timber, or other necessary amunitions, either for war or peace, should notwithstanding possess them all in such extraordinary plenty, that besides their own wants (which are very great) they can and do likewise serve and sell to other Princes, Ships, Ordnance, Cordage, Corn, Powder, Shot, and what not, which by their industrious trading they gather from all the quarters of the world…

[**Petty** *on Holland:]* Many writing on this subject do so magnify the Hollanders as if they were more, and all other nations less, than men, as to the matters of trade and policy, making them angels, and others fools, brutes, and sots, as to those particulars; whereas I take the foundation of their achievements to lie originally in the situation of the country, whereby they do things inimitable by others, and have advantages whereof others are incapable.[6]
It now remains to show the effects of their Policy, superstructed upon these natural advantages, and not as some think upon the excess of their Understandings.

[**Petty** *on the benefits of spatial compactness: (1) Economies of scale:]*
A nation wherein are eight millions of people, are more than twice as rich as the same scope of land wherein are but four; for the same governors, which are the great charge, may serve near as well for the greater as the lesser number.[7]
Suppose some great fabrick [i.e. factory] were in building by a thousand men, shall not much more time be spared if they lived all upon a thousand acres, than if they were forced to live upon ten times as large a scope of land.[8]
The charge of the administration of justice would be much easier, where witnesses and parties may be easily summoned, attendance less expensive, when men's actions would be better known, when wrongs and injuries could not be covered, as in thin-peopled places they are.[9]
[Specifically urban *agglomeration:]* If in this great city shall dwell the owners of all the lands, and other valuable things in England; if within it shall be all the traders, and all the courts, offices, records, juries and witnesses; then it follows, that justice may be done with speed and ease.[10]

[**Petty** *on the benefits of spatial compactness: (2) Conditions for technological advance:]*
[London:] In the great vast city there can be no so odd a conceit or design whereunto some assistance may not be found which in the thin, scattered way of habitation may not be.[11]
It is more likely that one ingenious curious man may rather be found out amongst 4 millions than 400 persons.[12]
… within a Wall or City continuing 800,000 heads, 'tis more likely to find able men by nature and art than in any lesser number.
… The hospitals, gardens, and laboratories of this place may well exceed any in the world in order to the art of medicine.
… In this City will be fund store of men skilled in al languages of the world, in all speculative sciences and practical arts, among the great number whereof some must be very excellent.
… mathematical, mechanical, and natural learning will be much improved.
… There are fair collections of all natural and artificial rarities, with comments upon them and applications of them.
… All that belongs to shipping and gunnery may be exquisitely learned, and other military dissertations.[13]

[**Petty** *on the benefits of spatial compactness: (3) Conditions for division of labour:]*
In so vast a city manufactures will beget one another, and each manufacture will be divided into as many parts as possible, whereby the work of each artisan will be simple and easy. As for example, in the making of a watch, if one man shall make the wheels, another the spring, another shall engrave the dial-plate and another shall make the cases, then the watch will be better and cheaper than if the whole work be put upon any one man. And we also see that in towns and in the streets of a great town, where all the inhabitants are almost of one trade, the commodity peculiar to those places is made better and cheaper than elsewhere.[14]
[Specialisation:] Those who live in solitary places must be their own soldiers, divines, physicians and lawyers.[15]

[**Xenophon** *on division of labour, c. 400 BCE:]* In a small city the same man must make beds and chairs and ploughs and tables, and often build houses as well… Now it is impossible that a single man working at a dozen crafts can do them all well; but in the great cities, owing to the wide demand for each particular thing, a single craft will suffice for a means of livelihood, and often enough even a single department of that; there are shoemakers who will only make sandals for men and others only for women. One artisan will get his living merely by stitching shoes, another by cutting them out, a third by shaping the upper leathers, and a fourth will do nothing but fit the parts together. Necessarily the man who spends all his time and trouble on the smallest task will do that task best.[16]

Mun. *England's treasure by foreign trade.* 1621 [published 1664].
[1] Petty: *Political Arithmetic.*
[2] Martin de Azpilcueta Navarro (1493–1586), *Comentario Resolutorio de Usuras* (1556). Translated in Grice-Hutchinson 1952, 94–95.
[3] Petty: *Treatise of Taxes and Contributions.* Ch. 3.
[4] Petty: *Verbum Sapienti.*
[5] Petty: *Quantulumcunque concerning money.*
[6] Petty: *Political Arithmetic.*
[7] Petty: *Treatise of Taxes and Contributions*: 34 §12.8.
[8] Petty: *Political Arithmetic*: 255 §1.
[9] Petty: *Political Arithmetic*: 255.
[10] Petty: *Another essay… concerning… London:* 473.
[11] Petty: *Another essay… concerning… London*
[12] Petty: *Another essay… concerning… London*
[13] Petty: "The uses of London," in *Petty Papers* 1: 40-42.
[14] Petty: *Another essay… concerning… London:* 473
[15] Petty: *Political Arithmetic.*
[16] *Cyropaedia*, Book VIII, C2. Page 233f of the 1914 Everyman translation by Dakyns.

ECON1006. History of Economic Thought.

Topic 2. Classical political economy (1) The Physiocrats and Adam Smith. *Lecture outline.*

2.1 Classical themes; surplus, distribution, circulation.

Petty's writings represent a transitional phase, reflecting both the state-oriented and emphatically military-fiscal orientation of the age of 'mercantilism', while also introducing the 'classical' idea of a surplus product and its distribution, along with discussions of how to increase it. These now became central themes of 'classical political economy', which came to dominate much of economic thought for over a century. The 'Physiocrat' François Quesnay, in his *Tableau Économique,* pioneered discussion of what today's macroeconomics represents as a 'circular flow' of goods and money round the economy. However, his scheme was very different from that of the macro of today, being based on the circulation around different orders of society of an economic surplus ('net product') deriving solely from the combination of labour with the productive powers of nature, primarily land.

2.2 Smith: Division of labour and the extent of the market.

Adam Smith took forward the centralization of productivity introduced by the Physiocrats, but shifted the focus onto the organization of the production process, rather than the productive powers of nature. He advanced the idea that the productive powers of labour increase with the division of labour, and that the division of labour increases with the extension of the market. His discussions of both division of labour and the market were advanced in a more abstract form than had been characteristic of pre-classical discussions of economic issues, representing an advance beyond description to concepts, and thus an advance towards economic analysis as subsequently understood.

2.3 The benefits of trade: from Mun to Smith

Adam Smith concurred with the Physiocrats in their call for free trade, but elaborated it into a far more wide-ranging critique of the 'commercial school', in which he argued the case for countries to specialise rather than aim for self-reliance. International trade played, however, a secondary role in his overall political economy, as a 'vent for surplus' investment, his primary focus being on furthering domestic production. (*Preview*: Subsequently, Ricardo, in his theory of comparative advantage, shifted the emphasis even more decisively onto the allocational, or efficiency, effects of international division of labour, while a critique of the arguments of the 'English' political economists was later advanced by the German journalist Friedrich List, who argued that 'late-comers' may need to take protectionist measures to foster their 'infant industries'.)

Textbook readings: Rima: chapter 4: 74-84 (Physiocrats); 5: 98-9 (Smith on division of labour); 115-17 (Smith on benefits of trade).

Prescribed readings from Smith, etc.

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT. Hugh Goodacre.

2. CLASSICAL POLITICAL ECONOMY (1): THE PHYSIOCRATS AND ADAM SMITH

2.1 Classical themes; surplus, distribution, circulation.

2.2 Smith: division of labour and the extent of the market.

2.3 The benefits of trade: from Mun to Smith.

Review:

'Mercantilism' (unfashionable term – no single school of thought) / pre-classical economic thought: characteristics;

- Wealth-getting no longer considered sinful
- Government ('prince') the principal economic agent
- Commercial wars between nation states.
- Increases in nations' wealth a 'zero sum game'
- Colonialism; beginnings of slave trade.
- Beginnings of systematic analysis of economic issues.
- Initial discussions on nature of 'wealth of nation'.

2

Introduction: **From 'mercantilism' to 'Enlightenment'.**

Petty's policy proposals illustrate characteristics of 'mercantilist' period, combined with beginnings of transition towards focus on production > trade:

- War aims / raising finance for war still dominant concern – 'fiscal-military': 90% state revenue for war.
- State policies to "multiply the people".
- State action / forced inward migration to England from Ireland ('**transplantation**').

  → Give England same advantages of population compactness as Holland.
- Aim: '**Bank for war**' from £1.1m extra annual state revenue.

From 'mercantilism' to 'Enlightenment', *contd*

Absolutist states, predatory commercial wars, colonialism, piracy, rise of the slave trade.

- Time for a makeover!

'**Enlightenment**':

- Movement in European philosophy (France, Scotland, etc.).
- 'Natural liberty'.

4

2.1 Classical themes: surplus, distribution, circulation.

(1) The surplus product and how to increase it.

Petty ('first stage' of classical tradition):

- Three great social classes, each with own revenue.
- Labour produces surplus.
- Increased by state action, e.g. compacting the population → increase in economies of scale, DOL, technical progress, etc.

Expenditure	£m	Income	£m
Personal expenditure of 6m persons at £6.67 per head	40	Rent of land	8
		Yield on "money and other personal estates"	7
		"The labour of the people"	25
TOTAL	40		40

Product of labour: £40m.

Labourers' wages: £25m.

Surplus: £15m.

5

(1) The surplus product and how to increase it, *contd*

Physiocracy – 'Rule of nature'.

- Labour only creates a '**net product**' (surplus of output over input) when combined with the powers of **nature**.

  i.e. primarily land; also fisheries, mines / extractive.
- A reaction against French state's attempts to foster manufactures and their export through intervention / regulation ('Colbertism').
- A decisive ('enlightened') move away from focus on trade ('mercantilism') to focus on production (classical).
- Reflected interests of rising capitalist agricultural sector in France.

6

The surplus product: **how to increase it,** *summary*

Petty:

- State action, e.g. compacting the population.

Physiocrats:

- Raise the proportion of **productive** > 'sterile' expenditure.
  i.e. expenditure on agriculture > manufacture.

Adam Smith -- *preview:*

- Organisation of production process / division of labour.
- DOL increases with increase in extent of the market.

7

Classical themes: (2) Distribution.

Surplus ('net') product and its **distribution** among social classes, central issues for **classical political economy**.

Petty: **Rent**
Wages
Yield on "money, etc."
i.e. surplus as Rent and a vague category (interest? profit?)

Physiocrats: **'Revenue' [Rent]**
Wages-and-profit
i.e. surplus all effectively as Rent

Smith *preview:* **Rent**
Wages
Profit
i.e. surplus divided between Rent and Profit; much more analysis of nature of capital ('stock') and profit.

8

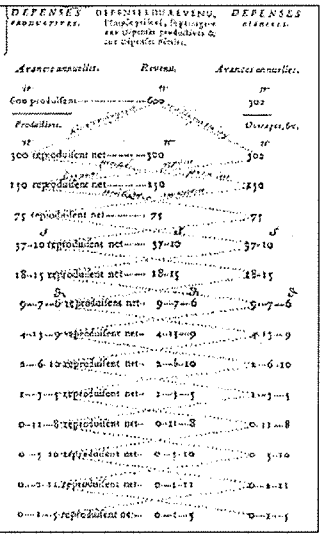
Classical themes: (3) Circulation

Quesnay's
Tableau Économique.

First systematic account of
- creation
- circulation
- reproduction

of national wealth.

Forerunner of ideas of
- 'circular flow'
- input-output
- intersectoral transactions.



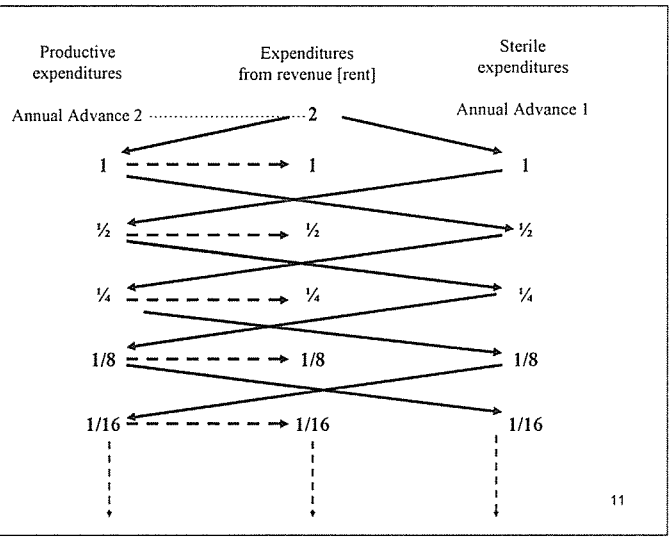
ECONOMIC TABLE

PRODUCTIVE EXPENDITURES relative to Agriculture, &c.	EXPENDITURES FROM REVENUE deducting Taxes, are divided between productive Expenditures and sterile Expenditures.	STERILE EXPENDITURES relative to industry, &c.
ANNUAL ADVANCES to produce a revenue of 600 L. are 600 L.	ANNUAL REVENUE of	ANNUAL ADVANCES for the products of the sterile expenditures are 300 L.
600 L. produce net	600 L.	

PRODUCE — PRODUCTS

300 — reproduce net ..... 300 L. — 300

150 — reproduce net ..... 150 L. — 150



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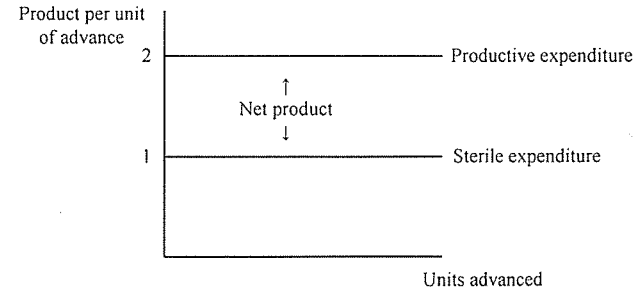
Preview: **Constant Returns**



Constant Returns – no matter how many units are advanced in the economy as a whole, the return on each unit advanced remains the same (does not 'diminish'):

- Each unit of sterile expenditure → 1 unit of product, i.e. net product is 0.
- Each unit of productive expenditure → 2 units, i.e. net product is 1.

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2.2 Smith: Division of labour and the extent of the market

Adam Smith: followed up Physiocrats' shift to focus on productivity:

- But source of surplus is **labour** and its **efficient organization,** rather than **Nature**.
- Primary focus now on **division of labour** (DOL), which increases "productive powers of labour".

DOL → increased output from given (labour) input due to three circumstances:

- increases dexterity of labourers
- saves time passing from one type of work to another
- stimulates invention of labour-saving devices

Though little attention to incipient 'industrial revolution' – still reflected age of *manu*facture > mechanisation. 13

Smith's economic analysis: from description to concept: (1) Division of labour:

Petty: descriptive accounts of DOL chosen from 'commanding heights' of the economy:

- ships – 'headline economics' was overseas trade
- textiles – England's main export
- watches – 'hi-tech'

Smith: becoming more like a *concept:*

- Productivity effect of DOL is present even in the most "trifling" manufacture -- pins.
- To emphasize / isolate the *effect / concept* in *abstract* terms, regardless of any other considerations. 14

Smith's economic analysis: from description to concept: (1) Division of labour, *contd*

Eventually, abstraction of economic processes into concepts is taken to extremes in mathematical economics.

e.g. A mathematical expression of Smith's ideas on another 'DOL' – between **productive and unproductive labour**:

k	proportion of **productive labour** in the labour force
g	growth rate
w	real wage
p	productivity (through extension of division of labour)

$$g = (k \,.\, p/w) - 1$$

$k = \underline{k}$ and $w = \underline{w}$ → g will depend entirely on Δp through DOL.
$p = \underline{p}$ and $w = \underline{w}$ → g will depend entirely on k.

(Hicks 1965. *Capital and Growth*). 15

Smith's economic analysis: from description to concept: (2)'The market':

Like DOL, market also gradually becoming more like a *concept.*

- **Petty**: mistrust: 'rather by hit than wit': market associated with court favoritism, trickery, gambling, luck, etc.
- **Cantillon**: more favourable to markets, but still very concrete / descriptive discussion ("once or twice a week", etc.).
- **Smith**: even in Smith, market is still not fully conceptualized; retains much description.
- *Preview:* **Microeconomics**: market *totally* conceptualized: "S = D", etc.

16

Smith links the two concepts:

- Market exchange leads to DOL in the first place.
- So also, extent of DOL is limited by extent of the market.
- → emphatic endorsement of the efficiency effects of the market.

Note: Spatial / geographical issues:

- For Petty, these were central for increasing productivity – compactness, etc.
- Smith still took them into account (availability of water-borne transport, etc.).
- But explicitly states that they are secondary – *extent of the market* is primary / decisive.

17

'The market' and natural liberty.

Thus we have our **Enlightenment** economic thought.

Aim: replace 'mercantilism' (Colbertism, etc.):

- trade wars
- state encroachment on individual liberty.

Markets are efficient / forerunner of 'efficient market hypothesis':

Markets spontaneously / 'naturally' / 'invisible hand' bring about:

- Increased DOL / efficiency
- *Preview*: Adjustment of supply and demand
  Individual **liberty** and **social harmony**

18

2.3 The benefits of trade: from Mun to Smith.

Mun: trade as a **zero sum game**.

Exported from England to Italy	Fetched from England by Italian merchants	Shipped to Italy by England's merchants	Merchant's mark-up
Corn, per quarter	25s.	50s	25s = 100%
Red herrings, per barrel	20s.	40s	20s. = 100%

i.e. **Either** English traders get the markup, **or** Italians.

12d (penny, pence) = 1s. (shilling).
20s. = £1.

19

12d (penny, pence) = 1s. (shilling).
20s. = £1.

Mun: trade as a zero sum game, *contd*:

"Remote or far countries" – trade "far more profitable", e.g.

	Price in England	Bought from the Dutch in Amsterdam	Mark-up	Bought in East Indies	Mark-up
Pepper, per pound	2s = [24d.]	20d. [1s 8d.]	4d. [= 16.7%]	3d.	21d. [= 700%]

Note: Greater 'gain' than "those to whom they properly appertain".

i.e. unequal trade acknowledged --

Certainly no idea of mutual benefit here!

20

Classical trade theory: the first stage:

Physiocrats:

- Free trade in agricultural products / against tariffs and commercial restrictions, domestic and international: *"Laissez-faire, laissez-passer!"*

Adam Smith.

- Took this up – all-round critique of 'commercial school', Colbertism, etc., and elaborated it into theory of gains from trade:
  - i.e. specialization better than self-sufficiency; country same as individual ("every prudent master of a family…").
    - *Note*: All this applies to 'civilized' countries only; other arguments regarding trade with 'uncivilized' countries.

The second stage – *preview*:

- **Ricardo**: theory of **comparative advantage**.
- *And also its critics*: **Friedrich List**: protect 'infant industries'.

21

Mutually beneficial trade	Labour input per unit of cloth (unit: 1 yd)	Labour input per unit of corn (unit: 1 cwt)
Portugal	5	2
England	2	4

i.e. **Mutual** benefit, unlike Mun's zero sum game'.

Note: These 2 countries and two commodities were the ones used by Ricardo to introduce his concept of **comparative advantage**.

- In the above example, we do not have this; it shows 'absolute' advantage only, i.e. the stage of trade theory represented by Smith.

Respective profitability of different sectors of the economy.

Petty – reflecting mercantilist interests (state-bureaucratic version) **:**

(1) Overseas trade
(2) Manufactures
(3) Agriculture

Smith – ***reverse!***

(1) Agriculture – sometimes almost Physiocratic
(2) Manufacture and domestic trade
(3) Overseas trade – largely just as "vent for surplus":
Foreign trade only appropriate when potential for domestic investment exhausted.

Once again, illustrates shift from **trade** to **production**.

23

2. CLASSICAL POLITICAL ECONOMY (1): THE PHYSIOCRATS AND ADAM SMITH -- *summary*

2.1 Classical themes; surplus, distribution, circulation.
From trade to production.
(1) The surplus and how to increase it.
(2) Distribution.
(3) Circulation: the Physiocrats, *Tableau Économique*.
Preview: Constant returns to scale.

2.2 Smith: division of labour and the extent of the market.
Division of labour. Productive and unproductive labour. Smith's economic analysis: from description to concept; the market.

2.3 The benefits of trade: from Mun to Smith.
Mun: Zero sum game.
Physiocrats: *Laissez-faire!*
Smith: mutually beneficial trade.
Preview: Ricardo, List. Sectors of the economy.

ECON1006. Topic 2: Classical political economy (1) The Physiocrats and Adam Smith. *Readings.*

2.1 CLASSICAL THEMES; SURPLUS, DISTRIBUTION, CIRCULATION.

[Petty: c*alculation on national income and expenditure:]*

There are of men, women, and children, in England and Wales, about six millions, whose expense at £6. 13s. 4d. per ann., or near 4 ½ d. per diem, for food, housing, cloaths, and all other necessaries, amount to 40 millions per ann.
There are in England and Wales, of acres of land (worth £6 6s 8d per acre, and 18 years purchase) 24 millions, that is, which yields 8 millions per ann., rent, and which are worth 144 millions to be sold....
["Money and other personal estates" are then estimated at 106 million (see below:]
Now if the land worth 144 millions, yield 8 millions per ann., the other estate converted into the like species must yield 5 8/9 millions more; but because money and other personal estates yield more per ann. than land (that is), doubles itself under 17 years purchase, at £6 per centum, then instead of 5 8/9 millions, suppose it to yield 7, making the whole annual proceed 15 millions...
Now if the annual proceed of the stock, or wealth of the nation, yields but 15 millions, and the expense be 40, then the labour of the people must furnish the other 25...

[Part of the calculation of "money, etc.":]

So as the Housing of *England* may be estimated worth 30 Millions; and that if their values be estimated by Chimneys, those of *London* are worth 12*d. per* Chimney; those of the Suburbs 10*d.* other Cities and Market-Towns 6*d.* and those without both, about 4*d.*	30
The Shipping of *England*, &c. is about 500,000 Tuns, which at 6 *d. per* Tun, including their Ordnance, Apparel , &c. is worth three Millions.	3
The Stock of Cattel on the afore-mentioned millions of Land, and the Waste thereunto belonging, is worth ¼ of the said Land, *viz.* 36 millions comprehending Horses, Oxen, Sheep, Swine, Deer, Fisheries, Parks and Warrens..	36
The coined gold and silver of the kingdom is scarce worth six millions.	6
The Wares, Merchandizes, and Utensils of Plate, and Furnitures, may be estimated at 31 millions...	31
[TOTAL (millions):]	106

[Quesnay's Tableau Économique (one of a number of versions):]

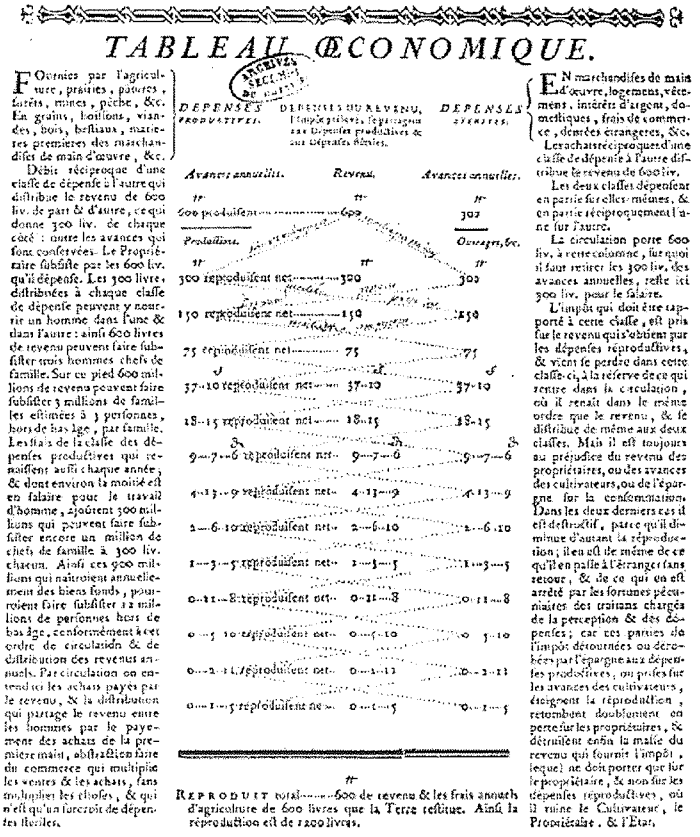

TABLEAU ŒCONOMIQUE.

DÉPENSES PRODUCTIVES. — DÉPENSES DU REVENU, l'emploi présent, l'épargne sont dépenses productives & non dépenses stériles. — DÉPENSES STERILES.

Avances annuelles. — Revenu. — Avances annuelles.

600 reproduisent ..... 600 — 300

Produits. — Ouvrages, &c.

300 reproduisent net ..... 300 — 300

150 reproduisent net ..... 150 — 150

75 reproduisent net ..... 75 — 75

37-10 reproduisent net ..... 37-10 — 37-10

18-15 reproduisent net ..... 18-15 — 18-15

9-7-6 reproduisent net ..... 9-7-6 — 9-7-6

4-13-9 reproduisent net ..... 4-13-9 — 4-13-9

2-6-10 reproduisent net ..... 2-6-10 — 2-6-10

1-3-5 reproduisent net ..... 1-3-5 — 1-3-5

0-11-8 reproduisent net ..... 0-11-8 — 0-11-8

0-5-10 reproduisent net ..... 0-5-10 — 0-5-10

0-2-11 reproduisent net ..... 0-2-11 — 0-2-11

0-1-5 reproduisent net ..... 0-1-5 — 0-1-5

REPRODUIT total ..... 600 de revenu & les frais annuels d'agriculture de 600 livres que la Terre restitue. Ainsi la reproduction est de 1200 livres.

EN marchandises de main d'œuvre, logemens, vêtemens, intérêts d'argent, domestiques, frais de commerce, denrées étrangeres, &c.

Les achats réciproques d'une classe de dépense à l'autre distribue le revenu de 600 liv.

Les deux classes dépensent en partie sur elles-mêmes, & en partie réciproquement l'une sur l'autre.

La circulation porte 600 liv. à cette colonne, sur quoi il faut retirer les 300 liv. des avances annuelles, reste ici 300 liv. pour le salaire.

L'impôt qui doit être rapporté à cette classe, est pris sur le revenu qui s'obtient par les dépenses reproductives, & vient se perdre dans cette classe-ci, à la réserve de ce qui rentre dans la circulation, où il rendit dans le même ordre que le revenu, & le distribue de même aux deux classes. Mais il est toujours au préjudice du revenu des propriétaires, ou des avances des cultivateurs, ou de l'épargne sur la consommation. Dans les deux derniers cas il est destructif, parce qu'il diminue d'autant la reproduction; il en est de même de ce qu'il en passe à l'étranger sans retour, & de ce qui en est arrêté par les fortunes pécuniaires des traitans chargés de la perception & des dépenses; car ces parties de l'impôt détournées ou dérobées par l'épargne aux dépenses productives, ou prises sur les avances des cultivateurs, éteignent la reproduction, retombent doublement en perte sur les propriétaires, & détruisent enfin la masse du revenu qui fournit l'impôt, lequel ne doit porter que sur le propriétaire, & non sur les dépenses reproductives, où il ruine le Cultivateur, le Propriétaire, & l'Etat.

[The Physiocrat Mirabeau displays his enthusiasm for the Tableau Économique:] There have been, since the world began, three great inventions which have principally given stability to political societies... The first is the invention of writing, which alone gives human nature the power of transmitting, without alteration, its laws, its contracts, its annals, and its discoveries. The second is the invention of money, which binds together all the relations between civilised societies. The third is the Economical Table, the result of the other two, which completes them both by perfecting their object; the great discovery of our age, but of which our posterity will reap the benefit.[1]

[Smith on the Physiocrats:] Though in representing the labour which is employed upon land as the only productive labour, the notions which it inculcates are perhaps too narrow and confined; yet in representing the wealth of nations as consisting, not in the unconsumable riches of money, but in the consumable goods annually reproduced by the labour of the society, and in representing perfect liberty as the only effectual expedient for rendering this annual reproduction the greatest possible, its doctrine seems to be in every respect as just as it is generous and liberal.[2]

2.2 SMITH: DIVISION OF LABOUR AND THE EXTENT OF THE MARKET

[From Wealth of Nations, *Book 1, Chapter 1: Division of labour and the productive powers of labour:]* The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour...

To take an example, ... from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving, the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.

[The "three circumstances" through which DOL increases productivity:] This great increase of the quantity of work which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first, to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many. ...

[From Chapter 2: What gives rise to the division of labour is "the propensity to truck, barter, and exchange":] This division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion. It is the necessary, though very slow and gradual consequence of a certain propensity in human nature which has in view no such extensive utility; the propensity to truck, barter, and exchange one thing for another...

[Individuals help each other not through benevolence only, but by self-interest:] In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and show them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages...

*[From Chapter 3: the division of labour is limited by the extent of the market:]*As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market. When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for.

[Productive and unproductive labour:] The labour of some of the most respectable orders in the society is, like that of menial servants, unproductive of any value, and does not fix or realize itself in any permanent subject; or vendible commodity, which endures after that labour is past, and for which an equal quantity of labour could afterwards be procured. The sovereign, for example, with all the officers both of justice and war who serve under him, the whole army and navy, are unproductive labourers. They are the servants of the public, and are maintained by a part of the annual produce of the industry of other people. Their service, how honourable, how useful, or how necessary soever, produces nothing for which an equal quantity of service can afterwards be procured. The protection, security, and defence of the commonwealth, the effect of their labour this year, will not purchase its protection, security, and defence for the year to come. In the same class must be ranked, some both of the gravest and most important, and some of the most frivolous professions: churchmen, lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers, etc. ... Like the declamation of the actor, the harangue of the orator, or the tune of the musician, the work of all of them perishes in the very instant of its production.[3]

[Proportion of productive workers in the labour force; division of labour decisive, not geographical factors, etc.:] According therefore as this produce, or what is purchased with it, bears a greater or smaller proportion to the number of those who are to consume it, the nation will be better or worse supplied with all the necessaries and conveniences for which it has occasion.

But this proportion must in every nation be regulated by two different circumstances; first, by the skill, dexterity, and judgment with which its labour is generally applied; and, secondly, by the proportion between the number of those who are employed in useful labour, and that of those who are not so employed. Whatever be the soil, climate, or extent of territory of any particular nation, the abundance or scantiness of its annual supply must, in that particular situation, depend upon those two circumstances.

[Petty, in contrast to Smith, defends state regulation over the market:] Against all this will be objected, that these computations are very hard if not impossible to make; to which I answer onely this, that they are so, especially if none will trouble their hands or heads to make them, or give authority for so doing: But withall, I say, that until this be done, Trade will be too conjectural a work for any man to employ his thoughts about; for it will be the same wisdom in order to win with fair Dice, to spend much time in considering how to hold them, how much to shake them, and how hard to throw them, and on what angles they should hit the side of the Tables, as to consider how to advance the Trade of this Nation; where at present particular men get from their neighbours (not from the earth and sea) rather by hit then wit, and by the false opinions of others, rather then their own judgements.[4]

[Cantillon, c.1731: markets still described in very concrete terms:] There are some villages where markets have been established by the interest of some proprietor or gentleman at court. These markets, held once or twice a week, encourage several little undertakers and merchants to set themselves up there. They buy in the market the products brought from the surrounding villages in order to carry them to the large towns for sale. In the large towns they exchange them for iron, salt, sugar and other merchandise which they sell on market days to the villagers. Many small artisans also, like locksmiths, cabinet makers and others, settle down for the service of the villagers who have none in their villages, and at length these villages become market towns. A market town being placed in the centre of the villages, and at length these villages become market towns. A market town being placed in the centre of the villages whose people come to market, it is more natural and easy that the villagers should bring their products thither for sale on market days and buy the articles they need, than that the merchants and factors should transport them to the villages in exchange for their products. (1) For the merchants to go round the villages would unnecessarily increase the cost of carriage. (2) The merchants would perhaps be obliged to go to several villages before finding the quality and quantity of produce which they wished to buy. (3) The villagers would generally be in their fields when the merchants arrived and not knowing what produce these needed would have nothing prepared and fit for sale. (4) It would be almost impossible to fix the price of the produce and the merchandise in the villages, between the merchants and the villagers. In one village the merchant would refuse the price asked for produce, hoping to find it cheaper in another village, and the villager would refuse the price offered for his merchandise in the hope that another merchant would come along and take it on better terms.

All these difficulties are avoided when the villagers come to town on market days to sell their produce and to buy the things they need. Prices are fixed by the proportion between the produce exposed for sale and the money offered for it; this takes place in the same spot, under the eyes of all the villagers of different villages and of the merchants or undertakers of the town. When the price has been settled between a few the others follow without difficulty and so the market place of the day is determined. The peasant goes back to his village and resumes his work.[5]

[The market completely conceptualised: definition in Sloman's Economics*:]* Market. The interaction between buyers and sellers.[6]

2.3 THE BENEFITS OF TRADE: FROM MUN TO SMITH.

[Adam Smith on the gains from trade:] It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy. The tailor does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes, but employs a tailor. The farmer attempts to make neither the one nor the other, but employs those different artificers. All of them find it for their interest to employ their whole industry in a way in which they have some advantage over their neighbours, and to purchase with a part of its produce, or what is the same thing, with the price of a part of it, whatever else they have occasion for.

What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry employed in a way in which we have some advantage. The general industry of the country, being always in proportion to the capital which employs it, will not thereby be diminished, no more than that of the above-mentioned artificers; but only left to find out the way in which it can be employed with the greatest advantage.[7]

[Smith criticizes the 'commercial system':] No regulation of commerce can increase the quantity of industry in any society beyond what its capital can maintain. It can only divert a part of it into a direction into which it might not otherwise have gone; and it is by no means certain that this artificial direction is likely to be more advantageous to the society than that into which it would have gone of its own accord.

Whether the advantages which one country has over another be natural or acquired is in this respect of no consequence. As long as the one country has those advantages, and the other wants them, it will always be more advantageous for the latter rather to buy of the former than to make. It is an acquired advantage only, which one artificer has over his neighbour, who exercises another trade; and yet they both find it more advantageous to buy of one another than to make what does not belong to their particular trades.[8]

[Smith on Colbert, with implicit endorsement of the Physiocrats' call for free trade:] The French have been particularly forward to favour their own manufactures by restraining the importation of such foreign goods as could come into competition with them. In this consisted a great part of the policy of Mr. Colbert, who, notwithstanding his great abilities, seems in this case to have been imposed upon by the sophistry of merchants and manufacturers, who are always demanding a monopoly against their countrymen. It is at present the opinion of the most intelligent men in France that his operations of this kind have not been beneficial to his country.[9]

[Smith on relations between manufacturing and agricultural countries:] What a town always is with regard to the country in its neighborhood, one independent state or country may frequently be with regard to other independent states or countries. It is thus that Holland draws a great part of its subsistence from other countries; live cattle from Holstein and Jutland, and corn from almost all the different countries of Europe. A small quantity of manufactured produce purchases a great quantity of rude produce. A trading and manufacturing country, therefore, naturally purchases with a small part of its manufactured produce a great part of the rude produce of other countries; while, on the contrary, a country without trade and manufactures is generally obliged to purchase, at the expense of a great part of its rude produce, a very small part of the manufactured produce of other countries.[10]

[Limits to Smith's advocacy of free trade:] Some particular branches of commerce, which are carried on with barbarous and uncivilised nations, require extraordinary protection. An ordinary store or counting-house could give little security to the goods of the merchants who trade to the western coast of Africa. To defend them from the barbarous natives, it is necessary that the place where they are deposited should be, in some measure, fortified.[11]

SUBSEQUENT DEBATES ON TRADE THEORY -- *preview:*

[Ricardo on comparative advantage:] If Portugal had no commercial connexion with other countries, instead of employing a great part of her capital and industry in the production of wines, with which she purchases for her own use the cloth and hardware of other countries, she would be obliged to devote a part of that capital to the manufacture of those commodities, which she would thus obtain probably inferior in quality as well as quantity.

The quantity of wine which she shall give in exchange for the cloth of England, is not determined by the respective quantities of labour devoted to the production of each, as it would be, if both commodities were manufactured in England, or both in Portugal...

This exchange might even take place, notwithstanding that the commodity imported by Portugal could be produced there with less labour than in England.

[James (father of John Stuart) Mil, a populariser of Ricardo's political economy, explains the concept of comparative advantage:] When a country can either import a commodity or produce it at home, it compares the cost of producing at home with the cost of procuring from abroad; if the latter cost is less than the first, it imports. The cost at which a country can import from abroad depends, not upon the cost at which the foreign country produces the commodity, but upon what the commodity costs which it sends in exchange, compared with the cost which it must be at to produce the commodity in question, if it did not import it.[12]

[Friedrich List on trade and protection:] Between two advanced nations, a free competition must necessarily be advantageous to both *if they were upon the same level of industrial progress*... [But] a nation unhappily far behind as to industry, commerce and navigation must above everything put forth all its strength to sustain a struggle with nations already in advance...

A country like England which is far in advance of all its competitors cannot better maintain and extend its manufacturing and commercial industry than by a trade as free as possible from all restrictions. For such a country, the cosmopolitan and the national principle are one and the same thing. This explains the favour with which the most enlightened economists of England regard free trade, and the reluctance of the wise and prudent of other countries to adopt this principle in the actual state of the world...

The energy developed in a few 'high-class progressive industries' may spread over a great part of the industrial system of the country...[13]

[Critique of Washington Consensus by Stiglitz and Charlton (2006):] Fifteen years after the Washington Consensus, the world has come to acknowledge that free trade is not a magic wand. Trade may be necessary for sustained industrial development, but it is not sufficient. In the right circumstances, trade liberalisation creates opportunities for development, but other factors determine the extent to which those opportunities are realised. In addition, any 'gross' welfare gains from trade liberalisation must be balanced against its associated costs. Liberalisation incurs adjustment costs as resources are moved from one sector to another in the process of reform and whereas it may take decades for multilateral trade reform to deliver gains to developing countries, the adjustment costs are automatic and usually upfront.

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[1] Marquis de Mirabeau, quoted in *Wealth of Nations*.

[2] *Wealth of Nations*: 678

[3] *Wealth of Nations*: 330-1.

[4] *Treatise on Taxes and Contributions*, chapter 5.

[5] Cantillon, c. 1730, *Essai*. Trans. Higgs.

[6] Sloman and Wride, *Economics*, 2009: 15.

[7] *Wealth of Nations*, IV, ii, 3, 12.

[8] *Wealth of Nations*, IV, ii.

[9] *Wealth of Nations*, IV, ii.

[10] *Wealth of Nations*, IV ix [298].

[11] *Wealth of Nations:* 731.

[12] *Elements of Political Economy*, chapter 3, iv.

[13] *The National System of Political Economy*, 1841.

ECON1006. History of Economic Thought.

Topic 3. Classical Political Economy (2): From Smith to Ricardo and Malthus. *Lecture outline.*

3.1 Smith: Free competition and 'natural liberty'

Smith is well known for his opposition to restraints on free competition in the market. He argued that an unintended consequence of the actions of self-interested economic agents would be a socially optimal outcome for a country's economy as a whole – the doctrine of the 'invisible hand'. In turn, he identified this optimal outcome with a situation of 'natural liberty', a concept which was being advanced by the Enlightenment movement in European philosophy.

3.2 Smith: Corporations, monopoly and privilege

Smith's advocacy of the benefits of free competition was coupled with his well-known critique of the unrestrained exercise of corporate power. He argued that monopolies had harmful effects through their practice of restricting supply in order to raise prices above their 'natural' level. The 'natural price' was that which would allot to each of the three great orders of society (landowners, capitalists, laborers) their respective revenues (rent, profit, wages) in a proportion which accorded with the harmony of the existing social order, i.e. the 'natural' order which accorded with the principle of 'natural liberty'. Less widely recognized is the fact that he conceded that this principle could justifiably be 'violated' in cases where its exercise would come into conflict with the fiscal interests of the state, as represented, in particular, by the stability of the Bank of England.

3.3 Ricardo: from static to dynamic analysis: machinery, gross output, and distribution

In the less socially stable conditions of war and industrial revolution, Smith's vision of a static, harmonious and 'natural' political economy was succeeded by Ricardo's more troubling vision of one that was dynamic, conflictual and problematic. He saw the interests of industrialists as being in contradiction with those of landlords, and also, late in his life, questioned Smith's assumption that increased productivity would benefit all orders of society. He argued that, while industrialization might increase net product (i.e. rent plus profit), it might at the same time lead to a reduction in gross product, and thus the 'wage fund', leading to immiseration of the laboring population.

3.4 Ricardo: Population and diminishing returns in agriculture

Malthus famously propagated the idea that population increases in geometrical progression, whereas the production of the means of subsistence can only increase (at best) in arithmetical progression. His conclusion was that excessive provision of assistance to the poor was counter-productive, since it would only encourage population increase, leading to a further cycle of necessary starvation to eliminate surplus population. In formulating this idea, Malthus likewise drew attention to the concept of diminishing returns on agricultural land as cultivation is extended from more to less fertile land.

Textbook readings: Rima: 109-10, 115 (natural price and the social order), 155-8 (Ricardo and immiseration), 126-31 (Malthus and population).

Prescribed readings from Smith, Malthus and Ricardo.

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT.
Hugh Goodacre.

3. CLASSICAL POLITICAL ECONOMY (2): FROM SMITH TO RICARDO AND MALTHUS.

3.1 Smith: Free competition and 'natural liberty'

3.2 Smith: Corporations, monopoly and privilege

3.3 Ricardo: from static to dynamic analysis: machinery, gross output, and distribution

3.4 Ricardo: Population and diminishing returns in agriculture

3.1 Free competition and 'natural liberty'

Deviations of 'market' price, or 'actual' price from 'natural price':

Fluctuations in supply and demand conditions → fluctuations in 'market' price / 'actual' price.

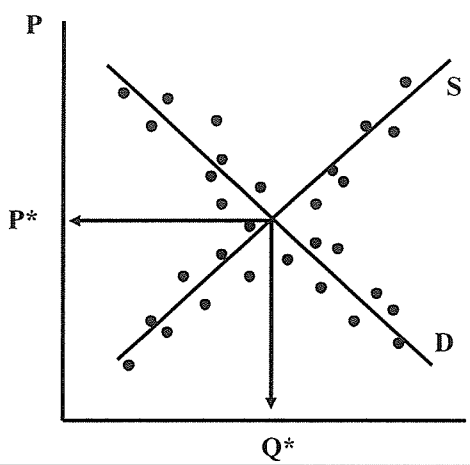
- But price will eventually adjust back to natural price.
  - i.e. equilibration of supply and demand through the operation of the market.
  - This concept already formulated by previous authors, even Mun (note international context!).

Preview: Another cause of deviation from natural price:

- Monopoly (again note international context!).

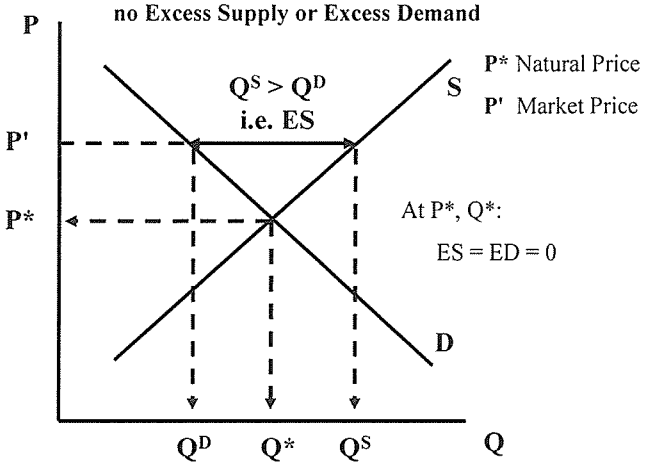
2

Supply and Demand – *review.*



Note: This diagrammatic version was *much* later – Marshall, late nineteenth century

Market Clearing – no Excess Supply or Excess Demand



Smith: 'Natural price', distribution, and the natural social order

Annual produce is "**naturally** distributed among the different ranks of the people" / "**naturally** divides itself" into:

- the rent of land
- the wages of labour
- the profits of stock (i.e. capital)

} all at "ordinary or average rate" → outcome is "natural price"

Each allotted as **revenue** to the corresponding order of society:

- landowners
- laborers
- capitalists

Natural price:

- The price at which this division takes place in such a way that the natural order of society is undisturbed / remains harmonious.

Note: Natural price determined by **cost of production** > D.

5

'The market' and 'natural liberty' -- *conclusions.*

Thus we have our Enlightenment economic thought.

Aim: replace 'mercantilism' (Colbertism, etc.):

- trade wars
- state encroachments on individual liberty.

Markets are efficient / forerunner of 'efficient market hypothesis':

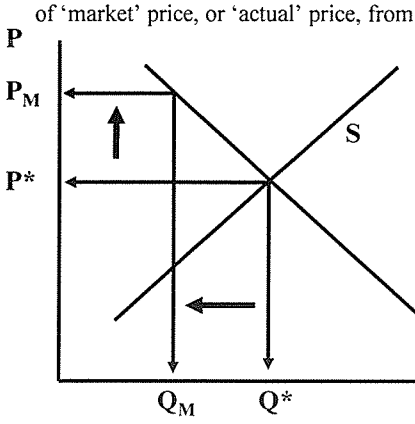
Markets spontaneously / 'naturally' / 'invisible hand' bring about:

- Increased DOL / efficiency
- Adjustment of supply and demand
- Individual liberty and social harmony

6

3.2 Corporations, monopoly and privilege

Monopolies / corporations: Another cause of deviations of 'market' price, or 'actual' price, from 'natural price':.



"Conspiracy against the public":

- Deliberately restrict supply ($Q_M < Q^*$)
- → can exact an above-natural price ($P_M > P^*$)

7

Limits to the European 'Enlightenment':

(1) Limited liability

Smith expressed opposition to limited liability:

- unjustified exercise of corporate power
- contradicts principle of natural liberty

BUT: He made an exception in the case of the **Bank of England**.

- This was in his time a joint-stock company with monopoly privileges guaranteed by state restrictions on other banks.
- But BoE was central to the state's functioning.
- i.e. principle of natural liberty could be 'violated' if it conflicted with state's fiscal priorities (mostly fiscal-military).

8

Theme: **The international dimension** – illustrations in Smith:

Central aspects of Smith's theoretical system initially formulated in international context:

- Much of his critique of monopoly power, e.g. for inefficiency, in international / 'mercantilist' context:
  African trade forts, etc.
- Even 'invisible hand' seems mainly concerned with increasing a *particular country's* – i.e. England's – wealth, not that of mankind as a whole.
  "..the interest of **the** society..." Sloman omits "the"!
- Note that this international context / continuity with 'mercantilism' is downplayed in standard accounts of Smith's political economy.

9

Review of some classical themes so far: (1) Surplus.

Labour produces a surplus product / net product.
Source / how to increase it:

Petty:

- Technology, economies of scale, DOL.
- Increased by **state action**: compact the population, etc.

Physiocrats:

- Labour + productive powers of **nature**
- Increased by high proportion of **productive** > sterile expenditure.

Smith:

- Organization of labour process / DOL
- DOL increases with increase in **extent of the market**.

Note: **Supply** emphasis – costs of production, etc.; little on demand.

10

Review of some classical themes so far: (2) Distribution:
Note: To orders of society > returns to factors of production ('functional'), as in today's microeconomics:

Distributive shares:

Petty:	• Rent • Yield on "money, etc." • Wages	i.e. surplus as Rent and a vague category – interest and ['user benefits'?]
Physiocrats:	• 'Revenue' [Rent] • Wages-and-profit	i.e. surplus ('net product') all effectively as Rent
Smith:	• Rent • Profit • Wages	i.e. surplus divided between Rent and Profit; much more analysis of nature of capital ('stock')

3.3 Ricardo, new times: dynamic analysis: machinery, gross output and distribution.

Historical context and topical debates:

Population, poverty, protection, conflict:

- Wars with France, following French Revolution
- Industrialisation ('industrial revolution')
- Post-war unemployment / social unrest / conflict
- Debates on Poor Laws, Corn Laws.

Distribution:

Smith:	Static	Harmonious	'Natural'
Ricardo:	**Dynamic**	**Conflictual**	**Problematic**

12

Distribution:

Smith:	Static	Harmonious	'Natural'
Ricardo:	**Dynamic**	**Conflictual**	**Problematic**

Ricardo takes over Smith's distribution schema.
BUT: Renders it dynamic rather than static – 'sequence analysis'.
Growth affected by **changes / trend** in income shares over time.

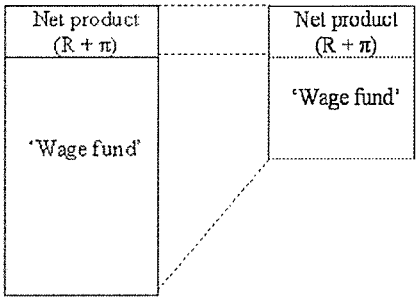
Smith: DOL ↑ → q_i ↑ (q_i output in industry i)
→ Q↑-and-D↑ (as in Say's Law) (Q aggregate output)
→ better standard of living for all
(subject only to slow erosion through population ↑).

Ricardo: Mechanization ↑ → q_i ↑
→ Q^{net} (i.e. R + π) ↑ BUT Q^{gross}↓
→ technological u / immiseration of laborers.
(subject only to mitigation / postponement through increased marginal productivity through increased investment).

Ricardo's example: a manufacturer-cum-farmer

Year	Total K	Fixed K	Product	Gross product	Net product / π + R @ 10%	Circulating K for W / 'Wage Fund'
1	20	7	15 W goods	15	2	15 – 2 = **13**
2	20	7	7.5 W goods + 7.5 machine	15	2	7.5 – 2 = **5.5**
3	20	7 (as before) + 7.5 (machine)	7.5 W goods (net of machine repairs)	7.5	2	7.5 – 2 = **5.5**

Gross and Net Income:



$R_2 = R_1$ and $\pi_2 = \pi_1$, i.e. $Q^{net}{}_2 = Q^{net}{}_1$ i.e. **Net** income is sustained.

BUT: $Q^{gross}{}_2 < Q^{gross}{}_1$ (in the example: 7.5 < 15).
→ $W_2 < W_1$ (in the example: 5.5 < 13).
'**Wage Fund**' has decreased / labourers made redundant.

Technological progress, u, standard of living

Smith: optimistic that frictional u will be reabsorbed;
Compensating opportunities for employment elsewhere.
(Kind of Say's Law in the labor market).
→ General standard of living unlikely to be affected.

Ricardo: No – LR problem of technological unemployment.
Smith had not taken account of changes in **composition of capital:**
proportion of: circulating
fixed, particularly machinery.

i.e. Both are concerned with growth / total output, but:
Smith: Extension of DOL → growth.
Distributional shares are 'natural'.
Ricardo: Changes in capital structure / capital accumulation, etc.
Trends in distributional shares, which **affect growth**.
Not so optimistic.

Review and preview: **Relevance to crisis theory.**

Petty: still fundamentally 'mercantilist':

- Foreign power captures nation's trade → fight another trade war!

Smith: 'stationary state' far off / centuries:

- Meanwhile, 'state' is 'progressive'; efficiency↑ through DOL.
- → u↑, but compensating opportunities arise for employment elsewhere.

Ricardo: less optimistic that stationary state could be warded off:

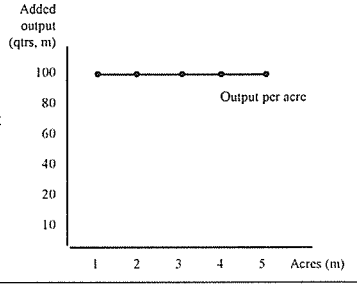
- Technological unemployment, immiseration.
- *Also / preview:* Declining profit share / problems of capital accumulation

3.4 Malthus, Ricardo: population and diminishing returns in agriculture

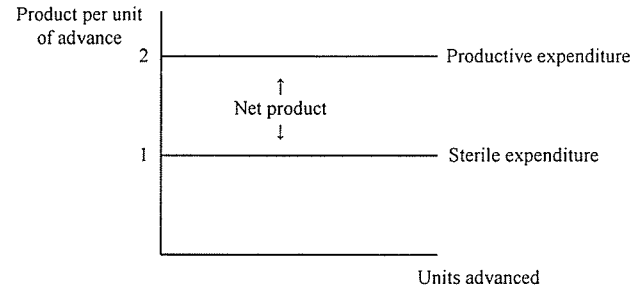
Constant returns: Each additional unit of land cultivated (say, in millions of acres) adds same amount to output, say 100m quarters → trivial result:

Number of acres (m)	1	2	3	4	5
Amount of added output (qtrs, m)	100	100	100	100	100

Constant returns



Review: **Constant Returns** *(as seen in the case of the Tableau Économique)*

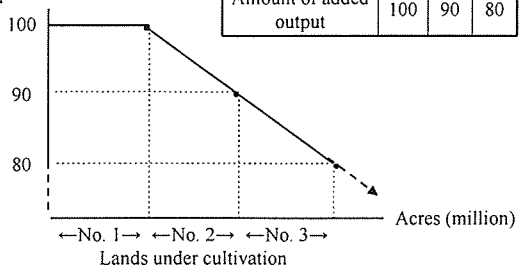


Constant Returns – no matter how many units are advanced in the economy as a whole, the return on each unit advanced remains the same (does not 'diminish'):

- Each unit of sterile expenditure → 1 unit of product, i.e. net product is 0.
- Each unit of productive expenditure → 2 units, i.e. net product is 1.

Diminishing Returns.

Land No.	1	2	3
Amount of added output	100	90	80



Constant returns only prevail when land of top quality (e.g. Land No. 1 in diagram) is in sufficient supply (e.g. abundant land, small population).

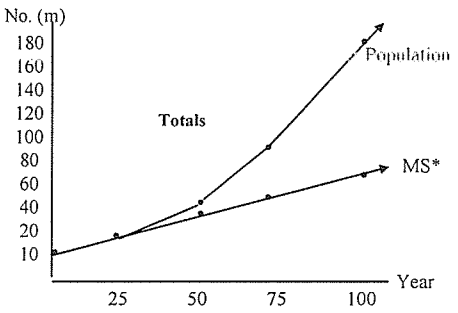
Pressure of population → best land all cultivated

→ lands of lower fertility are successively brought into cultivation (Lands No. 2 and 3 in diagram)

→ **Diminishing Returns** – lower output per acre.

Year	Pop.	MS*
t	11m	11m
t + 25	22m	22m
t + 50	44m	33m
t + 75	88m	44m
t + 100	176m	55m

MS*: max. poss. number for whom means of subsistence can be provided



Malthus on population and output of means of subsistence

Diminishing returns are inevitable, but *even supposing* (at best) constant returns, and *even supposing* MS could double in next quarter century, output of land could still only grow in **arithmetical progression** (e.g. 1, 2, 3, 4, 5, 6, 7, 8, 9…).

BUT: Population can double every 25 years, i.e. **geometrical progression** (e.g. 1, 2, 4, 8, 16, 32, 64, 128, 256…).

Malthus on population:

Wages cannot rise above subsistence level for a prolonged period of time:

that will lead to population growth in excess of the demand for labour.

Note: **Cantillon**: "rats in a barn".
Smith; "inferior orders".

Policy conclusions:

Keep birth rate of labouring population low.

(1) Oppose excessive poor relief.

(2) Education / encourage moral restraint.

'Wealth of nation': what it is / its source, and how to increase it.

'Mercantilism'	(1): Bullionism	Gold / precious metals	'Get' it from the Spanish, prevent gold exports.
	(2): Mun, etc.	Trade surplus	Gold exports OK if for re-exports / expanding trade
'Mercantilism' / 'Transitional'	Petty, etc.	Number of people, particularly those in 'arts'	Encourage higher birth rate. Welcome immigration (forced, Petty)
		Beginnings of emphasis on increasing productivity	Improve technology. (Bacon) Compact the population. (Petty)
Classical Political Economy:	Physiocrats	Powers of nature	Ensure high proportion of expenditure is 'productive' rather than 'sterile'
	Adam Smith	Organisation of production process / division of labour	Encourage extension of market; this allows further division of labour
	Ricardo	Accumulation of capital / industrialisation	Ensure surplus product is not all appropriated by landlords as rent.
Neo-classical economics	Traditional / 'liberal'	Focus on a different question: allocation of given resources by market	*(1) Laissez-faire!*
	'New'		(2) Prevent market failure

3. CLASSICAL POLITICAL ECONOMY (2): FROM SMITH TO RICARDO AND MALTHUS.

Summary.

3.1 Smith: Free competition and 'natural liberty'
Natural price and market price. Market-clearing. Natural price and natural social order. Natural liberty.

3.2 Smith: Corporations, monopoly and privilege
Monopolies as 'conspiracy'. Limits of European Enlightenment: (1) Limited liability (2) International dimension.

Review of classical themes so far: **Surplus and distribution.**

3.3 Ricardo: from static to dynamic analysis: machinery, gross output, and distribution
Technological unemployment, immiseration.

3.4 Ricardo: Population and diminishing returns in agriculture
Arithmetical and geometrical progression.

ECON1006. Topic 3: Classical political economy (2) From Smith to Ricardo and Malthus. *Readings.*

3.1 SMITH: FREE COMPETITION AND 'NATURAL LIBERTY'

[Natural and market price:] There is in every society or neighbourhood an ordinary or average rate both of wages and profit in every different employment of labour and stock... There is likewise in every society or neighbourhood an ordinary or average rate of rent... These ordinary or average rates may be called the natural rates of wages, profit, and rent, at the time and place in which they commonly prevail...
When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price...
The actual price at which any commodity is commonly sold is called its market price. It may either be above, or below, or exactly the same with its natural price...

[Price, supply and demand:] The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity ... When the quantity brought to market is just sufficient to supply the effectual demand, and no more, the market price naturally comes to be either exactly, or as nearly as can be judged of, the same with the natural price... The natural price, therefore, is, as it were, the central price, to which the prices of all commodities are continually gravitating...[1]

[The great social orders and their revenues:] The whole annual produce of the land and labour of every country... naturally divides itself, it has already been observed, into three parts; the rent of land, the wages of labour, and the profits of stock; and constitutes a revenue to three different orders of people; to those who live by rent, to those who live by wages, and to those who live by profit. These are the three great, original, and constituent orders of every civilised society...[2]

3.2 SMITH: CORPORATIONS, MONOPOLY AND PRIVILEGE.

[Smith's distrust of traders, etc., in general:] Merchants and master manufacturers are... an order of men whose interest is never exactly the same with that of the public, who have generally an interest to deceive and even to oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it.[3]
People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.[4]

[State-granted monopolies restrict supply to sell above natural price:] The monopolists, by keeping the market constantly understocked, by never fully supplying the effectual demand, sell their commodities much above the natural price, and raise their emoluments, whether they consist in wages or profit, greatly above their natural rate. The price of monopoly is upon every occasion the highest which can be got. The natural price, or the price of free competition, on the contrary, is the lowest which can be taken, not upon every occasion, indeed, but for any considerable time together. The one is upon every occasion the highest which can be squeezed out of the buyers, or which, it is supposed, they will consent to give: the other is the lowest which the sellers can commonly afford to take, and at the same time continue their business. The constant view of such companies is always to raise the rate of their own profit as high as they can; to keep the market, both for the goods which they export, and for those which they import, as much understocked as they can: which can be done only by restraining the competition, or by discouraging new adventurers from entering into the trade.

[The role of government in the system of natural liberty] All systems either of preference or of restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. The sovereign is completely discharged from a duty, in the attempting to perform which he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient; the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interest of the society. According to the system of natural liberty, the sovereign has only three duties to attend to; ... protecting the society from violence and invasion of other independent societies;... protecting... every member of the society from the injustice or oppression of every other member of it... and, thirdly, the duty of erecting and maintaining certain public works and certain public institutions which it can never be for the interest of any individual, or small number of individuals, to erect and maintain...[5]

[Limited liability (not Smith's own term):] to exempt a particular set of dealers from some of the general laws which take place with regard to all their neighbours, merely because they might be capable of thriving if they had such an exemption, would certainly not be reasonable.[6]

[But Smith justifies the monopoly privileges of the Bank of England:] The stability of the Bank of England is equal to that of the British government. All that it has advanced to the public must be lost before its creditors can sustain any loss... It acts, not only as an ordinary bank, but as a great engine of state... *[The regulations which restrict the activities of its competitors]* may, no doubt, be considered as in some respects a violation of natural liberty. But those exertions of the natural liberty of a few individuals, which might endanger the security of the whole society, are, and ought to be, restrained by the laws of all governments, of the most free as well as of the most despotical. The obligation of building party walls, in order to prevent the communication of fire, is a violation of natural liberty exactly of the same kind with the regulations of the banking trade which are here proposed.[7]

[Petty on the respective profitability of the sectors of the economy:] There is much more to be gained by Manufacture than Husbandry, and by Merchandize than Manufacture...[8]

[Smith reverses the order of priority:] ...the quantity of that labour which equal capitals are capable of putting into motion varies extremely according to the diversity of their employment; as does likewise the value which that

employment adds to the annual produce of the land and labour of the country.[9]
the capital of the master manufacturer... puts immediately into motion... a much greater quantity of productive labour, and adds a much greater value to the annual produce of the land and labour of the society than an equal capital in the hands of any wholesale merchant.
No equal capital puts into motion a greater quantity of productive labour than that of the farmer. Not only his labouring servants, but his labouring cattle, are productive labourers.[10]

[The international dimension: division of labour in 'civilised' countries:] Observe the accommodation of the most common artificer or day-labourer in a civilised and thriving country, and you will perceive that the number of people of whose industry a part, though but a small part, has been employed in procuring him this accommodation, exceeds all computation... [W]ithout the assistance and co-operation of many thousands, the very meanest person in a civilised country could not be provided, even according to what we very falsely imagine the easy and simple manner in which he is commonly accommodated. Compared, indeed, with the more extravagant luxury of the great, his accommodation must no doubt appear extremely simple and easy; and yet it may be true, perhaps, that the accommodation of a European prince does not always so much exceed that of an industrious and frugal peasant as the accommodation of the latter exceeds that of many an African king, the absolute master of the lives and liberties of ten thousand naked savages.[11] [*Note*: Rima: 101 omits this last phrase.]

[The invisible hand – note the international *context!:]* As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the* society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it.[12]
* Note mis-quotation by Sloman and Wride 2009: 22 – "the" is omitted!

[Smith on gold and wars – note similarity to Mun!:] It is not always necessary to accumulate gold and silver in order to enable a country to carry on foreign wars, and to maintain fleets and armies in distant countries. Fleets and armies are maintained, not with gold and silver, but with consumable goods.[13]

[Smith on slavery:] In order that they may work well, it is the interest of their master that they should be fed well and kept in good heart in the same manner as it is his interest that his working cattle should be so...[14]
The fund destined for replacing or repairing, if I may say so, the wear and tear of the slave, is commonly managed by a negligent master or careless overseer. That destined for performing the same office with regard to the free man, is managed by the free man himself... It appears, accordingly, from the experience of all ages and nations, I believe, that the work done by freemen comes cheaper in the end than that performed by slaves...[15]
But, as the profit and success of the cultivation which is carried on by means of cattle, depend very much upon the good management of those cattle, so the profit and success of that which is carried on by slaves must depend equally upon the good management of those slaves; and in the good management of their slaves the French planters, I think it is generally allowed, are superior to the English. The law, so far as it gives some weak protection to the slave against the violence of his master, is likely to be better executed in a colony where the government is in a great measure arbitrary than in one where it is altogether free.[16]

[Criticism of state-granted monopoly to joint stock companies – example of Cape Coast Castle:] The trade of a joint stock company is always managed by a court of directors... But the greater part of those proprietors seldom pretend to understand anything of the business of the company... The directors of such companies, however, being the managers rather of other people's money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own...[17]
The Royal African Company soon found that they could not maintain the competition against private adventurers... In 1732, after having been for many years losers by the trade of carrying negroes to the West Indies, they at last resolved to give it up altogether; to sell to the private traders to America the negroes which they purchased upon the coast...[18]
The committee are accused of having sent out bricks and stones from England for the reparation of Cape Coast Castle on the coast of Guinea, a business for which Parliament had several times granted an extraordinary sum of money. These bricks and stones too, which had thus been sent upon so long a voyage, were said to have been of so bad a quality that it was necessary to rebuild from the foundation the walls which had been repaired with them.[19]
The forts and garrisons which lie north of Cape Rouge are not only maintained at the expense of the state, but are under the immediate government of the executive power... The garrisons at Gibraltar and Minorca, accordingly, have never been neglected...[20]

3.3 RICARDO: FROM STATIC TO DYNAMIC ANALYSIS: MACHINERY, GROSS OUTPUT, AND DISTRIBUTION

[Ricardo changes his mind on mechanisation:] In the present chapter I shall enter into some enquiry respecting the influence of machinery on the interests of the different classes of society, a subject of great importance, and one which appears never to have been investigated in a manner to lead to any certain or satisfactory results. It is more incumbent on me to declare my opinions on this question, because they have, on further reflection, undergone a considerable change...
Ever since I first turned my attention to questions of political economy, I have been of opinion, that such an application of machinery to any branch of production, as should have the effect of saving labour, was a general good...

These were my opinions, and they continue unaltered, as far as regards the landlord and the capitalist; but I am convinced, that the substitution of machinery for human labour, is often very injurious to the interests of the class of labourers.
My mistake arose from the supposition, that whenever the net income of a society increased, its gross income would also increase; I now, however, see reason to be satisfied that the one fund, from which landlords and capitalists derive their revenue, may increase, while the other, that upon which the labouring class mainly depend, may diminish, and therefore it follows, if I am right, that the same cause which may increase the net revenue of the country, may at the same time render the population redundant, and deteriorate the condition of the labourer.

[A quantitative example:] A capitalist we will suppose employs a capital of the value of £20,000 and that he carries on the joint business of a farmer, and a manufacturer of necessities. We will further suppose, that £7,000 of this capital is invested in fixed capital, viz. in buildings, implements, &c. &c. and that the remaining £13,000 is employed as circulating capital in the support of labour. Let us suppose, too, that profits are 10 per cent, and consequently that the capitalist's capital is every year put into its original state of efficiency, and yields a profit of £2,
Each year the capitalist begins his operations, by having food and necessaries in his possession of the value of £13,000, all of which he sells in the course of the year to his own workmen for that sum of money, and, during the same period, he pays them the like amount of money for wages: at the end of the year they replace in his possession food and necessaries of the value of £15,000, £2,000 of which he consumes himself, or disposes of as may best suit his pleasure and gratification. As far as these products are concerned, the gross produce for that year is £15,000, and the net produce £2,000. Suppose now, that the following year the capitalist employs half his men in constructing a machine, and the other half in producing food and necessaries as usual. During that year he would pay the sum of £13,000 in wages as usual, and would sell food and necessaries to the same amount to his workmen; but what would be the case the following year?
While the machine was being made, only one-half of the usual quantity of food and necessaries would be obtained, and they would be only one-half the value of the quantity which was produced before. The machine would be worth £7,500, and the food and necessaries £7,500, and, therefore, the capital of the capitalist would be as great as before; for he would have besides these two values, his fixed capital worth £7,000, making in the whole £20,000 capital, and £2,000 profit. After deducting this latter sum for his own expenses, he would have a no greater circulating capital than £5,500 with which to carry on his subsequent operations; and, therefore, his means of employing labour, would be reduced in the proportion of £13,000 to £5,500, and, consequently, all the labour which was before employed by £7,500, would become redundant. The reduced quantity of labour which the capitalist can employ, must, indeed, with the assistance of the machine, and after deductions for its repairs, produce a value equal to £7,500, it must replace the circulating capital with a profit of £2,000 on the whole capital; but if this be done, if the net income be not diminished, of what importance is it to the capitalist, whether the gross income be of the value of £3,000, of £10,000, or of £15,000?
In this case, then, although the net produce will not be diminished in value, although its power of purchasing commodities may be greatly increased, the gross produce will have fallen from a value of £15,000 to a value of £7,500, and as the power of supporting a population, and employing labour, depends always on the gross produce of a nation, and not on its net produce, there will necessarily be a diminution in the demand for labour, population will become redundant, and the situation of the labouring classes will be that of distress and poverty.

3.4 MALTHUS, RICARDO, NEW TIMES: POPULATION AND DIMINISHING RETURNS IN AGRICULTURE

[Malthus on population:] We will take as our rule, and say, that population, when unchecked, goes on doubling itself every twenty-five years or increases in a geometrical ratio... It may be fairly pronounced... that, considering the present average state of the earth, the means of subsistence, under circumstances the most favourable to human industry, could not possibly be made to increase faster than in an arithmetical ratio.
The necessary effects of these two different rates of increase, when brought together, will be very striking. Let us call the population of this island eleven millions; and suppose the present produce equal to the easy support of such a number. In the first twenty-five years the population would be twenty-two millions, and the food being also doubled, the means of subsistence would be equal to this increase. In the next twenty-five years, the population would be forty-four millions, and the means of subsistence only equal to the support of thirty-three millions. In the next period the population would be eighty-eight millions, and the means of subsistence just equal to the support of half that number. And, at the conclusion of the first century, the population would be a hundred and seventy-six millions, and the means of subsistence only equal to the support of fifty-five millions, leaving a population of a hundred and twenty-one millions totally unprovided for.
Taking the whole earth, instead of this island, emigration would of course be excluded; and, supposing the present population equal to a thousand millions, the human species would increase as the numbers, 1, 2, 4, 8, 16, 32, 64, 128, 256, and subsistence as 1, 2, 3, 4, 5, 6, 7, 8, 9. In two centuries the population would be to the means of subsistence as 256 to 9 ; in three centuries as 4096 to 13, and in two thousand years the difference would be almost incalculable.[21]

[Cantillon:] Men multiply like mice in a barn if they have unlimited means of subsistence; and the English in the colonies will become more numerous in proportion in three generations than they would be in thirty in England, because in the colonies they find for cultivation new tracts of land from which they drive the savages.[22]

[Some similar attitudes from Smith:] Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it. But in civilised society it is only among the inferior ranks of people that the scantiness of subsistence can set limits to the further multiplication of the human species; and it can do so in no other way than by destroying a great part of the children which their fruitful marriages produce.[23]

1: *WN*: 72-5. 2: *WN*: 265. 3: *WN*: 267. 4: *WN*: 145. 5: *WN*: 687-8. 6: *WN*: 757. 7: *WN*: 320, 324. 8: *Political Arithmetic*, chapter 1. 9: *WN*: 360. 10: *WN*: 363. 11: *WN*: 24. 12: *WN*: 456. 13: *WN*: 440. 14: *WN*: 939. 15: *WN*: 98. 16: *WN*: 586-7. 17: *WN*: 741. 18: *WN*: 743. 19: *WN*: 739. 20: *WN*: 739-40. 21: *An essay on the principle of population as it affects the future improvement of society*. 22: Cantillon, Essai, chapter 15. Mirabeau, 1758, book I, chap. 2, p. 15 quotes this, with "rats" instead of "mice". 23: *WN*: book 1, chapter 8.

ECON1006. History of Economic Thought.

Topic 4. Classical political economy (3) Ricardo. *Lecture outline.*

4.1 Rent as differential rent

Ricardo applied the diminishing returns framework popularized by Malthus to rent theory, arguing that rent is differential rent – a premium on more fertile over less fertile land, a premium that arises once the margin of cultivation is extended beyond the most fertile land.

4.2 Distributive shares

Ricardo took over Smith's distribution schema (as prefigured in various respects by Petty, the Physiocrats, etc.), but, while Smith had viewed distribution among the different orders of society as of a fundamentally static, harmonious, 'natural' character, Ricardo viewed it in dynamic terms, and as a conflictual process, with wider relevance to problems of economic growth. This accorded with the historical context of post-war unemployment, rapid social change and industrial unrest, and intense public debate on the Corn Laws (restrictions on the import of corn) and legislation regarding poor relief (the Poor Laws). He argued that capital accumulation, and thus economic growth, was endangered by the trends in distributional shares. Rent absorbed an increasing proportion of income as the margin of cultivated land was extended, while the associated rise in the price of corn necessarily led to an increase in wages. The share of profits in gross output, and thus capital accumulation, was therefore subject to being 'squeezed', and even brought to a halt in the 'stationary state'. Only capital accumulation, and thus increased efficiency of production, might ward off, or more likely merely postpone, this outcome.

4.3 Demand in Classical Political Economy.

Unlike today's micro which views price determination in terms of the equilibration of supply and demand, classical political economy sought 'natural' explanations for price determination, and, in addition, discussed questions of demand in a very different manner. Smith discussed demand in terms of the distinction between use value and exchange value, but failed to establish a relation between them, leaving their non-correlation as an unexplained paradox (the water-diamond paradox). Beyond defining the concept of 'effectual demand', he gave little further attention to demand issues, his comments on fluctuations in demand being trivial (black cloth for public mournings). On the macro side, demand was, following Smith, even further down-graded as an issue in 'Say's Law'. Malthus was an exception; he considered aggregate demand, in the sense that he considered the economy to have a tendency towards under-consumption which could only be remedied by ensuring that landlords sustained their unproductive consumption; he accordingly advocated continuation of the Corn Laws. Ricardo came to the opposite policy conclusion, arguing that free trade in corn would have allocative advantages that would cheapen this principal wage good, and thus counter under-consumption through the encouragement of capital accumulation.

Textbook readings: Rima: chapter 6 (skim); chapter 7: 145-7, 150-1 (rent), 153-61 (distributive shares – compare 115 (Smith)); 104, 214, 261 (water-diamond paradox).

Prescribed readings from Malthus, Ricardo, Say, and also Petty, Smith, Keynes, etc.

4. CLASSICAL POLITICAL ECONOMY (3): RICARDO, *contd*

Review:
From Smith to Ricardo: historical background.
Ricardo and technological unemployment.
Malthus, Ricardo and diminishing returns.

4.1 Rent as differential rent

4.2 Distributive shares
Total, average and marginal magnitudes. Wages, profit, rent. Stationary state.

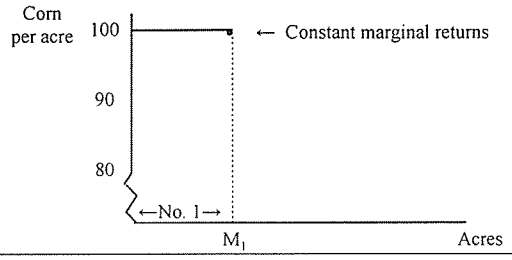
4.3 Demand: Ricardo, Say, Malthus, Keynes.
Smith: water-diamond paradox; 'effectual demand'; fluctuations in demand. Say's Law. Deficient demand: Malthus, Ricardo.

4.1 Rent as differential rent

Initial situation: land abundant, population small.

- → only the most fertile land is cultivated ("Land No. 1").
- No rent [land is 'free good'].

M_i Margin of cultivated land, beyond which cultivation is no longer profitable.
i.e. M_1 when only best land (No. 1) is cultivated.



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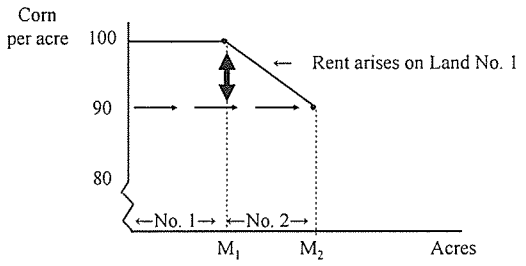
4.2 Rent as differential rent, *contd*

Pressure of population → margin of cultivation is extended onto inferior land, e.g. to M_2, thus taking Land No. 2 into cultivation.

Rent then **comes into existence** on Land No. 1 (not 'natural' as in Smith!).
i.e. owners of most fertile land can charge rent as premium over less fertile land – **'differential' rent**.



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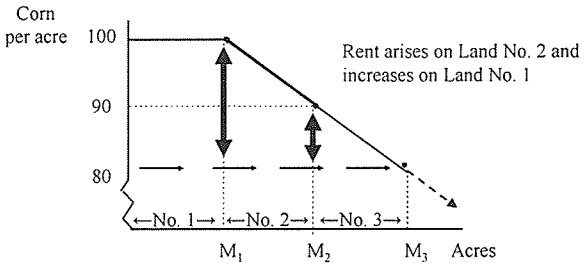
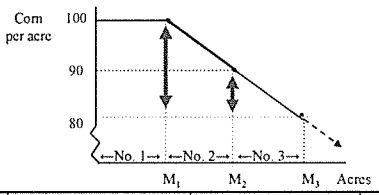
4.2 Rent as differential rent, *contd*

When cultivation is extended to even less fertile land, (say to M_3 in diagram), rent can be charged on Land 2, etc., etc....



i.e. Proportion of rent in total revenue not static, as in Smith:
Ricardo's distribution analysis is **dynamic**.



Land cultivated	Rent on Land No. 1	Rent on Land No. 2	Rent on Land No. 3, etc.
No. 1	–	–	–
No. 2	**100 – 90 = 10**	–	–
No. 3	**100 – 80 = 20**	**90 – 80 = 10**	–
No. 4	**100 – 70 = 30**	**90 – 70 = 20**	**80 – 70 = 10**

4.3 Distributive shares

Petty:	• Rent • Yield on "money, etc." • Wages	i.e. surplus as Rent and a vague category: interest plus [?] 'user services' of luxury possessions.
Physiocrats:	• 'Revenue' [Rent] • Wages-and-profit	i.e. surplus ('net product') all effectively as Rent
Smith:	• Rent • Profit • Wages	i.e. surplus divided between Rent and Profit; much more analysis of nature of capital ('stock')

Smith:	Static	Harmonious	'Natural'
Ricardo:	**Dynamic**	**Conflictual**	**Problematic**

6

4.3 Distributive shares

Smith:	• Rent • Profit • Wages	i.e. surplus divided between Rent and Profit; much more analysis of nature of capital ('stock')

Smith:	Static	Harmonious	'Natural'
Ricardo:	**Dynamic**	**Conflictual**	**Problematic**

i.e. Both are concerned with growth / total output, but:

Smith: Extension of DOL → growth.
Distributional shares are '**natural**'.

Ricardo: Changes in capital structure / capital accumulation, etc.
Trends in distributional shares, which **affect growth**.
Not so optimistic.

7

*Ricardo's **dynamic** approach to distributive shares:*

"... in different stages of society, the **proportions** of the whole produce of the earth which will be allotted to each of these classes, under the names of rent, profit, and wages, will be essentially **different**..."

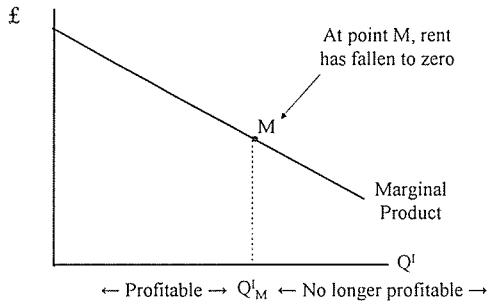
[These proportions depend on soil fertility, accumulation of capital, level of mechanisation, etc.]

"To determine the laws which regulate this distribution, is the **principal problem in Political Economy**..."

[Previous writers on political economy] afford very little satisfactory information respecting the natural **course** of rent, profit, and wages.

8

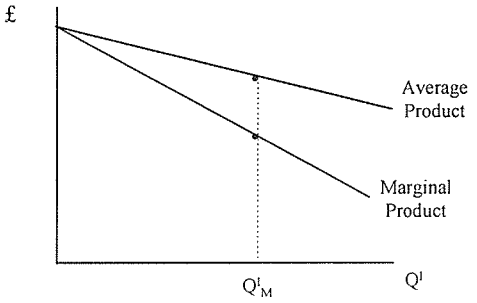
Diminishing Returns plotted as a continuous function:



Note: Horizontal axis now labelled Q^I, i.e. quantity of **inputs**;
no longer land alone, but **land-and-capital**:
K↑ on a given area of land / more capital-intensive cultivation → same increase in output (Q^O) as extending cultivation to less fertile land.

9

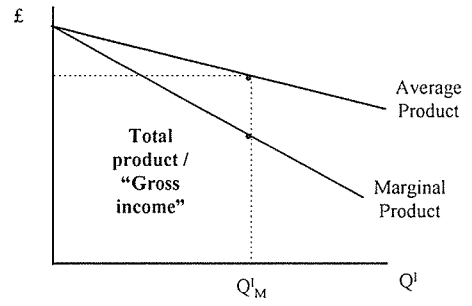
Total, Average and Marginal magnitudes:



Average Product curve always lies *above* **Marginal Product**, since at any given level of inputs (e.g. Q^I_M) not only marginal (least fertile) land is in cultivation, but also all the more fertile land as well. [*Forward pointer*: textbook micro!]

10

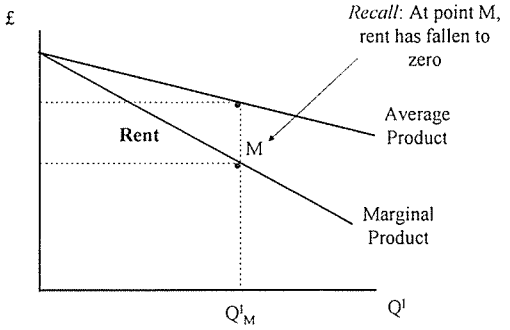
Total, Average and Marginal magnitudes, *contd*



Total Product is Q^I_M times Average Product;
not times the Marginal Product – that is just the product of the **last** / least fertile / zero-rent unit of input added.

11

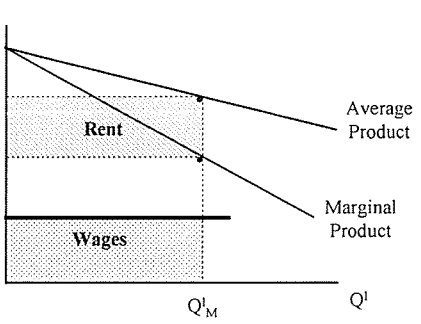
Rent / **differential** rent and the total product / gross income:



Recall: Rent is zero at the margin – not fertile enough to be worth cultivating.
Landowner extracts as rent all product that is due to land being more fertile than marginal / zero-rent land.

12

Wages



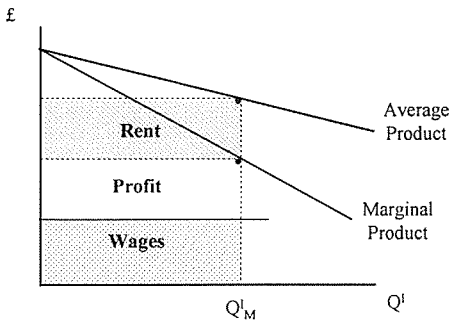
Wages are determined by the price of necessities, primarily corn.

- In different countries, different historical conditions prevail – habit and custom, etc.
- But within a given country, the purchasing power of wages, i.e. real wage, is constant over the medium run.

8 – 13, 16

13

Profit



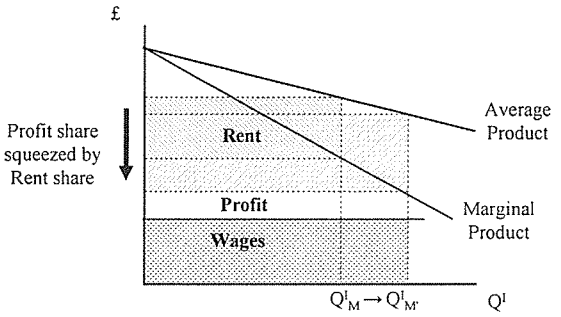
Profit is just the **residual** / not independently determined.

It is thus in danger of being **squeezed** by

- Rent
- Wages
- more probably, *both*.

14

Profit squeezed by Rent.



Population ↑

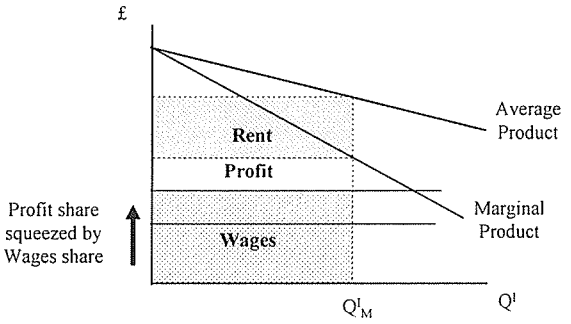
→ more land brought into cultivation / margin extended from Q^I_M to $Q^I_{M'}$

→ diminishing returns / MP falls.

→ Rent exacts ever larger proportion of Product / Income.

15

Profit squeezed by Wages.

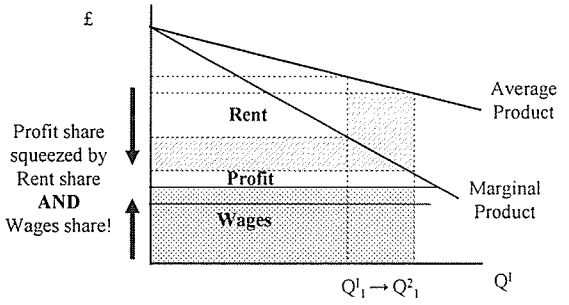


Rise in price of corn / means of subsistence → wages rise.

→ Profit and Wages are inversely related.

16

In practice, squeeze by Rent and Wages **BOTH likely to happen together; they are linked:**



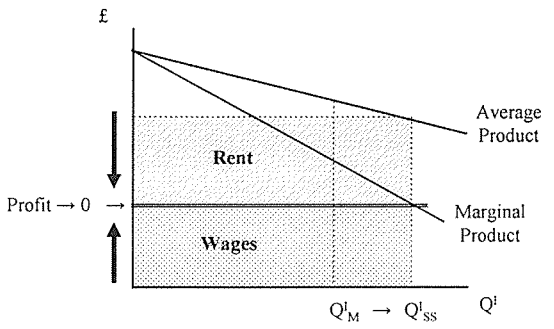
Extension of cultivation to less fertile lands

→ higher cost of production of corn

→ higher price of corn / means of subsistence

→ wages rise → vicious spiral.

17



Stationary state! Profit completely squeezed out:

- "an **end of accumulation**"
- "the whole net income of the country would belong to the landlords…"

18

*Ricardo's **dynamic** approach to distributive shares:*

"... in different stages of society, the **proportions** of the whole produce of the earth which will be allotted to each of these classes, under the names of rent, profit, and wages, will be essentially **different**..."

[These proportions depend on soil fertility, accumulation of capital, level of mechanisation, etc.]

"To determine the laws which regulate this distribution, is the **principal problem in Political Economy**..."

[Previous writers on political economy] afford very little satisfactory information respecting the natural **course** of rent, profit, and wages.

19

Stationary state from Smith to Ricardian crisis theory

Smith: 'stationary state' centuries away.

- Meanwhile, 'state' is 'progressive'; efficiency↑ through DOL.
- DOL → u↑, but **compensating opportunities for** employment elsewhere.

Ricardo: less optimistic that stationary state could be warded off:

- *Review*: **Technological unemployment**, immiseration, **redundancy**.
- *Now also:* **Declining profit share** / problems of capital accumulation.

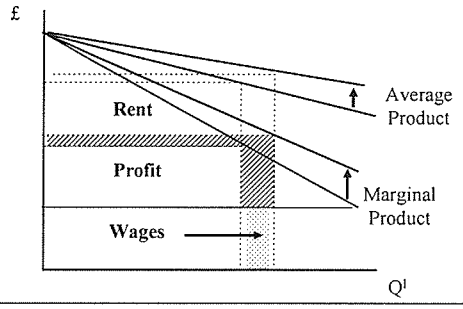
i.e. Ricardo: 'stationary state' from distant / theoretical possibility (Smith), to **immediate** and analytically specified threat / crisis theory.

20

Countervailing influence of increasing efficiency:

- Reinvestment of profit / capital accumulation might increase marginal productivity.

  Tendency of profits to fall is "happily checked at repeated intervals by the improvements in machinery",
- But effect slow / uncertain / in any case offset by population growth.
- Unlikely to ward off stationary state; just postpone it.



21

Historical context / policy prescriptions:

Corn Laws / tariff on corn imports → P_{corn} was kept artificially high → intensive pressure to extend margin of cultivation.
Ricardo was a Member of Parliament; represented interests of industrialists → campaigned against the Corn Laws.

He argued that rent ↓ and profits ↑ would be an economic gain:

Landlords: 'rent' is not earned by productive activity / a deduction from output of others. (*Preview*: 'Rent-seeking'.)
Compare Smith: rent is a 'natural' component of price.

Industrialists: the only source of growth:
Profit↑ → Capital accumulation ↑ →Investment ↑ → output ↑.

Question the social order?

Smith: No; 'natural'; existing social order is compatible with 'natural liberty'; static / harmonious perspective.

Ricardo: Yes; contradiction between interests of landowners and industrialists.

Radicals ('Ricardian socialists', Marx): Yes; contradiction between interests of workers and capitalists.

Distribution and the social order:

Smith	Harmonious		Existing order is natural
Ricardo	Conflictual	Landowners vs. industrialists	Free competition / capital accumulation necessary to defend existing order
Radicals		Capitalists vs. workers	Replace the existing order

23

4.3 Demand in Classical Political Economy.

Today's micro: nature of D presents no fundamental problem:
S & D intersection determines price.

But price determination in CPE seen in very different way / 'natural'.

- Likewise, D discussed in very different way: problem of 'exchange value' and 'use value', etc..

After Smith, Demand largely considered in **macro** terms / aggregate demand > micro / price determination.

24

Smith on demand ('micro' issues):

Raised a problem: **water-diamond paradox**: value in use, value in exchange.

i.e. Saw problem, but left it unanswered.

Similarly Ricardo: commodity must have value in use as **prerequisite** for exchange value, but no formal relation established between them.

Demand just a simple question of whether:

Effectual or ineffectual.

Poor man desires 'coach and six' – ineffectual.

Fluctuations in demand ['exogenous'] trivial:

Only example is black cloth for public mournings.

25

Smith thus illustrates:

- CPE emphasis: supply side / cost of production > D.
- Emphasis in price determination is on 'natural price'; **gravitation** towards this.
- Interlinked with distribution / natural order of society / **components** of value.

Post-Smith, this downgrading of demand taken further:

At macro level, demand spirited away in **Say's Law**

26

Demand in CPE at 'macro' level.

Malthus:

- Problem of tendency to under-consumption
- Spending habits of landlords necessary to sustain aggregate demand through unproductive consumption.
- Economy does not have sufficiently strong self-correcting forces to ensure this on its own.

Policy conclusions: Keep Corn Laws.

i.e. Demand *was* considered by Malthus, but

- with respect to CPE concern with growth and distribution,
- not price determination

i.e. 'macro' > 'micro'.

27

Demand in CPE at 'macro' level, *contd*

Ricardo: agreed with Malthus on spending habits of landowners (and added that war could achieve same result), but came to **OPPOSITE** policy conclusion!

Free trade in corn → more efficient allocation of resources ('comparative advantage') → cheaper corn.

i.e. Ricardo added **allocation** of resources / allocative theory; i.e. as well as distributional.

More faith in self-correcting capacity of market forces.

Preview: Keynes: Malthus to 'underworld' / Ricardo became orthodoxy / Spanish Inquisition.

28

The following will be one of the questions in Problem Set 3:

Compare Ricardo's approach to questions of distribution with that of Adam Smith.

In your answer, you may wish to discuss:

- The general contrast in their viewpoint, and the historical context.
- Trends in distributional shares and the danger of a stationary state.
- The particular role of rent in this situation, and the role ascribed by Ricardo in his rent theory to diminishing returns in agriculture and increasing population.
- Smith's view of the natural order of society.
- Smith's comparatively optimistic view of the problem of technological unemployment.

4. CLASSICAL POLITICAL ECONOMY (3): RICARDO -- *summary*

Review:

From Smith to Ricardo: historical background.
Ricardo and technological unemployment.
Malthus, Ricardo and diminishing returns.

4.1 Rent as differential rent

4.2 Distributive shares
Total, average and marginal magnitudes. Wages, profit, rent. Stationary state.

4.3 Demand: Ricardo, Say, Malthus, Keynes.
Smith: water-diamond paradox; 'effectual demand'; fluctuations in demand. Say's Law. Deficient demand: Malthus, Ricardo.

ECON1006. Topic 4. CLASSICAL POLITICAL ECONOMY (2) RICARDO. *Readings.*

4.1 RENT AS DIFFERENTIAL RENT[1]

[Initial situation: abundant fertile land, no rent – land is a free good:] On the first settling of a country, in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population, or indeed can be cultivated with the capital which the population can command, there will be no rent; for no one would pay for the use of land, when there was an abundant quantity not yet appropriated, and, therefore, at the disposal of whosoever might choose to cultivate it.
On the common principles of supply and demand, no rent could be paid for such land, for the reason stated why nothing is given for the use of air and water, or for any other of the gifts of nature which exist in boundless quantity.

[Extension of cultivation to less fertile land; rent arises on the land of superior fertility:] If all land had the same properties, if it were unlimited in quantity, and uniform in quality, no charge could be made for its use, unless where it possessed peculiar advantages of situation. It is only, then, because land is not unlimited in quantity and uniform in quality, and because in the progress of population, land of an inferior quality, or less advantageously situated, is called into cultivation, that rent is ever paid for the use of it. When in the progress of society, land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality, and the amount of that rent will depend on the difference in the quality of these two portions of land.
When land of the third quality is taken into cultivation, rent immediately commences on the second, and it is regulated as before, by the difference in their productive powers. At the same time, the rent of the first quality will rise, for that must always be above the rent of the second, by the difference between the produce which they yield with a given quantity of capital and labour. With every step in the progress of population, which shall oblige a country to have recourse to land of a worse quality, to enable it to raise its supply of food, rent, on all the more fertile land, will rise.

[A quantitative illustration:] Thus suppose land – No. 1, 2, 3, – to yield, with an equal employment of capital and labour, a net produce of 100, 90, and 80 quarters of corn. In a new country, where there is an abundance of fertile land compared with the population, and where therefore it is only necessary to cultivate No. 1, the whole net produce will belong to the cultivator, and will be the profits of the stock which he advances. As soon as population had so far increased as to make it necessary to cultivate No. 2, from which ninety quarters only can be obtained after supporting the labourers, rent would commence on No. 1; for either there must be two rates of profit on agricultural capital, or ten quarters, or the value of ten quarters must be withdrawn from the produce of No. 1, for some other purpose. Whether the proprietor of the land, or any other person, cultivated No. 1, these ten quarters would equally constitute rent; for the cultivator of No. 2 would get the same result with his capital, whether he cultivated No. 1, paying ten quarters for rent, or continued to cultivate No. 2, paying no rent. In the same manner it might be shown that when No. 3 is brought into cultivation, the rent of No. 2 must be ten quarters, or the value of ten quarters, whilst the rent of No. 1 would rise to twenty quarters; for the cultivator of No. 3 would have the same profits whether he paid twenty quarters for the rent of No. 1, ten quarters for the rent of No. 2, or cultivated No. 3 free of all rent.

[Employment of more capital on lands already cultivated:] It often, and, indeed, commonly happens, that before No. 2, 3, 4, or 5, or the inferior lands are cultivated, capital can be employed more productively on those lands which are already in cultivation. It may perhaps be found, that by doubling the original capital employed on No. 1, though the produce will not be doubled, will not be increased by 100 quarters, it may be increased by eighty-five quarters, and that this quantity exceeds what could be obtained by employing the same capital, on land No. 3.

4.2 DISTRIBUTIVE SHARES

[Ricardo's dynamic approach to distributive shares:] The produce of the earth - all that is derived from its surface by the united application of labour, machinery, and capital, is divided among three classes of the community; namely, the proprietor of the land, the owner of the stock or capital necessary for its cultivation, and the labourers by whose industry it is cultivated.
But in different stages of society, the proportions of the whole produce of the earth which will be allotted to each of these classes, under the names of rent, profit, and wages, will be essentially different; depending mainly on the actual fertility of the soil, on the accumulation of capital and population, and on the skill, ingenuity, and instruments employed in agriculture.
To determine the laws which regulate this distribution, is the principal problem in Political Economy: much as the science has been improved by the writings of Turgot, Stuart, Smith, Say, Sismondi, and others, they afford very little satisfactory information respecting the natural course of rent, profit, and wages.[2]

WAGES[3]

[Natural price of wages is subsistence level:] Labour, like all other things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price. The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution.

[Subsistence depends on real, not nominal, wage:] The power of the labourer to support himself, and the family which may be necessary to keep up the number of labourers, does not depend on the quantity of money which he may receive for wages, but on the quantity of food, necessaries, and conveniences become essential to him from habit, which that money will purchase...

[Wages and population:] It is when the market price of labour exceeds its natural price, that the condition of the labourer is flourishing and happy, that he has it in his power to command a greater proportion of the necessaries and enjoyments of life, and therefore to rear a healthy and numerous family. When,

however, by the encouragement which high wages give to the increase of population, the number of labourers is increased, wages again fall to their natural price, and indeed from a re-action sometimes fall below it...
When the market price of labour is below its natural price, the condition of the labourers is most wretched: then poverty deprives them of those comforts which custom renders absolute necessaries. It is only after their privations have reduced their number, or the demand for labour has increased, that the market price of labour will rise to its natural price, and that the labourer will have the moderate comforts which the natural rate of wages will afford...

[Subsistence wage is historically determined:] It is not to be understood that the natural price of labour, estimated even in food and necessaries, is absolutely fixed and constant. It varies at different times in the same country, and very materially differs in different countries. It essentially depends on the habits and customs of the people. An English labourer would consider his wages under their natural rate, and too scanty to support a family, if they enabled him to purchase no other food than potatoes, and to live in no better habitation than a mud cabin; yet these moderate demands of nature are often deemed sufficient in countries where 'man's life is cheap', and his wants easily satisfied. Many of the conveniences now enjoyed in an English cottage, would have been thought luxuries at an earlier period of our history...

[Against intervention in labour market through Poor Laws; inverse relation of wages and profit:] Like all other contracts, wages should be left to the fair and free competition of the market, and should never be controlled by the interference of the legislature...
The clear and direct tendency of the poor laws, is in direct opposition to these obvious principles: it is not, as the legislature benevolently intended, to amend the condition of the poor, but to deteriorate the condition of both poor and rich; instead of making the poor rich, they are calculated to make the rich poor; and whilst the present laws are in force, it is quite in the natural order of things that the fund for the maintenance of the poor should progressively increase, till it has absorbed all the net revenue of the country, or at least so much of it as the state shall leave to us, after satisfying its own never failing demands for the public expenditure.
This pernicious tendency of these laws is no longer a mystery, since it has been fully developed by the able hand of Mr Malthus; and every friend to the poor must ardently wish for their abolition...

[Wages and population:] It is a truth which admits not a doubt, that the comforts and well-being of the poor cannot be permanently secured without some regard on their part, or some effort on the part of the legislature, to regulate the increase of their numbers, and to render less frequent among them early and improvident marriages. The operation of the system of poor laws has been directly contrary to this. They have rendered restraint superfluous, and have invited imprudence, by offering it a portion of the wages of prudence and industry.

[Dickens's Scrooge responds to a request for charity:] "At this festive season of the year, Mr Scrooge," said the gentleman, taking up a pen, "it is more than usually desirable that we should make some slight provision for the Poor and destitute, who suffer greatly at the present time. Many thousands are in want of common necessaries; hundreds of thousands are in want of common comforts, sir."
"Are there no prisons?... And the Union workhouses?... I don't make merry myself at Christmas and I can't afford to make idle people merry. I help to support the establishments I have mentioned: they cost enough: and those who are badly off must go there." "Many... would rather die." "If they would rather die," said Scrooge, "they had better do it, and decrease the surplus population..."[4]

PROFIT.[5]

[Inverse relation of profits and wages:] In this case, therefore, I think it is clearly demonstrated that a rise in the price of corn, which increases the money wages of the labourer, diminishes the money value of the farmer's profits....

[Tendency of profit to fall; technical progress, capital accumulation, and stationary state:] The natural tendency of profits then is to fall; for in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour. This tendency, this gravitation as it were of profits, is happily checked at repeated intervals by the improvements in machinery, connected with the production of necessaries, as well as by discoveries in the science of agriculture which enable us to relinquish a portion of labour before required, and therefore to lower the price of the prime necessary of the labourer. The rise in the price of necessaries and in the wages of labour is however limited; for as soon as wages should be equal ... to .. . the whole receipts of the farmer, there must be an end of accumulation; for no capital can then yield any profit whatever, and no additional labour can be demanded, and consequently population will have reached its highest point. Long indeed before this period, the very low rate of profits will have arrested all accumulation, and almost the whole produce of the country, after paying the labourers, will be the property of the owners of land and the receivers of tithes and taxes.
Thus... the whole net income of the country would belong to the landlords...

[Fertility of land and rate of fall in profit:] The effects then of accumulation will be different in different countries, and will depend chiefly on the fertility of the land. However extensive a country may be where the land is of a poor quality, and where the importation of food is prohibited, the most moderate accumulations of capital will be attended with great reductions in the rate of profit...

[Ricardo's use of abstraction:] My object has been to simplify the subject, and I have therefore made no allowance for the increasing price of the other necessaries, besides food, of the labourer; an increase which would be the consequence of the increased value of the raw materials from which they are made, and which would of course further increase wages, and lower profits.

[Compare the use by William Petty of 'suppositions':]
Suppose there be in a Territory a thousand people, let these people be supposed sufficient to Till this whole Territory as to the Husbandry of Corn, which we will suppose to contain all necessaries for like, as in the Lords Prayer we suppose the word Bread doth.[6]

4.3 DEMAND IN CLASSICAL POLITICAL ECONOMY.

[Smith: The 'water-diamond paradox':] The word value, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called "value in use"; the other, "value in exchange." The things which have the greatest value in use have frequently little or no value in exchange; and, on the contrary, those which have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water: but it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.[7]

[Smith on "effectual demand":] The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity, or the whole value of the rent, labour, and profit, which must be paid in order to bring it thither. Such people may be called the effectual demanders, and their demand the effectual demand; since it may be sufficient to effectuate the bringing of the commodity to market. It is different from the absolute demand. A very poor man may be said in some sense to have a demand for a coach and six; he might like to have it; but his demand is not an effectual demand, as the commodity can never be brought to market in order to satisfy it.[8]

[Smith on "occasional and temporary fluctuations" in market price:] Such fluctuations affect both the value and the rate either of wages or of profit, according as the market happens to be either overstocked or understocked with commodities or with labour; with work done, or with work to be done. A public mourning raises the price of black cloth (with which the market is almost always understocked upon such occasions), and augments the profits of the merchants who possess any considerable quantity of it.[9]

[Say: 'Say's Law':][A] product is no sooner created than it, from that instant, affords a market for other products to the full extent of its own value. When the producer has put the finishing hand to his product, he is most anxious to sell it immediately lest the value should vanish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus the mere circumstance of the creation of one product immediately opens a vent for other products.[10]

[John Stuart Mill: endorsement of Say's Law':] Consumption never needs encouragement... [There can never be a] want of buyers for all commodities... The legislator... need not give himself any concern about consumption.[11]

[Ricardo on unproductive consumption and labour demand:] Independently of the consideration of the discovery and use of machinery, to which our attention has been just directed, the labouring class have no small interest in the manner in which the net income of the country is expended...
If a landlord, or a capitalist, expends his revenue in the manner of an ancient baron, in the support of a great number of retainers, or menial servants, he will give employment to much more labour, than if he expended it on fine clothes, or costly furniture; on carriages, on horses, or in the purchase of any other luxuries.
In both cases the net revenue would be the same, and so would be the gross revenue, but the former would be realised in different commodities... As the labourers, then, are interested in the demand for labour, they must naturally desire that as much of the revenue as possible should be diverted from expenditure on luxuries, to be expended in the support of menial servants.
In the same manner, a country engaged in war, and which is under the necessity of maintaining large fleets and armies, employs a great many more men than will be employed when the war terminates, and the annual expenses which it brings with it, cease.

[Keynes on the influence on economists of Ricardo:] The idea that we can safely neglect the aggregate demand function is fundamental to the Ricardian economics, which underlie what we have been taught for more than a century. Malthus, indeed, had vehemently opposed Ricardo's doctrine that it was impossible for effective demand to be deficient; but vainly. For, since Malthus was unable to explain clearly (apart from an appeal to the facts of common observation) how and why effective demand could be deficient or excessive, he failed to furnish an alternative construction; and Ricardo conquered England as completely as the Holy Inquisition conquered Spain. Not only was his theory accepted by the city, by statesmen and by the academic world. But controversy ceased; the other point of view completely disappeared; it ceased to be discussed. The great puzzle of effective demand with which Malthus had wrestled vanished from economic literature. You will not find it mentioned even once in the whole works of Marshall, Edgeworth and Professor Pigou, from whose hands the classical theory has received its most mature embodiment. It could only live on furtively, below the surface, in the underworlds of Karl Marx, Silvio Gesell or Major Douglas. The completeness of the Ricardian victory is something of a curiosity and a mystery. It must have been due to a complex of suitabilities in the doctrine to the environment into which it was projected. That it reached conclusions quite different from what the ordinary uninstructed person would expect, added, I suppose, to its intellectual prestige. That its teaching, translated into practice, was austere and often unpalatable, lent it virtue. That it was adapted to carry a vast and consistent logical superstructure, gave it beauty. That it could explain much social injustice and apparent cruelty as an inevitable incident in the scheme of progress, and the attempt to change such things as likely on the whole to do more harm than good, commended it to authority. That it afforded a measure of justification to the free activities of the individual capitalist, attracted to it the support of the dominant social force behind authority.
But although the doctrine itself has remained unquestioned by orthodox economists up to a late date, its signal failure for purposes of scientific prediction has greatly impaired, in the course of time, the prestige of its practitioners. For

professional economists, after Malthus, were apparently unmoved by the lack of correspondence between the results of their theory and the facts of observation;—a discrepancy which the ordinary man has not failed to observe, with the result of his growing unwillingness to accord to economists that measure of respect which he gives to other groups of scientists whose theoretical results are confirmed by observation when they are applied to the facts.

The celebrated optimism of traditional economic theory, which has led to economists being looked upon as Candides, who, having left this world for the cultivation of their gardens, teach that all is for the best in the best of all possible worlds provided we will let well alone, is also to be traced, I think, to their having neglected to take account of the drag on prosperity which can be exercised by an insufficiency of effective demand. For there would obviously be a natural tendency towards the optimum employment of resources in a society which was functioning after the manner of the classical postulates. It may well be that the classical theory represents the way in which we should like our economy to behave. But to assume that it actually does so is to assume our difficulties away.[12]

[Should have been 3.3!] DYNAMIC ANALYSIS: MACHINERY, GROSS OUTPUT, AND DISTRIBUTION.[13]

[Ricardo changes his mind on mechanisation:] In the present chapter I shall enter into some enquiry respecting the influence of machinery on the interests of the different classes of society, a subject of great importance, and one which appears never to have been investigated in a manner to lead to any certain or satisfactory results. It is more incumbent on me to declare my opinion on this question, because they have, on further reflection, undergone a considerable change...

Ever since I first turned my attention to questions of political economy, I have been of opinion, that such an application of machinery to any branch of production, as should have the effect of saving labour, was a general good...

These were my opinions, and they continue unaltered, as far as regards the landlord and the capitalist; but I am convinced, that the substitution of machinery for human labour, is often very injurious to the interests of the class of labourers.

My mistake arose from the supposition, that whenever the net income of a society increased, its gross income would also increase; I now, however, see reason to be satisfied that the one fund, from which landlords and capitalists derive their revenue, may increase, while the other, that upon which the labouring class mainly depend, may diminish, and therefore it follows, if I am right, that the same cause which may increase the net revenue of the country, may at the same time render the population redundant, and deteriorate the condition of the labourer.

[A quantitative example:] A capitalist we will suppose employs a capital of the value of £20,000 and that he carries on the joint business of a farmer, and a manufacturer of necessities. We will further suppose, that £7,000 of this capital is invested in fixed capital, viz. in buildings, implements, &c. &c. and that the remaining £13,000 is employed as circulating capital in the support of labour. Let us suppose, too, that profits are 10 per cent, and consequently that the capitalist's capital is every year put into its original state of efficiency, and yields a profit of £2,

Each year the capitalist begins his operations, by having food and necessaries in his possession of the value of £13,000, all of which he sells in the course of the year to his own workmen for that sum of money, and, during the same period, he pays them the like amount of money for wages: at the end of the year they replace in his possession food and necessaries of the value of £15,000, £2,000 of which he consumes himself, or disposes of as may best suit his pleasure and gratification. As far as these products are concerned, the gross produce for that year is £15,000, and the net produce £2,000. Suppose now, that the following year the capitalist employs half his men in constructing a machine, and the other half in producing food and necessaries as usual. During that year he would pay the sum of £13,000 in wages as usual, and would sell food and necessaries to the same amount to his workmen; but what would be the case the following year?

While the machine was being made, only one-half of the usual quantity of food and necessaries would be obtained, and they would be only one-half the value of the quantity which was produced before. The machine would be worth £7,500, and the food and necessaries £7,500, and, therefore, the capital of the capitalist would be as great as before; for he would have besides these two values, his fixed capital worth £7,000, making in the whole £20,000 capital, and £2,000 profit. After deducting this latter sum for his own expenses, he would have a no greater circulating capital than £5,500 with which to carry on his subsequent operations; and, therefore, his means of employing labour, would be reduced in the proportion of £13,000 to £5,500, and, consequently, all the labour which was before employed by £7,500, would become redundant. The reduced quantity of labour which the capitalist can employ, must, indeed, with the assistance of the machine, and after deductions for its repairs, produce a value equal to £7,500, it must replace the circulating capital with a profit of £2,000 on the whole capital; but if this be done, if the net income be not diminished, of what importance is it to the capitalist, whether the gross income be of the value of £3,000, of £10,000, or of £15,000?

In this case, then, although the net produce will not be diminished in value, although its power of purchasing commodities may be greatly increased, the gross produce will have fallen from a value of £15,000 to a value of £7,500, and as the power of supporting a population, and employing labour, depends always on the gross produce of a nation, and not on its net produce, there will necessarily be a diminution in the demand for labour, population will become redundant, and the situation of the labouring classes will be that of distress and poverty.

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[1] From *Principles of Political Economy and Taxation* [PPET], chapter 2.
[2] The opening words of the Preface to PPET.
[3] From PPET, Chapter 5.
[4] *A Christmas Carol.*
[5] From PPET, Chapter 6.
[6] *Treatise of Taxes and Contributions*, 89 §17.
[7] WN 1, 4: end.
[8] WN: 1, ch. 7: near beginning.
[9] WN: Book 1, chapter 7.
[10] Say, Jean-Baptiste (1803) [1880 trans.] *A Treatise on Political Economy; or the production, distribution and consumption of wealth.* p. 167.
[11] Mill, John Stuart (1848) [1967] *Principles of Political Economy, with some of the their applications to social philosophy.* p. 263, 276.
[12] *General Theory:* 32-4.
[13] From PPET, Chapter 31, "On Machinery".

Topic 5. From classical political economy to marginalism. *Lecture outline.*

5.1 Utility and the margin.

The theory of utility was known to the classical political economists, but they did not establish a place for it in their theories, despite the fact that Bentham's 'felicific calculus' seemed to offer the prospect of incorporation into a formalistic, mathematical system. Such an incorporation was not decisively achieved until the 1870s, when Jevons, borrowing some mathematical techniques from Continental authors, applied the principle of diminishing returns to utility. This solved Smith's water-diamond paradox by locating the determination of exchange value at the level of per unit demand at the margin.

5.2 From value to price.

After Ricardo, the concept of value became widely perceived to be a problem, since it was associated with the concept of surplus production and contentious distributional issues; in particular, efforts were made to disassociate economic analysis from the labor theory of value, which was being taken up by radical authors who viewed the existing social order as exploitative. The marginal concept was seen as the answer to this, and in Walras's general equilibrium theory, the whole economy was represented as a system of efficient markets, with equilibrium an optimal outcome, in contrast to the stationary state of classical political economy, with its negative and pessimistic connotations.

TRADE THEORY:

5.3 Ricardo and resource allocation: comparative advantage

Adam Smith had advocated the benefits of international specialisation. Ricardo, in his theory of comparative advantage, took the argument further, shifting the emphasis decisively onto the allocational, or efficiency, effects of international division of labour. His motivation was to reinforce his arguments for lifting the Corn Laws, as a measure to lower the price of the principal wage good. Ricardo's theory has served as a reference point for much of trade theory every since, to a great extend negatively, by considering the effects of lifting the extremely restrictive assumptions on which it relies.

5.4 Trade and 'late-comers': arguments for protection.

The first critique of the arguments of the 'English' political economists in favor of free trade originated in the US, and was developed into an all-round argument for the protection of infant industries by the nineteenth-century German journalist Friedrich List. 'Late-comers', List argued, need to protect a few 'high class progressive industries', whose benefits would spread to other sectors of the economy; otherwise, their economies would diverge ever further from those of the first-comers.
Preview: Analogous debates have continued in connection with post-war Keynesianism, Washington Consensus, 'Post Washington Consensus', and current trade issues.

Textbook readings: Rima: 125-6 (Bentham); chapter 12: 254-67 (Jevons); 267-73 (Walras); chapter 7: 161-4 (Ricardo and comparative advantage).

Prescribed readings from Smith, Say, Bentham, Ricardo, Jevons, Walras, Chang, etc.

5. FROM CLASSICAL POLITICAL ECONOMY TO MARGINALISM

Review: Demand in Classical Political Economy

5.1 Utility and the margin.

5.2 From value to price.

General topic: TRADE THEORY:

5.3 Ricardo and resource allocation: comparative advantage

5.4 Trade and late-comers: arguments for protection.

5.1 Utility and the margin.

CPE, utility and demand.

- CPE (England): nature of demand / determinants of "intensity of desire" remained unexplored.
- A separate intellectual tradition considered this (France, Italy).
- Even 'utilitarianism' of Bentham, despite its quantitative formulation ('felicific calculus'), not taken up as basis for demand theory by CPE.

2

Bentham's 'utilitarianism'.

Context:

- Formulated for legislative reform, though clearly had an economic dimension.
- Beneficence of 'natural' order / 'invisible hand' coming under question.
- Individual not best judge of own interest anyway?
- Poverty, rapid social change; need for active reform.

Utility (max happiness for max number, etc.) as theoretical / ideological basis for reform:

- Education (UCL!) + penalties.

But problem: *quantification* of utility / mathematical formalisation.

3

The margin.

Ricardo's rent and distribution theory:

- Abstract, 'model'-type theory.
- Can be presented in formalistic terms, as seen.

But his *own* presentation:

- Some basic building blocks of this approach remained implicit only.
  e.g. average and marginal quantities.

Despite this, marginalist idea was there, in *informal* terms:
Rent determined by *last / least* profitable / zero rent area.

4

Jevons: the marginal principle applied to utility.

Diminishing returns to agricultural land.

→ Rent determined by last / least profitable area of land cultivated while still worth cultivating.

i.e. *from* **particular** question of land fertility
to **general** concept of determination at margin.

Jevons: Apply to demand, as diminishing marginal utility:

Subjectively experienced decreasing utility of successive units of a good consumed.

→ Demand determined by *last* unit / unit that provides *least* utility while still worth the price / "final degree" of utility.

i.e. A theory of value / price-determination alternative to that of CPE.

5

Marginal utility theory of demand.

Nature of demand conceptualised in terms of utility at the margin.

Allowed application of quantitative techniques / calculus.

Solved 'water-diamond paradox':

Exchange value determined by ***per unit* demand *at the margin.***

Water worth something in drought!

Relative scarcity / modelable 'nexus' between value in use (utility) and value in exchange.

6

i.e. Satisfaction / demand related to price in modelable form.

In particular, calculus / marginal utility / derivatives:

Solves Bentham's quantification problem.

i.e. Ordinal > cardinal.

Consequence: Decisive shift:

Exchange value / price determination:

From: CPE: cost of production.

To: Marginal utility / subjective.

7

5.2 From value to price.

Value seen as a *problem*:

- Associated with concepts of surplus and distribution; components of value (and thus price) linked to social order.
- But reform and radical movements: question the social order!

In particular:

- Value according to labour embodied?
  i.e. Labour Theory of Value; e.g. Petty / corn-silver, etc.
- Value according to labour commanded?
  i.e. what product of labour can buy / is equivalent to.
- These two things are not equal!
- Opens door to theory of exploitation / expropriation of surplus / Marx.

8

Ricardo's example: a manufacturer-cum-farmer

Year	Total K	Fixed K	Product	Net product / π + R @ 10%	Circulating K for W / 'Wage Fund'
1	20	7	15 W goods	2	15 – 2 = **13**
			Labour 'embodied' (AND 'commanded' by the capitalist)		Labour 'commanded' by the labourers

9

Question the social order?

Smith: No; 'natural'; associated with 'natural liberty'; static / harmonious perspective.

Ricardo: Yes; contradiction between interests of landowners and industrialists.

Radicals ('Ricardian socialists', Marx): Yes; contradiction between interests of workers and capitalists.

Distribution and the social order:

Smith	Harmonious		Existing order is natural
Ricardo	Conflictual	Landowners vs. industrialists	Free competition / capital accumulation necessary to defend existing order
Radicals		Capitalists vs. workers	Replace the existing order

10

i.e. Strong ideological need to switch away from value.

- Its association with surplus and distribution.
- Even Ricardo who defended the social order pointed out its adverse aspects.

Marginal utility answered this need.

- Whole emphasis on distribution / social order abandoned.
- Focus entirely on 'subjective' side / individual.
- 'Labour embodied', etc., becomes redundant.

Stationery state converted:

from pessimistic conclusions; things go *wrong*.

to equilibrium; desirable; situation when market goes *right*. 11

Walras: General equilibrium.

Whole economy represented as a system of efficient markets.

i.e. no macro-micro split.

Begins with two commodities:

$$MU_a / MU_b = P_a / P_b$$

Assumptions:

- Supply is fixed.
- Full employment of all productive resources.
- Technical coefficients of production fixed.
- Utility functions of consumers fixed.

12

Walras: General equilibrium, *contd.*

Constructs (x – 1) equations, where x is number of unknowns (quantities and prices).

Each individual maximises utility with respect to all goods simultaneously.

Choose one commodity as '*numéraire*'

→ equality of number of independent equations with number of unknowns.

→ simultaneous solution of entire system of equations:

quantities and prices all defined in terms of the *numéraire*.

13

Walras: General equilibrium, *contd.*

Further assumption:

Transactions take place outside time!

Tatonnement: very descriptive image, but paradoxically *totally* abstracted:

- Instantaneous; unlike CPE 'gravitation' from market price to 'natural' price.
- No transactions take place till *tatonnement* complete!
  (no 'false trading' at 'false prices'.)

i.e. A postulate only – automatically true if assumptions hold.

'Pure theory' – **from maths to 'economics'.**

14

Contrast of Walras's General equilibrium with CPE:

Questions addressed:

CPE: Growth, circular flow, reproduction.
Maximise supply.

GE: Market-clearing.
i.e. Asks different question:
Utility-maximising allocation of given supply.
Achieved through system of market-clearing prices.

Stability / 'stationary':

CPE: Stationary state is bad / negative / opposite of optimal.

GE: Stationary state theory now abandoned for **equilibrium**.
Equilibrium is optimal; market-clearing / optimisation.

15

Assessment of the 'marginalist revolution':

- Achieved decisive break with CPE.
- Gave economics its technical / mathematical character.

Initially (Jevons, Walras – 'first generation') left many issues hanging in the air:

- Distribution side-stepped.
- Supply left vague: no S schedule.
- Supply undetermined → no explanation for existence of price in the first place.
- Macro theory weak: aggregate "of course" same laws as individual; labour theory – just disutility.
- Lacked theory of profit.

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Assessment of the 'marginalist revolution', *contd*

'Second generation':

(i) Much elaboration of the technical paraphernalia:
Indifference curves, Edgeworth Box, etc., etc.

(ii) Most importantly (*preview*):
Marginalism extended to **supply** side:
Marginal productivity → distribution / allocation of productive factors.
i.e. '**Functional**' distribution rather than CPE distribution to social groups.
→ Complete Demand and Supply system in micro terms:
'Marshallian economics' / neoclassical economics.
Note: This was **partial equilibrium** / micro.
→ Keynes's critique: argued it was inadequate basis for macro.

5.3 Ricardo and resource allocation: comparative advantage

Distribution and resource allocation.

Ricardo: agreed with Malthus on spending habits of landowners (and added that war could achieve same result), but came to **OPPOSITE** policy conclusion!

Free trade in corn → **more efficient allocation of resources** ('comparative advantage') → cheaper corn.

i.e. Ricardo added **allocation** of resources / allocative theory; i.e. as well as distributional.

More faith in self-correcting capacity of market forces.

Ricardo and resource allocation: comparative advantage

	Labourers for a year to produce a given quantity of	
	Wine	Cloth
Portugal	80	90
England	120	100

Trade reduces cost of production:

Portugal

Without trade: 170 produce 1 W and 1 C.

With trade: 160 produce 2 W, and 1 W is traded for 1 C.

i.e. Trade saves the labour of 10 laborers.

England

Without trade: 220 produce 1 W and 1 C.

With trade: 200 produce 2 C, and 1 C is traded for 1 W.

i.e. Trade saves the labour of 20 laborers.

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Classical trade theory. Ricardo: 'comparative advantage', *contd*

	Labourers for a year to produce a given quantity of	
	Wine	Cloth
Portugal	80	90
England	120	100

i.e. Portugal is more efficient in producing *both* commodities, but *can still benefit from trade*.

What matters is the relative cost of producing the goods *within* each country, not the *absolute* level of cost as compared *between* the two countries (as in Smith).

This is because England's productivity *dis*-advantage remains less in one commodity (cloth) than the other (wine), so that it can still benefit from 'indirect production' of wine.

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Classical trade theory. Ricardo: 'comparative advantage', *contd*

	Labourers for a year to produce a given quantity of	
	Wine	Cloth
Portugal	80	90
England	120	100

Contrast with Smith's simple gains from trade (absolute advantage):

Smith: no numerical example, but might have been, e.g.

	Labourers for a year to produce a given quantity / 'unit'	
	Wine	Cloth
Portugal	100	120
England	120	100

All this shows is the simpler idea that specialization is better than self-sufficiency.

21

James Mill, 1821: [Applied to Ricardo example:]

When a country [England] can either import a commodity [wine] or produce it at home, it compares the cost of producing at home [120 labour units], with the cost of procuring from abroad [corn, 'costing' 100 labour units]; if the latter cost is less than the first, it imports.

The cost at which a country can import from abroad depends:

not upon the cost at which the foreign country [Portugal] produces the commodity [80 labour units]

but upon what the commodity costs which it sends in exchange [corn, 'costing' 100 labour units], compared with the cost which it must be at to produce the commodity in question, if it did not import it [120 labour units].

Note: James Mill (father of John Stuart Mill) was a populariser of the theories of Ricardo.

22

Features of Ricardo's trade theory:

Motivation:

- Reduce the price of corn, the primary wage good.
- Rational international allocation of corn production for its most efficient production.
- i.e. an argument against the Corn Laws.

Note recurring 'classical' theme:

- Country still same as individual, as in Smith.

Note also:

- Explicitly frames theory in terms of **barter.**
- Precious metals are just another commodity like any other – their particular use is transportability, standardization, etc.
- Payments transacted through paper instruments ('Trade bills') ultimately result in specie flow.
- i.e. He sees Transactions Demand for money only.
- *Preview*: Keynes contested this standpoint – argued that there are other ('speculative') motives for money demand as well.

Features of Ricardo's trade theory, *contd*

VERY restrictive assumptions:

International: Completely **free trade**: no subsidies or tariffs.

Domestic: Labour **fully mobile** within each country

- i.e. Frictionless transfer between sectors: no hiring and firing costs, retraining costs, etc.
- Capital also frictionlessly mobile domestically, but not internationally.

Preview:

Debates on realistic application of trade theory largely centre around consequences of *lifting* these assumptions, e.g.

- Benefit may be very unequal.
- Capital may be internationally mobile.

5.4 'Late-comers': arguments for protection.

England:

- Commercial dominance through eighteenth century.
- Industrializing **'first-comer'** – from late 18th.
- Strong advocacy of **free trade** (Smith, Ricardo, etc.).

US:

- Hamilton, first Treasury Secretary:
  Protect US industries against competition from cheaper English imports.

Germany: another '**latecomer**'.

- **Friedrich List** (1789-1846): German journalist.
- All-round argument for protection of 'infant industries'

'**Workshop of the World**'.

	Labour input to produce a given quantity / 'unit' of	
	Manufactures	Agricultural products
Economy 1	L^1_M	L^1_A
Economy 2	L^2_M	L^2_A

Tacit assumptions underlying 'English' free trade argument:

- Economy 1 has capacity to provide enough M for the whole world.

→ Production of M in Economy 2 is not economically viable:

- Economy 2 can always import adequate M ('produce' it indirectly) since Economy 1 has the capacity to supply both.
- Economy 2 should produce A only.

'Workshop of the World' is optimal for *both* economies / 'core-periphery' pattern, etc.

List's response:

Endorsed the *ideal* of universal free trade.
BUT: Argued against free trade as *always and everywhere* the best policy in practice.
Smith and Ricardo saw world as "simply a republic of merchants, one and indivisible".
This discounts the intermediate, *national* sphere.

Nations are at different stages of industrialization
→ only a 'first-comer' can benefit from free competition at international ('cosmopolitan') level.

→ Advocated late-comer policy:
Free competition within *own* borders OK.
BUT selectively **protect 'infant industries' against foreign competition.**

International ('cosmopolitan') free competition only when all ('civilized') nations concerned have reached the same level of industrialization.

List and "the energy developed in a few 'high-class progressive industries'":
i.e. Focus on **development** of a nation's productive power – accumulation of ***knowledge***, etc.

This introduced idea of advance from **static** to **dynamic** analysis of advantages of trade:
Learning effects.
Technical progress.
Assumption: Increase in TP in a 'high-class progressive industry' **spills over** into others.

Forward pointers:

- 'Human capital', 'positive knowledge spillovers', etc.
- '**Modern**' and '**traditional**' sectors in some development economics literature.

Policy implications of failing to protect infant industries:

If Economy 2 **ceases to produce M**, there will be **no technical progress** in Economy 2.

→ With free competition, Economy 1 will **diverge** ever further from Economy 2.

Economy 2 is justified in protecting its production of M → TP.
Then faces trade-off:

SR disadvantage of higher price of M
BUT: LR developmental advantage of TP

i.e. Dynamic TCA; learning effects / TP:
Originates largely in modern sector.
BUT: Spreads to **both sectors equally** / spills over.

5. FROM CLASSICAL POLITICAL ECONOMY TO MARGINALISM -- *summary*

Review: Demand in Classical Political Economy

5.1 Utility and the margin.
Bentham. The marginal principle applied to utility.

5.2 From value to price.
Value as a problem. Walras: general equilibrium; contrasts with Classical political economy; assessment of the 'marginalist revolution'.

General topic: TRADE THEORY:

5.3 Ricardo and resource allocation: comparative advantage
Smith: The gains from trade. Ricardo: comparative advantage.

5.4 Late-comers: arguments for protection.
Hamilton. List. Free trade and 'Workshop of the World'. Infant Industries. Technical progress and dynamic comparative advantage.
Preview: analogous debates surrounding post-war Keynesianism, Washington Consensus, and 'Post Washington Consensus'.

Topic 5. FROM CLASSICAL POLITICAL ECONOMY TO MARGINALISM. *Readings.*

5.1 UTILITY AND THE MARGIN

[Galiani: an early 'subjective' value theory:] The value of things... is defined by many authors as the appraisal men make of them... Appraisement, that is value, is *an idea of proportion between the possession of one thing and that of another one in the concept of a man....* Then value is a ratio; and this ratio is the result of two other ratios expressed by the names Utility and Scarcity... *More useful* and *less useful* are relative terms, which are measured according to the varying condition of individuals.[1]

[Condillac on value:] Value is not an attribute of matter, but represents our sense of its usefulness and this utility is relative to our need. It grows or diminishes according as our need expands or contracts. But since the value of things is based upon need, it is natural that a more keenly felt need should endow things with a greater value, while a less urgent need endows them with less. Value increases with scarcity and diminishes with plenty.[2]

[Bentham's 'felicific calculus':] Pleasures then, and the avoidance of pains, are the ends that the legislator has in view; it behoves him therefore to understand their value. Pleasures and pains are the instruments he has to work with: it behoves him therefore to understand their force, which is again, in other words, their value.

To a person considered by himself, the value of a pleasure or pain considered by itself, will be greater or less, according to the four following circumstances:

Its intensity.
Its duration.
Its certainty or uncertainty.
Its propinquity or remoteness...

To take an exact account then of the general tendency of any act, by which the interests of a community are affected, proceed as follows. Begin with any one person of those whose interests seem most immediately to be affected by it: and take an account...

Sum up all the values of all the pleasures on the one side, and those of all the pains on the other. The balance, if it be on the side of pleasure, will give the good tendency of the act upon the whole, with respect to the interests of that individual person; if on the side of pain, the bad tendency of it upon the whole...

Take an account of the number of persons whose interests appear to be concerned; and repeat the above process with respect to each. Sum up the numbers expressive of the degrees of good tendency, which the act has, with respect to each individual, in regard to whom the tendency of it is good upon the whole: do this again with respect to each individual, in regard to whom the tendency of it is good upon the whole: do this again with respect to each individual, in regard to whom the tendency of it is bad upon the whole. Take the balance which if on the side of pleasure, will give the general good tendency of the act, with respect to the total number or community of individuals concerned; if on the side of pain, the general evil tendency, with respect to the same community.[3]

[Ricardo and determination at the margin:] The exchangeable value of all commodities, whether they be manufactured, or the produce of the mines, or the produce of land, is always regulated, not by the less quantity of labour that will suffice for their production under circumstances highly favourable, and exclusively enjoyed by those who have peculiar facilities of production; but by the greater quantity of labour necessarily bestowed on their production by those who have no such facilities; by those who continue to produce them under the most unfavourable circumstances; meaning - by the most unfavourable circumstances, the most unfavourable under which the quantity of produce required, renders it necessary to carry on the production....[4]

[Jevons on value and utility:] Repeated reflection and inquiry have led me to the somewhat novel opinion, that value depends entirely upon utility. Prevailing opinions make labour rather than utility the origin of value; and there are even those who distinctly assert that labour is the cause of value. I show, on the contrary, that we have only to trace out carefully the natural laws of the variation of utility, as depending upon the quantity of commodity in our possession, in order to arrive at a satisfactory theory of exchange, of which the ordinary laws of supply and demand are a necessary consequence...

Let us imagine the whole quantity of food which a person consumes on an average during twenty-four hours to be divided into ten equal parts. If his food be reduced by the last part, he will suffer but little; if a second tenth part be deficient, he will feel the want distinctly; the subtraction of the third tenth part will be decidedly injurious; with every subsequent subtraction of a tenth part his sufferings will be more and more serious, until at length he will be upon the verge of starvation. Now, if we call each of the tenth parts an increment, the meaning of these facts is, that each increment of food is less necessary, or possesses less utility, than the previous one...

But the division of the food into ten equal parts is an arbitrary supposition. If we had taken twenty or a hundred or more equal parts, the same general principle would hold true, namely, that each small portion would be less useful and necessary than the last. The law may be considered to hold true theoretically, however small the increments are made; and in this way we shall at last reach a figure which is undistinguishable from a continuous curve. The notion of infinitely small quantities of food may seem absurd as regards the consumption of one individual; but, when we consider the consumption of a nation as a whole, the consumption may well be conceived to increase or diminish by quantities which are, practically speaking, infinitely small compared with the whole consumption. The laws which we are about to trace out are to be conceived as theoretically true of the individual; they can only be practically verified as regards the aggregate transactions, productions, and consumptions of a large body of people. But the laws of the aggregate depend of course upon the laws applying to individual cases...

[Jevons on the 'final degree' of utility:] We shall seldom need to consider the degree of utility except as regards the last increment which has been consumed, or, which comes to the same thing, the next increment which is about to be consumed.

I shall therefore commonly use the expression final degree of utility, as meaning the degree of utility of the last addition, or the next possible addition of a very small, or infinitely small, quantity to the existing stock...
It is also evident that we may know the degree of utility at any point while ignorant of the total utility, that is, the area of the whole curve. To be able to estimate the total enjoyment of a person would be an interesting thing, but it would not be really so important as to be able to estimate the additions and subtractions to his enjoyment, which circumstances occasion. In the same way a very wealthy person may be quite unable to form any accurate statement of his aggregate wealth; but he may nevertheless have exact accounts of income and expenditure, that is, of additions and subtractions...
The final degree of utility is that function upon which the Theory of Economics will be found to turn. Economists, generally speaking, have failed to discriminate between this function and the total utility, and from this confusion has arisen much perplexity. Many commodities which are most useful to us are esteemed and desired but little. We cannot live without water, and yet in ordinary circumstances we set no value on it. Why is this? Simply because we usually have so much of it that its final degree of utility is reduced nearly to zero. We enjoy, every day, the almost infinite utility of water, but then we do not need to consume more than we have. Let the supply run short by drought, and we begin to feel the higher degrees of utility, of which we think but little at other times.

[Jevons on economics as a mathematical science:] It is clear that Economics, if it is to be a science at all, must be a mathematical science. There exists much prejudice against attempts to introduce the methods and language of mathematics into any branch of the moral sciences. Many persons seem to think that the physical sciences form the proper sphere of mathematical method, and that the moral sciences demand some other method – I know not what. My theory of Economics, however, is purely mathematical in character. Nay, believing that the quantities with which we deal must be subject to continuous variation, I do not hesitate to use the appropriate branch of mathematical science, involving though it does the fearless consideration of infinitely small quantities. The theory consists in applying the differential calculus to the familiar notions of wealth, utility, value, demand, supply, capital, interest, labour, and all the other quantitative notions belonging to the daily operations of industry. As the complete theory of almost every other science involves the use of that calculus, so we cannot have a true theory of Economics without its aid.
To me it seems that our science must be mathematical, simply because it deals with quantities. Wherever the things treated are capable of being greater or less, there the laws and relations must be mathematical in nature. The ordinary laws of supply and demand treat entirely of quantities of commodity demanded or supplied, and express the manner in which the quantities vary in connection with the price. In consequence of this fact the laws are mathematical. Economists cannot alter their nature by denying them the name; they might as well try to alter red light by calling it blue. Whether the mathematical laws of Economics are stated in words, or in the usual symbols, x, y, z, p, q, etc., is an accident, or a matter of mere convenience.

5.2 FROM VALUE TO PRICE.

[Petty: an early anticipation of the labour theory of value] Let another man go travel into a Countrey where is Silver, there Dig it, Refine it, bring it to the same place where the other man planted his Corn; Coyne it, etc. the same person, all the while of his working for Silver, gathering also food for his necessary livelihood, and procuring himself covering, etc. I say, the Silver of the one, must be esteemed of equal value with the Corn of the other: the one being perhaps twenty Ounces and the other twenty Bushels. From whence it follows, that the price of a Bushel of this Corn to be an Ounce of Silver.[5]

[Smith on labour commanded:] Every man is rich or poor according to the degree in which he can afford to enjoy the necessaries, conveniences, and amusements of human life. But after the division of labour has once thoroughly taken place, it is but a very small part of these with which a man's own labour can supply him. The far greater part of them he must derive from the labour of other people, and he must be rich or poor according to the quantity of that labour which he can command, or which he can afford to purchase. The value of any commodity, therefore, to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities.
[Smith then goes on to discuss labour embodied, as in labour theory of value:] The real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. What everything is really worth to the man who has acquired it, and who wants to dispose of it or exchange it for something else, is the toil and trouble which it can save to himself, and which it can impose upon other people. What is bought with money or with goods is purchased by labour as much as what we acquire by the toil of our own body. That money or those goods indeed save us this toil. They contain the value of a certain quantity of labour which we exchange for what is supposed at the time to contain the value of an equal quantity. Labour was the first price, the original purchase-money that was paid for all things. It was not by gold or by silver, but by labour, that all the wealth of the world was originally purchased; and its value, to those who possess it, and who want to exchange it for some new productions, is precisely equal to the quantity of labour which it can enable them to purchase or command.[6]

[Jevons repudiates the 'Ricardian school' (classical political economy) in favour of the 'French school' (mathematical, Cournot, etc.):] The conclusion to which I am ever more clearly coming is that the only hope of attaining a true system of Economics is to fling aside, once and for ever, the mazy and preposterous assumptions of the Ricardian School. Our English Economists have been living in a fool's paradise. The truth is with the French School, and the sooner we recognize this fact, the better it will be for the world.[7]

[Marx on Ricardo's chapter "On machinery" in later editions of PPET:] This section, which Ricardo added to his third edition, bears witness to his honesty which so essentially distinguishes him from the vulgar economists.[8]

[Cournot on general equilibrium:] For a complete and rigorous solution of the problems relative to some parts of the economic system, it is indispensable to take the entire system into consideration.[9]

[Walras on general equilibrium:] In fact, the whole world may be looked upon as a vast general market made up of diverse special markets where social wealth is bought and sold. Our task then is to discover the laws to which these purchases and sales tend to conform automatically. To this end, we shall suppose that the market is perfectly competitive, just as in pure mechanics we suppose to start with, that machines are perfectly frictionless.[10]

5.3 RICARDO AND RESOURCE ALLOCATION: COMPARATIVE ADVANTAGE

[Ricardo on the benefits of international division of labour:] Under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each. This pursuit of individual advantage is admirably connected with the universal good of the whole. By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature, it distributes labour most effectively and most economically... while, by increasing the general mass of productions, it diffuses general benefit, and binds together by one common tie of interest and intercourse, the universal society of nations throughout the civilized world. It is this principle which determines that wine shall be made in France and Portugal, that corn shall be grown in America and Poland, and that hardware and other goods shall be manufactured in England.

[Ricardo on comparative advantage:] If Portugal had no commercial connexion with other countries, instead of employing a great part of her capital and industry in the production of wines, with which she purchases for her own use the cloth and hardware of other countries, she would be obliged to devote a part of that capital to the manufacture of those commodities, which she would thus obtain probably inferior in quality as well as quantity.
The quantity of wine which she shall give in exchange for the cloth of England, is not determined by the respective quantities of labour devoted to the production of each, as it would be, if both commodities were manufactured in England, or both in Portugal.

[Ricardo's England-Portugal example:] England may be so circumstanced, that to produce the cloth may require the labour of 100 men for one year; and if she attempted to make the wine, it might require the labour of 120 men for the same time. England would therefore find it her interest to import wine, and to purchase it by the exportation of cloth.

To produce the wine in Portugal, might require only the labour of 80 men for one year, and to produce the cloth in the same country, might require the labour of 90 men for the same time. It would therefore be advantageous for her to export wine in exchange for cloth. This exchange might even take place, notwithstanding that the commodity imported by Portugal could be produced there with less labour than in England. Though she could make the cloth with the labour of 90 men, she would import it from a country where it required the labour of 100 men to produce it, because it would be advantageous to her rather to employ her capital in the production of wine, for which she would obtain more cloth from England, than she could produce by diverting a portion of her capital from the cultivation of vines to the manufacture of cloth.

Thus England would give the produce of the labour of 100 men, for the produce of the labour of 80. Such an exchange could not take place between the individuals of the same country. The labour of 100 Englishmen cannot be given for that of 80 Englishmen, but the produce of the labour of 100 Englishmen may be given for the produce of the labour of 80 Portuguese, 60 Russians, or 120 East Indians.[11]

[Ricardo on trade considered as barter:] Gold and silver having been chosen for the general medium of circulation, they are, by the competition of commerce, distributed in such proportions amongst the different countries of the world, as to accommodate themselves to the natural traffic which would take place if no such metals existed, and the trade between countries were purely a trade of barter...
If the markets be favourable for the exportation of wine from Portugal to England, the exporter of the wine will be a seller of a bill, which will be purchased either by the importer of the cloth, or by the person who sold him his bill; and thus without the necessity of money passing from either country, the exporters in each country will be paid for their goods. Without having any direct transaction with each other, the money paid in Portugal by the importer of cloth will be paid to the Portuguese exporter of wine; and in England by the negotiation of the same bill, the exporter of the cloth will be authorized to receive its value from the importer of wine...

But if the prices of wine were such that no wine could be exported to England, the importer of cloth would equally purchase a bill; but... the gold or silver money which he received in exchange for his bill, must be actually exported to his correspondent in England...

It is thus that the money of each country is apportioned to it in such quantities only as may be necessary to regulate a profitable trade of barter.

[Ricardo on the immobility of capital:] In one and the same country, profits are, generally speaking, always on the same level; or differ only as the employment of capital may be more or less secure and agreeable. It is not so between different countries. If the profits of capital employed in Yorkshire, should exceed those of capital employed in London, capital would speedily move from London to Yorkshire, and an equality of profits would be effected; but if in consequence of the diminished rate of production in the lands of England, from the increase of capital and population, wages should rise, and profits fall, it would not follow that capital and population would necessarily move from England to Holland, or Spain, or Russia, where profits might be higher...
The difference in this respect, between a single country and many, is easily accounted for, by considering the difficulty with which capital moves from one country to another, to seek a more profitable employment, and the activity with which it invariably passes from one province to another in the same country...
Experience... shews, that the fancied or real insecurity of capital, when not under the immediate control of its owner, together with the natural disinclination which every man has to

quit the country of his birth and connexions, and intrust himself with all his habits fixed, to a strange government and new laws, checks the emigration of capital. These feelings, which I should be sorry to see weakened, induce most men of property to be satisfied with a low rate of profits in their own country, rather than seek a more advantageous employment for their wealth in foreign nations.

[James (father of John Stuart) Mill on comparative advantage:] When a country can either import a commodity or produce it at home, it compares the cost of producing at home with the cost of procuring from abroad; if the latter cost is less than the first, it imports. The cost at which a country can import from abroad depends, not upon the cost at which the foreign country produces the commodity, but upon what the commodity costs which it sends in exchange, compared with the cost which it must be at to produce the commodity in question, if it did not import it.[12]

5.4 TRADE AND LATE-COMERS: ARGUMENTS FOR PROTECTION.

[Friedrich List on trade and protection:] Between two advanced nations, a free competition must necessarily be advantageous to both *if they were upon the same level of industrial progress*... [But] a nation unhappily far behind as to industry, commerce and navigation must above everything put forth all its strength to sustain a struggle with nations already in advance...

A country like England which is far in advance of all its competitors cannot better maintain and extend its manufacturing and commercial industry than by a trade as free as possible from all restrictions. For such a country, the cosmopolitan and the national principle are one and the same thing. This explains the favour with which the most enlightened economists of England regard free trade, and the reluctance of the wise and prudent of other countries to adopt this principle in the actual state of the world...

The energy developed in a few 'high-class progressive industries' may spread over a great part of the industrial system of the country...[13]

[List and the colonial era:] The temperate zone is the region of intellectual and physical effort.... The countries of the torrid zone... possess, on the other hand, the natural monopoly of many precious commodities which the inhabitants of the temperate climates greatly prize...

Between countries of the temperate and those of the torrid zone, this exchange [i.e. of manufactures for natural resources] will be perpetual, for it accords with nature...

It is true that tropical countries sink thus into dependence upon those of the temperate zone...

[Not only England but also other European nations may] participate in the advantageous work of introducing civilization into savage countries, of civilizing barbarians...

[Marshall on List:] While recognizing the leadership of Adam Smith, the German economists have been irritated more than any others by what they have regarded as the insular narrowness and self-confidence of the Ricardian school. In particular they resented the way in which the English advocates of free trade tacitly assumed that a proposition which had been established with regard to a manufacturing country, such as England was, could be carried over without modification to agricultural countries. The brilliant genius and national enthusiasm of List overthrew this presumption; and showed that the Ricardians had taken but little account of the indirect effects of free trade. No great harm might be done in neglecting them so far as England was concerned; because there they were in the main beneficial and thus added to the strength of its direct effects...

American manufacturers adopted List as their advocate...

The Germans are fond of saying that the Physiocrats and the school of Adam Smith underrated the importance of national life; that they tended to sacrifice it on the one hand to a selfish individualism and on the other to a limp philanthropic cosmopolitanism.

His patriotic fervour perverted in many ways his scientific judgment: but Germans listened eagerly to his argument that every country had to go through the same stages of development that England had gone through, and that she had protected her manufacturers when she was in transition from the agricultural to the manufacturing stage.[14]

[Chang on the 'Washington Consensus':] There is currently great pressure on developing countries from the developed world, and the international development policy establishment that it controls, to adopt a set of 'good policies' and 'good institutions' to foster their economic development. According to this agenda, 'good policies' are broadly those prescribed by the so-called Washington Consensus. They include restrictive macroeconomic policy, liberalization of international trade and investment, privatization and deregulation. The 'good institutions' are essentially those that are to be found in developed counties, especially the Anglo-American ones...

'How did the rich counties *really* become rich?' The short answer to this question is that the developed counties did not get where they are now through the policies and the institutions that they recommend to developing countries today. Most of them actively used 'bad' trade and institutional policies, such as infant industry protection and export subsidies – practices that these days are frowned upon, in not actively banned, by the WTO...[15]

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[1] *Della moneta*, 1751: 38, 39, 44.

[2] *La Commerce et le Gouvernement Considerés relativement l'un à l'autre*, 1776. Ch. I, Pt. 1.

[3] *An Introduction to the Principles of Morals and Legislation.* Chapter IV, "Value of a Lot of Pleasure or Pain, how to be Measured",

[4] PPET: chapter 2, "On Rent").

[5] *Treatise of taxes and contributions*: ch. 4.

[6] WN: 1, ch. 5. beginning.

[7] William Stanley Jevons, *Theory of Political Economy*, 1871: xlix-xlv.

[8] *Theories of surplus value* 2: 555.

[9] Cournot, *Researches into the mathematical principles of the theory of wealth*, 1838, translated 1897. p. 127.

[10] Léon Walras, *Elements of Pure Economics*, 1874: 84.

[11] *PPET*, chapter 7.

[12] *Elements of Political Economy*, chapter 3, iv.

[13] *The National System of Political Economy*, 1841.

[14] Marshall, *Principles of Economics*, Appendix B.

[15] Ha-Joon Chang, *Kicking away the ladder*. 2003. Chapter 1.

ECON1006. History of Economic Thought.

Topic 6. CLASSICAL ECONOMICS. *Lecture outline.*

6.1 Marginalism: from first to second generation.

Classical political economy had focused on objective issues – supply, 'wealth of nation' and its growth – and its approach to issues of value centered on costs of production. The 'marginalist revolution' of the 1870s shifted the focus onto the exploration of the demand side, taking from Ricardo's theory of rent the concept of determination at the margin, and using it as a methodological principle which it applied to utility, that is, subjective factors. The marginalist revolution also broke with the discursive mode of argumentation of classical political economy, and took a decisive step towards constituting economics as a formalistic and mathematically-based discipline with a methodology modeled on that of the natural sciences, and, unlike classical political economy, separate from other fields of social inquiry. The tasks taken up by the 'second generation' of marginalists were, first, to extend the marginal principle to the sphere of production and supply, and thus to formulate a marginalist supply-and-demand framework for price determination, and, secondly, to extend marginalist principles from the micro to the macro level.

6.2 Marginal productivity and factor rewards

The 'second generation' of marginalists, notably Marshall, aimed to develop the principle of marginal utility and its application to issues of demand, while also restoring the issue of costs of production, though without the connection with wider issues of social distribution which had characterized the approach of classical political economy. The 'neo-classical' solution was to model factors of production as mutually-substitutable inputs, their proportions being determined by their respective marginal productivity. All the factor rewards could thus be modeled homogeneously in terms of their contribution to output, rather than being separately, historically and socially determined, like the revenues of the different social groups in classical political economy.

6.3 Profit and competition

Marginal productivity theory provided a basis for generalization of Ricardo's theory of rent, since the formal homogenization of factors of production as mutually substitutable and variable inputs allowed wages or capital to be taken as the fixed factor to analyze changes in profit in the same way as Ricardo had taken land as the fixed factor in analyzing changes in income shares. Such an analysis requires constant returns to scale, which, in turn, requires the assumption of perfect competition to eliminate supra-normal profit, regarded as economically harmful – 'rent-seeking' – along the lines of both Smith's monopoly profits and Ricardo's landlords' rent. The theory was thus dependent on the assumption that profit is a reward for a particular kind of input – management, etc. (An 'Austrian' school, in contrast, had an alternative view of profit, placing more emphasis on entrepreneurship.) In the 1930s, the analytical apparatus of Marshall's free competition model was elaborated to address different forms of market structure, with models incorporating elements of monopoly as well as competitive behavior.

6.4 'Classical economics'.

Marshall's framework had abandoned the 'general equilibrium' approach of Walras, and instead focused on 'partial equilibrium' – the analysis of price determination in individual markets, holding other aspects of the economy constant – the method of *ceteris paribus*. The problem of how to extend this analytical framework to the macro level become increasingly pressing in the interwar period, culminating in Keynes's all-round critique of what he termed 'classical economics' – the standpoint that markets can be relied upon to clear if governments do not intervene, and that Say's Law and the Quantity Theory of Money both hold.

Textbook readings: Rima: Chapter 13 skim, e.g. 288-90 (generalization of Ricardo's theory of rent), 292-3 (constant returns to scale and 'adding up'); Chapter 14: 318-35. Sloman, Chapter 16: "The roots of modern macroeconomics", Section 2.

Prescribed readings from Marshall, etc.

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT. Hugh Goodacre.

6. NEO-CLASSICAL ECONOMICS

6.1 Marginalism: from first to second generation

6.2 Marginal productivity and factor rewards

6.3 Profit and competition

6.4 'Classical economics'

6.1 Marginalism: from first to second generation

CPE	Marginalism – 'first generation'
Supply	Demand
Cost of production	Marginal utility
Objective	Subjective / need
Wealth of nation / growth	Exchange value / price
Discursive method	Beginnings of formalistic / mathematical apparatus
Determination at margin for rent only	Determination at margin extended to utility

6.2 Marginal productivity and factor rewards

'First generation':

- Pioneered 'pure theory':
  from maths → applied to economy > *vice versa*
- But all based on utility / demand; **supply assumed fixed**.

'**Second generation**', notably Marshall:

- Extend marginalist approach from utility to **production**.
- Marshall's aim: Go with the MU tide, but 'restore' cost of production, though without the political economy (distribution to social groups, etc.).
  → 'Neo-classical'

'Factors of production' replace income shares of CPE:

Each factor has corresponding factor reward:
This reward homogenised:
Same algebraic form/
e.g. in Cobb-Douglass Production Function ($Q = A.K^{\alpha}.L^{\beta}$)

Contrast CPE:
Shares are separately determined; socio-historical > abstract.
i.e. CPE / Ricardo / income share focus abandoned.
→ *Functional* distribution > distribution to social groups.

Distribution and marginal productivity:

Factors are rewarded in accordance with their respective marginal productivity.

- Factors assumed substitutable → proportions can vary.
- Thus distribution:
  - delinked from social groups
  - transferred to productivity of factors.

Fundamentally, all this depends on factor prices being determined by MP in identical way to MU, i.e.

$$MU_a / MU_b = P_a / P_b$$
$$\rightarrow \quad MP_{f1} / MP_{f2} = P_{f1} / P_{f2}$$

This as basis for constrained optimisation (maximisation subject to budget constraint, etc.).

i.e. 'Pure' / mathematical theorising; political economy excised.

- → distancing of economics from other social sciences;
- Marshall predominantly discursive, but mathematics was underlying.

Technical / mathematical apparatus greatly elaborated:

- Distinction between marginal productivity and average productivity formalised.

  Had only been implicit / not formulated this way in Ricardo;

  contra our diagrams / later presentational device.

- Indifference curves.
- Edgeworth Box.
- Returns to scale.

etc., etc. → eventually textbook micro.

Marshall's insistence on avoiding mathematical presentation (burn it!) eventually discarded.

7

All this clinched S&D in marginalist framework, so that prices are determined, as in Marshall's diagrams.

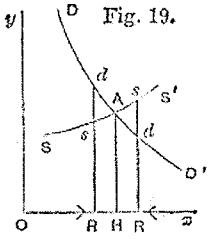


Fig. 19.

Usefulness of diagrams: Compare Marshall's verbal version!

Note that all this is **partial** equilibrium analysis!

- Small changes in chosen market.
- Rest of economy *cet. par.*
- i.e. Walras '**general** equilibrium' abandoned.

8

Objectives / achievements of 'second generation' -- *review*:

(1) Extend marginalism from utility / demand to **supply** and **distribution**:

- → 'Neo-classical' – costs of production incorporated
- Marginal productivity → factor rewards
- Distribution: functional – to factors > social groups
- Clinch S & D → price determination

Note: All this involved much further formalistic / mathematical elaboration.

(2) Extend from micro to **macro** level:

- Application of these principles developed for micro tasks (partial equilibrium) to macro.
- Achievements more contentious; was later to be subjected to all-round critique by Keynes.

9

6.3 Profit and competition.

Marginal productivity theory as a basis for a generalisation of Ricardo' theory of rent.

- *Recall*: Ricardo's distribution schema:
  - Each source of revenue has its own characteristics, determinants (social, historical).
  - Each has a share of total income.

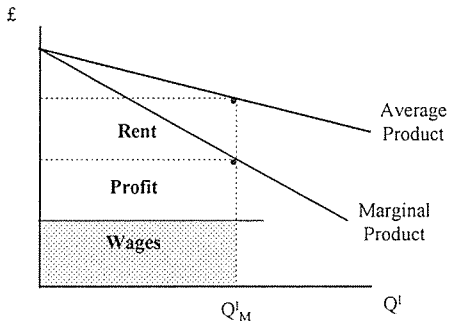
Marginalist revolution:

1st generation: MU – i.e. marginalism applied to Demand.

2nd generation: extend from MU to MP – i.e. Supply as well.

- Mathematically homogenised 'factor returns'.
- Marshall, *cet. par.*; all else held constant.
- i.e. loses Ricardian focus on socially and historically-determined 'income shares' of social groups.

10



Rent determined at the margin.

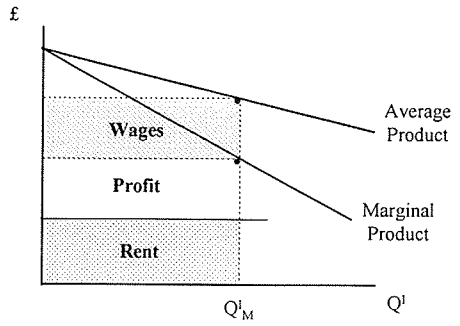
- Land are fixed – monopoly power of landlords.

11

Generalisation of Ricardo's rent theory to profit.

- In terms of Marshallian *cet. par.* method, land is the fixed factor.
- Labour and capital variable.
- Just apply same formal analysis to the other factors!
- i.e. if Labour fixed, rent is MP_{land}, etc.

12



Labour supply fixed > land area fixed / Ricardo.

- Wage-earners are the monopoly owners of a factor of production > landowners.
- Now it is Wages that are determined at the margin!
- Unreasonably high Wages are **'rent-seeking'**

13

Profit as monopoly gain.

- Profit is / should be just a factor return for a particular kind of input – management, etc.
- Excess over this is supra-normal monopoly gain.
- Socially harmful, like Ricardo's landlords; i.e. combines this 'rent-seeking' with Smith's monopoly /corporations.
- An imperfection in competition.
- Should be eliminated by pure competition.

14

The 'Austrian school' – an alternative view of profit:

- Profit 'imputed' for entrepreneurial skills.
- i.e. Not like rent / not seen in negative light.
- Reward for skill / correct expectations / dealing with uncertainties / overcoming new frictions, etc.

15

From general to partial equilibrium: market structure assumed pure competition.

Walras: General equilibrium: entire economy is a system of simultaneous equations.

Marshall: Partial equilibrium.

- Clinched price formation through S and D.
- Entry and exit of firms → pure competition.

Assumptions (through *cet. par*):

- Constant preferences.
- Prices of other goods given.
- Ignore interaction of factor demand and product demand curves, etc.

16

Market structure: overview of currents in micro-analysis:

Pure competition:

- **Walras:** General equilibrium.
- **Marshall**: Partial equilibrium.

1930s 'Imperfect Competition' / 'Monopolistic Competition':

- Reintroduced Diminishing Returns.
- Monopoly and competition; all now → textbook micro / 'market structure.

1980s → 'Increasing returns revolution':

- *Preview*: 'Endogenous' modelling; Post Washington Consensus (Stiglitz, etc.).

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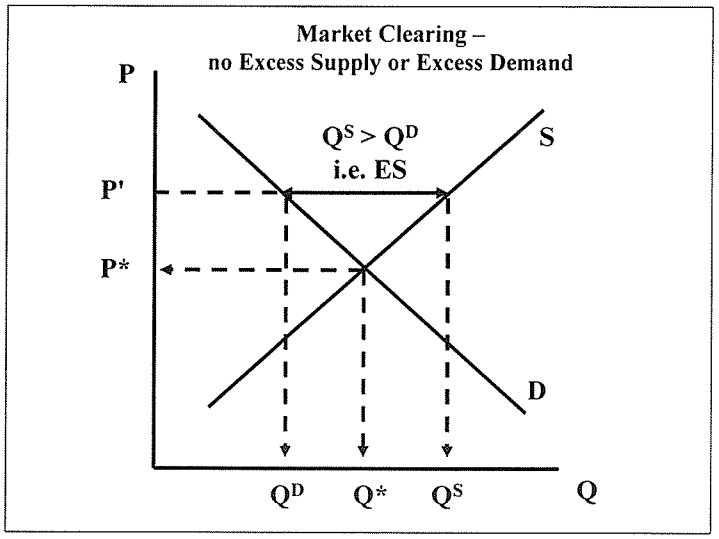
6.4 'Classical economics'.

Preview: Main points at issue	Classical economics	Keynesian critique
(i) Market-clearing:	All kinds of 'prices' (P, r, ER, W) adjust for optimal outcome	Adjustments **fail** to take place; P, W, etc., may be 'sticky'
(ii) Say's Law:	Supply creates its own demand	Market may **fail** to provide adequate demand
(iii) Quantity Theory of Money:	Trying to stimulate demand (e.g. through monetary expansion) only results in inflation	Monetary policy, etc., ***can*** affect real economy, not just prices
Underlying view of markets:	Market forces work OK	Market forces may fail
Policy conclusions:	Do not intervene in market – *Laissez-faire!*	Government may need to intervene to remedy market shortcomings[18]



Classical economics (1) Market-clearing

Category of 'prices' is broadened to include not only P (price of goods and services), but also:

- Interest (r) – 'price' of 'loanable funds'
- Exchange rate (ER) – 'price' of foreign currency (in flexible ER regime)
- Wages (W) – 'price' of labour

In the classical view, these all adjust to ensure optimal outcome:

ΔP → **goods market** clears
Δr → **market for loanable** funds clears
ΔER → **international market clears** (under flexible ER)
ΔW → **labour market** clears

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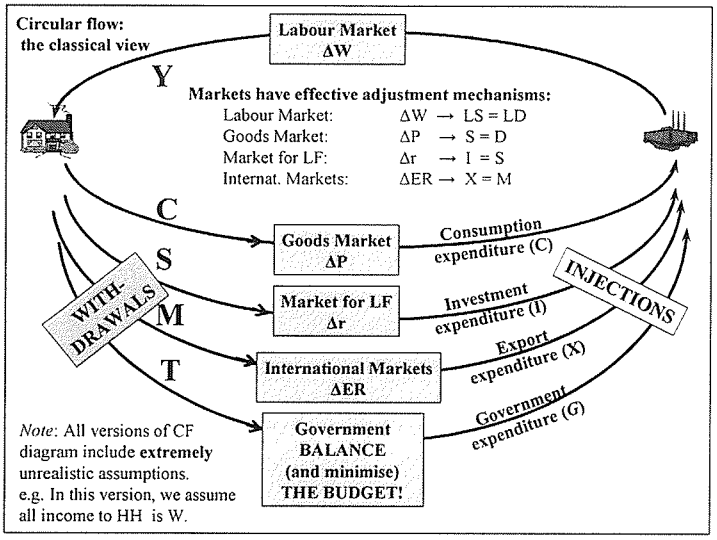
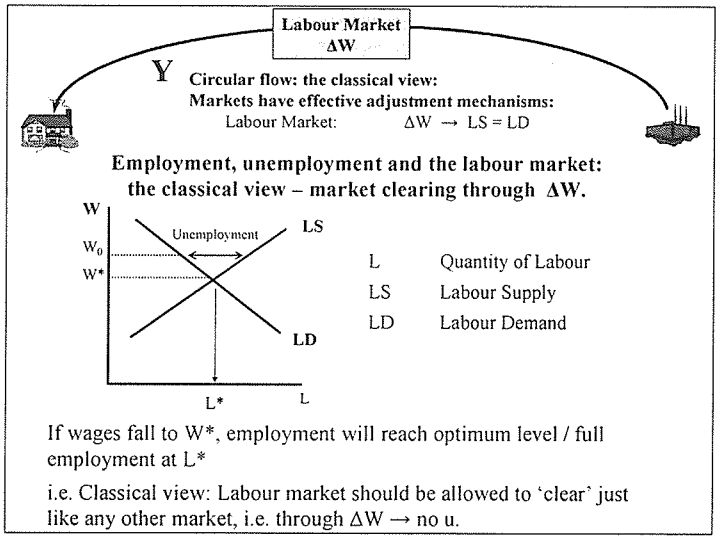
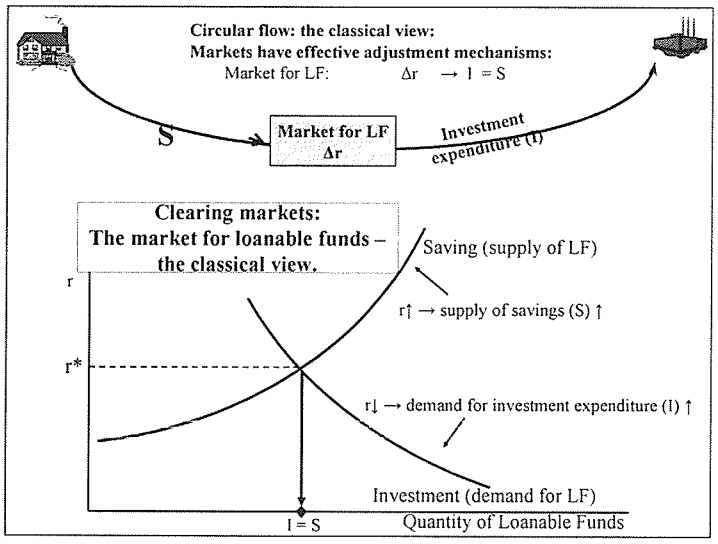
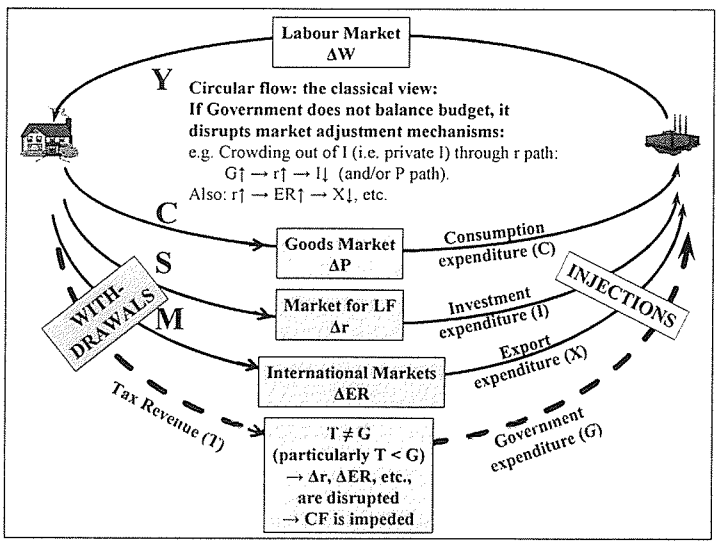




If wages fall to W*, employment will reach optimum level / full employment at L*

i.e. Classical view: Labour market should be allowed to 'clear' just like any other market, i.e. through ΔW → no u.





Classical economics (ii) Say's Law:
Supply creates its own Demand

The production of goods and services is enough in itself to generate sufficient expenditure to ensure that they are sold.

There can consequently be no deficiency of demand in the economy as a whole.

> "A product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value... The mere circumstance of the creation of one product immediately opens a vent for other products."
>
> Jean-Baptiste Say, 1803.

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Say's Law:
Supply creates its own Demand

Classical approach:

'*Supply-side*' economics; Say's Law holds.

Supply creates its own demand / Look after supply and demand will look after itself.

Preview: **Keynesian approach:**

'*Demand-side*' economics; Say's Law does *not* hold.

Demand will *not* look after itself; may '**fail**'.

Government intervention may be necessary to revive demand.

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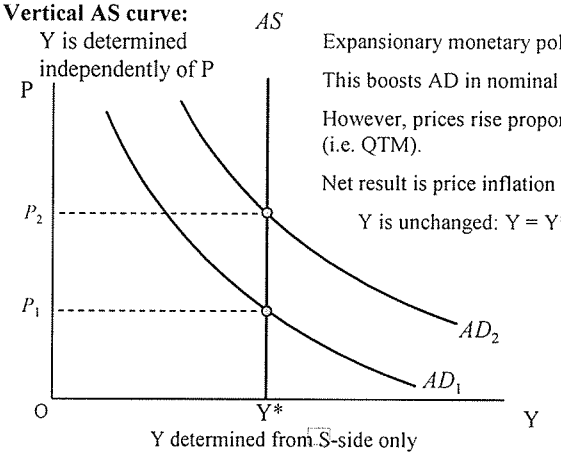
The Quantity Theory of Money in the AS/AD framework

Vertical AS curve:
Y is determined independently of P



Y determined from S-side only

Expansionary monetary policy; MS↑

This boosts AD in nominal terms.

However, prices rise proportionately (i.e. QTM).

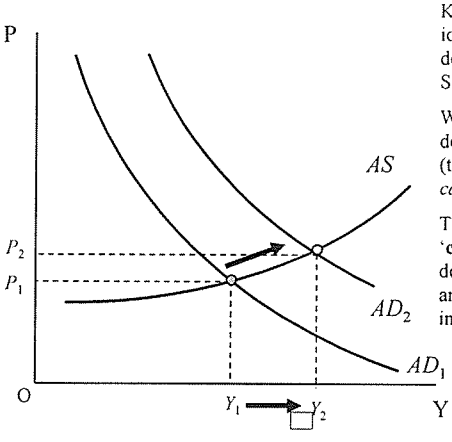
Net result is price inflation only:

Y is unchanged: Y = Y*

The Quantity Theory of Money:
policy implications

- Classical economics uses the QTM as an argument against the demand-side approach of using expansionary monetary policy to boost AD.
- The classical approach holds that this is futile: the only consequence of such a policy will be price inflation.

Keynes's counter-attack in the AS/AD framework – ***preview***



Keynes rejected the idea that Y is determined only from S-side.

With AS sloping, demand management (through ΔMS, etc.) *can* affect Y.

Thus argued that '**classical dichotomy**' does not hold; nominal and real variables *do* interact.

<u>6. NEO-CLASSICAL ECONOMICS</u> – *summary.*

6.1 Marginalism: from first to second generation.
Agenda: from utility to supply; from micro to macro.

6.2 Marginal productivity and factor rewards.
Functional distribution: factor rewards according to marginal productivity replace income shares. Technical apparatus elaborated. Marshall clinches price-determination by supply and demand; diagrams.

6.3 Profit and competition.
Ricardo's rent theory as theory of profit. Supra-normal profit as monopoly gain. From general to partial equilibrium. Overview of market structure analysis.

6.4 'Classical economics'.
Market-clearing, Say's Law, Quantity Theory of Money. Preview of Keynes's critique.

6.1 MARGINALISM: FROM FIRST TO SECOND GENERATION

6.2 MARGINAL PRODUCTIVITY AND FACTOR REWARDS

[Marshal's statement of the principle of diminishing marginal utility:] There is an endless variety of wants, but there is a limit to each separate want. This familiar and fundamental tendency of human nature may be stated in the law of satiable wants or of diminishing utility thus:–
The total utility of a thing to anyone (that is, the total pleasure or other benefit it yields him) increases with every increase in his stock of it, but not as fast as his stock increases. If his stock of it increases at a uniform rate the benefit derived from it increases at a diminishing rate. In other words, the additional benefit which a person derives from a given increase of his stock of a thing, diminishes with every increase in the stock that he already has.
That part of the thing which he is only just induced to purchase may be called his marginal purchase, because he is on the margin of doubt whether it is worth his while to incur the outlay required to obtain it. And the utility of his marginal purchase may be called the marginal utility of the thing to him. Or, if instead of buying it, he makes the thing himself, then its marginal utility is the utility of that part which he thinks it only just worth his while to make. And thus the law just given may be worded:–
The marginal utility of a thing to anyone diminishes with every increase in the amount of it he already has.[1]

[John Bates Clark on the nature of profit:] The function of this natural law is to separate the gross earnings of society into three generic shares that are unlike in kind. It causes the whole annual gains of society to distribute themselves into three great sums—general wages, general interest and aggregate profits. These are, respectively, the earnings of labor, the earnings of capital and the gains from a certain coördinating process that is performed by the employers of labor and users of capital. This purely coördinating work we shall call the entrepreneur's function, and the rewards for it we shall call profits. The function in itself includes no working and no owning of capital: it consists entirely in the establishing and maintaining of efficient relations between the agents of production.[2]

[John Bates Clark on functional distribution:] We may now advance the more general thesis... that, where natural laws have their way, the share of income that attests to any productive function is gauged by the actual product of it. In other words, free competition tends to give to labor what labor creates, to capitalists what capital creates, and to entrepreneurs what the coördinating function creates.
The entire study of distribution is, in this view, a study of specific production. It is an analysis of the wealth-creating operation, and a tracing to each of the three agencies that together bring wealth into existence of the part which it separately contributes to the joint result. To each agent a distinguishable share in production, and to each a corresponding reward – such is the natural law of distribution.[3]

[Marshall on the equilibration of demand and supply:] When demand and supply are in equilibrium, the amount of the commodity which is being produced in a unit of time may be called the equilibrium-amount, and the price at which it is being sold may be called the equilibrium-price.
[*Compare awkward verbal explanation with diagram!:]* Such an equilibrium is stable; that is, the price, if displaced a little from it, will tend to return, as a pendulum oscillates about its lowest point; and it will be found to be a characteristic of stable equilibria that in them the demand price is greater than the supply price for amounts just less than the equilibrium amount, and vice versa. For when the demand price is greater than the supply price, the amount produced tends to increase. Therefore, if the demand price is greater than the supply price for amounts just less than an equilibrium amount; then, if the scale of production is temporarily diminished somewhat below that equilibrium amount, it will tend to return; thus the equilibrium is stable for displacements in that direction. If the demand price is greater than the supply price for amounts just less than the equilibrium amount, it is sure to be less than the supply price for amounts just greater: and therefore, if the scale of production is somewhat increased beyond the equilibrium position, it will tend to return; and the equilibrium will be stable for displacements in that direction also.
When demand and supply are in stable equilibrium, if any accident should move the scale of production from its equilibrium position, there will be instantly brought into play forces tending to push it back to that position; just as, if a stone hanging by a string is displaced from its equilibrium position, the force of gravity will at once tend to bring it back to its equilibrium position. The movements of the scale of production about its position of equilibrium will be of a somewhat similar kind....
We might as reasonably dispute whether it is the upper or the under blade of a pair of scissors that cuts a piece of paper, as whether value is governed by utility or cost of production. It is true that when one blade is held still, and the cutting is effected by moving the other, we may say with careless brevity that the cutting is done by the second; but the statement is not strictly accurate, and is to be excused only so long as it claims to be merely a popular and not a strictly scientific account of what happens.[4]

[Marshall explains his supply and demand diagram:] To represent the equilibrium of demand and supply geometrically we may draw the demand and supply curves together as in Fig. 19. If then OR represents the rate at which production is being actually carried on, and Rd the demand price is greater than Rs the supply price, the production is exceptionally profitable, and will be increased. R, the amount-index, as we may call it, will move to the right. On the other hand, if Rd is less than Rs, R will move to the left. If Rd is equal to Rs, that is, if R is vertically under a point of intersection of the curves, demand and supply are in equilibrium.

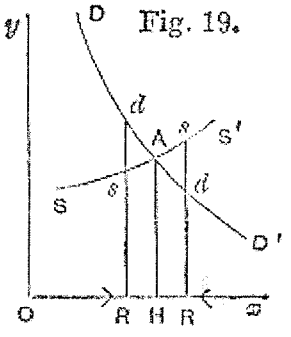


Fig. 19.

This may be taken as the typical diagram for stable

equilibrium for a commodity that obeys the law of diminishing return. But if we had made SS' a horizontal straight line, we should have represented the case of "constant return," in which the supply price is the same for all amounts of the commodity. And if we had made SS' inclined negatively, but less steeply than DD' (the necessity for this condition will appear more fully later on), we should have got a case of stable equilibrium for a commodity which obeys the law of increasing return.[5]

[Jevons on mathematical method:] If we had no regard to trouble and prolixity, the most complicated mathematical problems might be stated in ordinary language, and their solution might be traced out by words. In fact, some distinguished mathematicians have shown a liking for getting rid of their symbols, and expressing their arguments and results in language as nearly as possible approximating to that in common use. In his *Système du Monde*, Laplace attempted to describe the truths of physical astronomy in common language; and Thomson and Tait interweave their great *Treatise on Natural Philosophy* with an interpretation in ordinary words, supposed to be within the comprehension of general readers...

[Marshall on mathematics:] 1) Use mathematics as shorthand language, rather than as an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life (5) Burn the mathematics. (6) If you can't succeed in 4, burn 3. This I do often.[6]

[Marshall on economics and measurement:] The advantage which economics has over other branches of social science appears then to arise from the fact that its special field of work gives rather larger opportunities for exact methods than any other branch. It concerns itself chiefly with those desires, aspirations and other affections of human nature, the outward manifestations of which appear as incentives to action in such a form that the force or quantity of the incentives can be estimated and measured with some approach to accuracy, and which therefore are in some degree amenable to treatment by scientific machinery. An opening is made for the methods and the tests of science as soon as the force of a person's motives – not the motives themselves – can be approximately measured by the sum of money, which he will just give up in order to secure a desired satisfaction; or again by the sum which is just required to induce him to undergo a certain fatigue.[7]

[Marshall on economic laws:] Economic laws, or statements of economic tendencies, are those social laws which relate to branches of conduct in which the strength of the motives chiefly concerned can be measured by a money price.[8]

[Marshall on money, measurement, etc.:] The *raison d'être* of economics as a separate science is that it deals chiefly with that part of man's action which is most under the control of measurable motives; and which therefore lends itself better than any other to systematic reasoning and analysis. We cannot indeed measure motives of any kind, whether high or low, as they are in themselves: we can measure only their moving force. Money is never a perfect measure of that force; and it is not even a tolerably good measure unless careful account is taken of the general conditions under which it works, and especially of the riches or poverty of those whose action is under discussion. But with careful precautions money affords a fairly good measure of the moving force of a great part of the motives by which men's lives are fashioned.[9]

[*Cournot on markets (1838):]* Economists understand by the term Market, not any particular market place in which things are bought and sold, but the whole of any region in which buyers and sellers are in such free intercourse with one another that the prices of the same goods tend to equality easily and quickly.[10]

[Jevons on markets:] Originally a market was a public place in a town where provisions and other objects were exposed for sale; but the word has been generalized, so as to mean any body of persons who are in intimate business relations and carry on extensive transactions in any commodity. A great city may contain as many markets as there are important branches of trade, and these markets may or may not be localized. The central point of a market is the public exchange, mart or auction rooms, where the traders agree to meet and transact business. In London the Stock Market, the Corn Market, the Coal Market, the Sugar Market, and many others are distinctly localized; in Manchester the Cotton Market, the Cotton Waste Market, and others. But this distinction of locality is not necessary. The traders may be spread over a whole town, or region of country, and yet make a market, if they are, by means of fairs, meetings, published price lists, the post-office or otherwise, in close communication with each other.[11]

[Marshall on the global extension of the market:] In applying economic reasonings in practice it is often difficult to ascertain how far the movements of supply and demand in any one place are influenced by those in another. It is clear that the general tendency of the telegraph, the printing-press and steam traffic is to extend the area over which such influences act and to increase their force. The whole Western World may, in a sense, be regarded as one market for many kinds of stock exchange securities, for the more valuable metals, and to a less extent for wool and cotton and even wheat; proper allowance being made for expenses of transport, in which may be included taxes levied by any customs houses through which the goods have to pass. For in all these cases the expenses of transport, including customs duties, are not sufficient to prevent buyers from all parts of the Western World from competing with one another for the same supplies.[12]

[Marshall on stock exchanges as the 'pattern' of markets:] Stock exchanges then are the pattern on which markets have been, and are being formed for dealing in many kinds of produce which can be easily and exactly described, are portable and in general demand. The material commodities however which possess these qualities in the highest degree are gold and silver. For that very reason they have been chosen by common consent for use as money, to represent the value of other things: the world market for them is most highly organized, and will be found to offer many subtle illustrations of the actions of the laws which we are now discussing.[13]

[Marshall on his ceteris paribus *method:]* The forces to be dealt with are however so numerous, that it is best to take a few at a time; and to work out a number of partial solutions as auxiliaries to our main study. Thus we begin by isolating the primary relations of supply, demand and price in regard to a particular commodity. We reduce to inaction all other forces by the phrase, "other things being equal".[14]

6.3 PROFIT AND COMPETITION.

[John Bates Clark on socialism:] This thesis we have to prove; and more hinges on the truth of it than any introductory words can state. The right of society to exist in its present form, and the probability that it will continue so to exist, are at stake. These facts lend to this problem of distribution its measureless importance.

The welfare of the laboring classes depends on whether they get much or little; but their attitude toward other classes—and, therefore, the stability of the social state—depends chiefly on the question, whether the amount that they get, be it large or small, is what they produce. If they create a small amount of wealth and get the whole of it, they may not seek to revolutionize society; but if it were to appear that they produce an ample amount and get only a part of it, many of them would become revolutionists, and all would have the right to do so. The indictment that hangs over society is that of "exploiting labor." "Workmen" it is said, "are regularly robbed of what they produce. This is done within the forms of law, and by the natural working of competition." If this charge were proved, every right-minded man should become a socialist; and his zeal in transforming the industrial system would then measure and express his sense of justice. If we are to test the charge, however, we must enter the realm of production. We must resolve the product of social industry into its component elements, in order to see whether the natural effect of competition is or is not to give to each producer the amount of wealth that he specifically brings into existence.[15]

[Marshall on England:]... the world had to wait for the dawn of the new economic era till a whole nation was ready for the ordeal of economic freedom.

England especially was gradually prepared for the task; but towards the end of the eighteenth century, the changes, which had so far been slow and gradual, suddenly became rapid and violent. Mechanical inventions, the concentration of industries, and a system of manufacturing on a large scale for distant markets broke up the old traditions of industry, and left everyone to bargain for himself as best he might; and at the same time they stimulated an increase of population for which no provision had been made beyond standing-room in factories and workshops. Thus free competition, or rather, freedom of industry and enterprise, was set loose to run, like a huge untrained monster, its wayward course. The abuse of their new power by able but uncultured business men led to evils on every side; it unfitted mothers for their duties, it weighed down children with overwork and disease; and in many places it degraded the race. Meanwhile the kindly meant recklessness of the poor law did even more to lower the moral and physical energy of Englishmen than the hardhearted recklessness of the manufacturing discipline: for by depriving the people of those qualities which would fit them for the new order of things, it increased the evil and diminished the good caused by the advent of free enterprise.[16]

6.4 'CLASSICAL ECONOMICS'

[Marshall enumerates the questions addressed by economics:] What are the causes which, especially in the modern world, affect the consumption and production, the distribution and exchange of wealth; the organization of industry and trade; the money market; wholesale and retail dealing; foreign trade, and the relations between employers and employed? How do all these movements act and react upon one another? How do their ultimate differ from their immediate tendencies?

Subject to what limitations is the price of anything a measure of its desirability? What increase of wellbeing is *prima facie* likely to result from a given increase in the wealth of any class of society? How far is the industrial efficiency of any class impaired by the insufficiency of its income? How far would an increase of the income of any class, if once effected, be likely to sustain itself through its effects in increasing their efficiency and earning power?

How far does, as a matter of fact, the influence of economic freedom reach (or how far has it reached at any particular time) in any place, in any rank of society, or in any particular branch of industry? What other influences are most powerful there; and how is the action of all these influences combined? In particular, how far does economic freedom tend of its own action to build up combinations and monopolies, and what are their effects? How are the various classes of society likely to be affected by its action in the long run; what will be the intermediate effects while its ultimate results are being worked out; and, account being taken of the time over which they will spread, what is the relative importance of these two classes of ultimate and intermediate effects? What will be the incidence of any system of taxes? What burdens will it impose on the community, and what revenue will it afford to the State?

The above are the main questions with which economic science has to deal directly, and with reference to which its main work of collecting facts, of analyzing them and reasoning about them should be arranged. The practical issues which, though lying for the greater part outside the range of economic science, yet supply a chief motive in the background to the work of the economist, vary from time to time, and from place to place, even more than do the economic facts and conditions which form the material of his studies. The following problems seem to be of special urgency now in our own country:–

How should we act so as to increase the good and diminish the evil influences of economic freedom, both in its ultimate results and in the course of its progress? If the first are good and the latter evil, but those who suffer the evil, do not reap the good; how far is it right that they should suffer for the benefit of others?

Taking it for granted that a more equal distribution of wealth is to be desired, how far would this justify changes in the institutions of property, or limitations of free enterprise even when they would be likely to diminish the aggregate of wealth? In other words, how far should an increase in the income of the poorer classes and a diminution of their work be aimed at, even if it involved some lessening of national material wealth? How far could this be done without injustice, and without slackening the energies of the leaders of progress? How ought the burdens of taxation to be distributed among the different classes of society?

Ought we to rest content with the existing forms of division of labour? Is it necessary that large numbers of the people should

be exclusively occupied with work that has no elevating character? Is it possible to educate gradually among the great mass of workers a new capacity for the higher kinds of work; and in particular for undertaking co-operatively the management of the business in which they are themselves employed?
What are the proper relations of individual and collective action in a stage of civilization such as ours? How far ought voluntary association in its various forms, old and new, to be left to supply collective action for those purposes for which such action has special advantages? What business affairs should be undertaken by society itself acting through its government, imperial or local? Have we, for instance, carried as far as we should the plan of collective ownership and use of open spaces, of works of art, of the means of instruction and amusement, as well as of those material requisites of a civilized life, the supply of which requires united action, such as gas and water, and railways?
When government does not itself directly intervene, how far should it allow individuals and corporations to conduct their own affairs as they please? How far should it regulate the management of railways and other concerns which are to some extent in a position of monopoly, and again of land and other things the quantity of which cannot be increased by man? Is it necessary to retain in their full force all the existing rights of property; or have the original necessities for which they were meant to provide, in some measure passed away? Are the prevailing methods of using wealth entirely justifiable? What scope is there for the moral pressure of social opinion in constraining and directing individual action in those economic relations in which the rigidity and violence of government interference would be likely to do more harm than good? In what respect do the duties of one nation to another in economic matters differ from those of members of the same nation to one another?
Economics is thus taken to mean a study of the economic aspects and conditions of man's political, social and private life; but more especially of his social life. The aims of the study are to gain knowledge for its own sake, and to obtain guidance in the practical conduct of life, and especially of social life. The need for such guidance was never so urgent as now; a later generation may have more abundant leisure than we for researches that throw light on obscure points in abstract speculation, or in the history of past times, but do not afford immediate aid in present difficulties.
But though thus largely directed by practical needs, economics avoids as far as possible the discussion of those exigencies of party organization, and those diplomacies of home and foreign politics of which the statesman is bound to take account in deciding what measures that he can propose will bring him nearest to the end that he desires to secure for his country. It aims indeed at helping him to determine not only what that end should be, but also what are the best methods of a broad policy devoted to that end. But it shuns many political issues, which the practical man cannot ignore: and it is therefore a science, pure and applied, rather than a science and an art. And it is better described by the broad term "Economics", than by the narrower term "Political Economy".[17]

[Marshall on the further volume on macro issues which he never wrote:] ...the organization of markets is intimately connected both as cause and effect with money, credit, and foreign trade; a full study of it must therefore be deferred to a later volume, where it will be taken in connection with commercial and industrial fluctuations, and with combinations of producers and of merchants, of employers and employed.[18]

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[1] *Principles*, Book 3, Chapter 2.

[2] *Distribution of Wealth.*

[3] *Distribution of Wealth.*

[4] *Principles*, Book 5, Chapter 3.

[5] *Principles*, Book 5, Chapter 3, footnote.

[6] Letter to Pigou, 1906.

[7] *Principles*, Book 1, Chapter 2.

[8] *Principles*, Book 1, Chapter 3.

[9] *Principles*, Book 1, Chapter 4.

[10] *Recherches sur les principes mathématiques de la théorie des richesses*, chapter 4.

[11] *Theory of political economy*, chapter 4.

[12] *Principles*, Book 5, chapter 1.

[13] *Principles*, Book 5, chapter 1.

[14] *Principles*, Preface to 8th edition.

[15] *Distribution of Wealth.*

[16] *Principles*, Introduction.

[17] *Principles*, Book 1, Chapter 4.

[18] *Principles*, Book 5, chapter 1.

ECON1006. History of Economic Thought.
Topic 7. KEYNES AND CLASSICAL ECONOMICS. *Lecture outline.*

7.1 The Great Depression and the classical response

Following the First World War, the UK's Treasury aimed to recover the country's pre-war commercial and financial position by restoring its trade surplus and the strength of the pound Sterling. However, with the loss of export markets in wartime and the fall of the exchange rate, these two goals came into sharp conflict. A solution was sought in a strong emphasis on downward flexibility of wages to sustain export competitiveness. With the collapse of world trade by the early 1930s, this strategy clearly provided no solution to the gathering recession, yet the Treasury refused to reflate the domestic economy; it was assumed, in particular, that all the available means for financing a fiscal expansion would be counterproductive.

7.2 Keynes's challenge to the classical approach

Keynes focused his opposition to the Treasury's standpoint on repudiating Say's Law, arguing that the problems of the depression lay not in supply issues but in deficient aggregate demand; unemployment may thus be involuntary, rather than a consequence of high wages. He elaborated this argument into an all-round theoretical critique of the classical approach, repudiating its assumption that 'market-clearing' mechanisms hold throughout the range of economic interactions. In the field of policy, far from opposing deficit financing, he suggested that this might be justified in a recession, an argument reinforced by the concept of the multiplier.

7.3 "The prefix *general*"

Keynes argued that the classical model only "comes into its own" at the full employment level of output; it thus represents a "special case" only – hence the title of his 1936 book, 'The *General* Theory of Employment, Interest and Money'. The publication of this book signalized the definitive establishment of macroeconomics as a branch of economic analysis distinct from analysis at the micro level. At the same time, the book prefigured a fundamental division within the new sub-discipline it established, between those who, like Keynes, emphasized demand issues, and those who, in contrast, have aimed to restore the fundamental principles of what Keynes had termed 'classical economics'.

Textbook readings: Rima, chapters 20 and 21, particularly: 456-9 (introduction, and equation of exchange); 465-7 (involuntary unemployment); 467-8 (interest rates); 473-5 (effective demand, with diagram); 483-5 (monetary theory).

Prescribed readings: From Keynes's *General Theory*, and his 1937 article in the *Quarterly Journal of Economics.*

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT. Hugh Goodacre.

7. KEYNES AND CLASSICAL ECONOMICS

7.1 The Great Depression and the classical response

7.2 Keynes's challenge to the classical approach

7.3 "The prefix *general*"

1

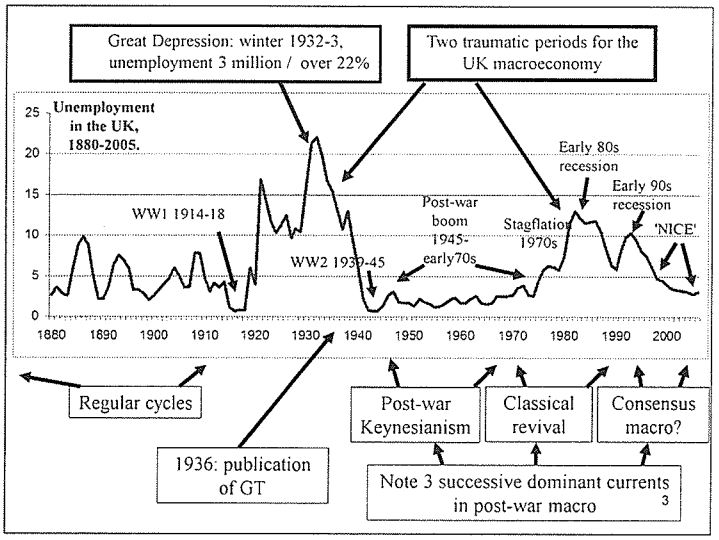
'Classical economics' – *review*:

- Market-clearing
- Say's Law
- Quantity Theory of Money

Definitions / terminology

- Classical Political Economy
- Neo-Classical
- Classical Economics – Keynes's 'solecism'?
- New Classical Macro
- 'News' in general

2



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7.1 The Great Depression and the classical response

Pre-WW1 (1914-18): Britain's global dominance

Empire provided captive markets for:

- Exports of British goods
- Investment of British capital

Commercial dominance and the trade surplus:

- Economic problems at home → export way out of difficulties / 'workshop of world'
- → **positive Balance of Trade** a pre-eminent policy goal.

Financial dominance and the strength of Sterling:

- International confidence / strong and stable currency
- Linked to gold
- Preferred 'store of value' internationally

4

World War I and its aftermath

During WW1, Britain's **BOT ran into deficit**:

- Export markets lost in war conditions at sea.
- Export-oriented industries diverted into war production (munitions, etc.)

Following war, BOT deficit **persisted**

- Import prices high
  - Global demand for capital goods for post-war reconstruction.
- Episode of inflation reduced competitiveness of exports.

5

Classical response / policy of the Treasury (i.e. Ministry of Finance):

Goal: regain lost pre-war dominance:

(1) **Commercial** dominance:
Restore competitiveness of British exports.

(2) **Financial** dominance:
Restore Sterling strength / return to **gold standard**.
Left gold standard during WW1.
Gold standard restored 1925-31.

BUT: These two goals were *in contradiction with each other.*

6

Conflict of goals:

Sterling strength / return to gold standard at former high Exchange Rate

→ Export sector (X) → less competitive.

Imports (M) sucked in.

→ Net Exports (NX), i.e. X - M, suffer.

BUT: Reducing trade deficit required exactly the *opposite:*

ER↓ → X↑, M↓, i.e. NX↑

7

W and P flexibility – the Treasury approach:

Recall: In classical view, P (likewise W, r, etc.) adjust flexibly / adjustment is effective / clears markets.

Treasury policy: ER = ER at high level.

→ Only way to restore competitiveness of exports:

W↓ → firms' costs of production ↓

→ P_X↓ → international competitiveness ↑

→ X↑ , M↓ → NX↑

→ trade deficit would be eliminated.

BUT: This assumes that W *are* flexible!

8

Treasury refused boost to exports by ER↓

→ *crucial element* if BOT was to improve:

W must be flexible:

– Eliminate unemployment.

– Redeploy labour to more efficient uses.

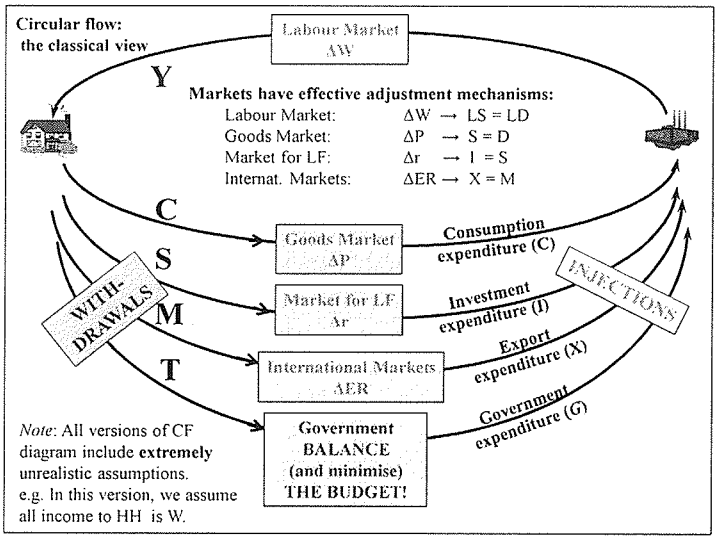
i.e. **wages must fall.**

But wages **did *not* fall**:

Resistance to wage cuts / industrial unrest.

General Strike of 1926, etc.

9



The Treasury approach in the classical 'clearing markets' framework – *overview.*

Labour Market

W↓→ clear Labour Market

Workers no longer pricing themselves out of jobs

Market for Loanable Funds

Encourage saving

Savings ↑ → Supply Loanable Funds ↑

→ r↓→ I↑ → Y↑

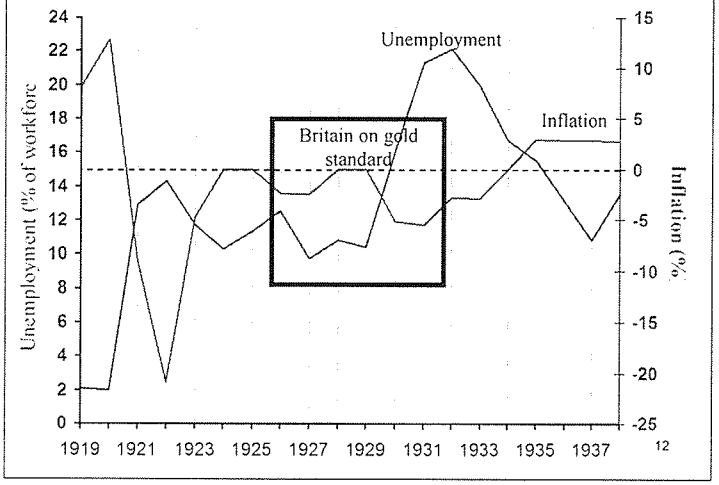
International market

W↓→ P↓→ export competitiveness ↑ → NX↑

→ regain lost commercial dominance without ER↓.

11

UK unemployment and inflation: 1919 - 38



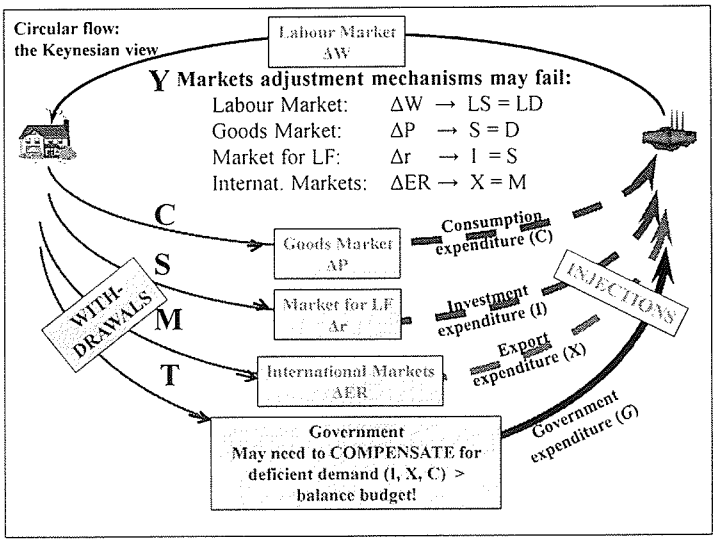
12

Wall Street crash (1929) and collapse of world trade

- Crash of New York Stock Exchange ('Wall Street crash') → collapse in international trade.
- Now no hope of UK exporting its way out of its problems.
- X↑ no longer through W↓ no matter how far W fall:

  No market for X!

13



Treasury policy – 'classical':

- Opposition to government intervention / min. G and T.
- **Balance budget → G ≤ T.**

i.e. *Laissez-faire!* Allow *markets* to solve problems through their self-adjustment mechanisms.

e.g. Encourage S → r↓→ I↑.

BUT: G↓ is a reduction in AD.

AD↓ → Y↓ → T↓ → budget deficit even worse: T < G!

And S↑ → C↓ , i.e. also a reduction in AD.

→ Treasury policies *intensified* recession.

15

Arguments of critics of TV :

Government should 'reflate' the economy:

Boost DEMAND through programme of **public works**:

- Roads
- Hospitals
- Schools, etc.

TV response:

Means for raising finance for this:

- Increasing taxation
- Increasing government borrowing
- Printing extra money

Each of these would have undesirable side-effects →→→

16

Arguments against raising funds for public works:

(1) Increase in taxation – *the incentives argument:*

TV: T↑ would → C↓
- i.e. no net increase in AD

Would **reduce incentives**
- i.e. net effect on AD might be negative

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Arguments against raising funds for public works, *contd*:

(2) Increase in government borrowing – *the 'crowding out' argument:*

TV: Higher r to borrow money for public works.
This would lead to a rise in the *general* level of r

→ Discourage private sector investment, i.e. I↓.

i.e. G↑ would '**crowd out**' private sector investment:

ΔG↑ → r↑ → ΔI↓

18

Arguments against raising funds for public works, *contd*:

(3) Printing more money – *the QTM argument:*

TV held to **QTM**:

MS↑ → π only / no effect on 'real' variables: **'classical dichotomy'**

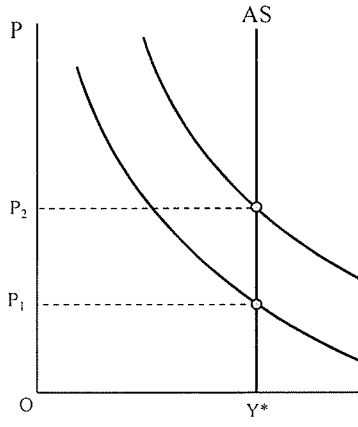
In AS/AD, vertical AS curve.

MS↑ → *nominal* AD ↑, but net result π only

And π would → competitiveness of British exports ↓ further.

19

Arguments for reflation and Treasury response



TV on printing extra money:

i.e. MS↑.

→AD ↑ in *nominal* terms.

BUT: P rises **proportionately** (i.e. QTM).

Net result: π only.

20

7.2 Keynes's challenge to the classical approach.

Lack of Effective **Demand**; not a question of supply – there is **slack** in the economy – *excess* supply!

Policy prescriptions: Government should stimulate AD *even if* → *budget deficit.*

'Crowding out' of private I is only a problem if resources (LF, L, physical capital, etc.) are **scarce.**

In recession, resources are *not* scarce:

Plenty of **'slack'** in the economy / unused resources:

Unemployed workers, idle factories, uninvested LF.

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Keynes's rejection of Say's Law

Say's Law – Supply creates its own Demand

→ Market forces can ensure full employment

Keynes:

Depression is contrary evidence.

Contrary to SL, Supply will *respond* to Demand:

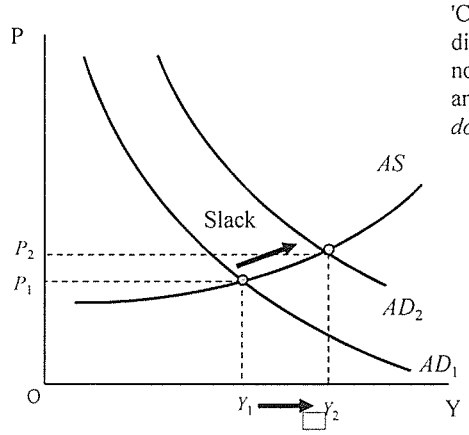
AD ↑ → FF will *respond* / will produce more

→ LD↑ → u↓

Conversely, AD↓ → LD↓ → u↑

22

Keynes's counter-attack in the AS/AD framework



'Classical dichotomy' does not hold; nominal and real variables *do* interact.

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Keynes's criticism of the classical policy of wage cuts

(1)W↑ → u↑ not observed: "Labour is not more truculent in the depression than in the boom – far from it." (GT)

(2) Wage-earners are also consumers.

→ W↓ → C↓ → AD↓ even further → downward spiral in Y.

i.e. Positive effect of W↓ (i.e. P↓ → competitiveness ↑, etc.) *more than offset* by negative effect of C↓ → AD↓

Net effect: wage cuts *deepen* recession!

(3) Level of employment not determined by wage bargain in any case:

→ All-round theoretical response to 'classical economics'

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The Multiplier effect

Far from agreeing that the budget must be balanced at all costs, Keynes argued that in recession deficit financing might be justified:

AD↑ has ***cumulative*** effect:

FF increase output → LD↑

→ FF pay more to HH – as W, and also as r, Rent, etc.

i.e. income of HH increases.

HH income ↑ → C↑ → FF can sell even more

→ LD↑ even further → another round of Y↑

→ process is repeated again.

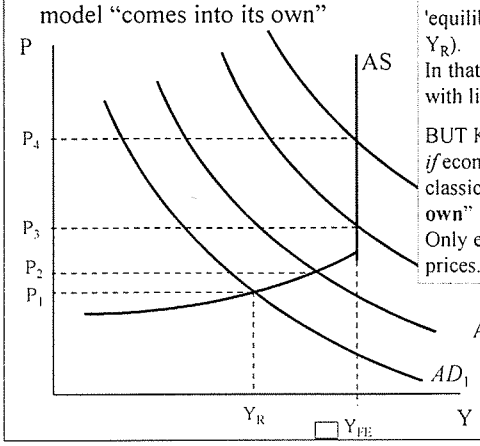
This repeated effect → a *multiplied* rise in income and employment

i.e. The initial stimulus leads to a **more than proportionate** effect

25

7. 3 "The prefix *general*".

Keynes: at Y_{FE}, classical model "comes into its own"



Keynesian approach:
Economy can slide into recession and stay there – i.e. 'equilibrium' at $Y < Y_{FE}$ (e.g. Y_R).
In that case, AD↑ can → Y↑ with little effect on P.

BUT Keynes *also* remarked: *if* economy is at Y_{FE}, then the classical model "**comes into its own**"
Only effect of AD↑ *would* be on prices.

26

Conclusions: **Macro and micro:**

- **Smith**: "What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom".
- **Jevons**: "the laws of the aggregate depend of course upon the laws applying to individual case."
- **Macro**: Fallacy of composition, etc.
  i.e. Aggregating the individual is not adequate.
  A **new branch of economic analysis** is needed.
- From **efficient allocation** of the resources being used to the question of **whether they are being used at all.**

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7.4 Two traditions in macroeconomics: *preview.*

Macro debates and macro turbulence

Intense debate (1) Keynes's attack on classical economics
Background: Great Depression.

Intense debate (2) S-side counter-attack against Keynesianism
Background: macroeconomic instability / stagflation of 1970s.

Dumbing down of debate? Attempts at 'consensus' / 'third way'
Background: relative macroeconomic stability since mid-1990s.

Current situation: Such consensus difficult to sustain?

Note also: **Macro debates and macro turbulence**

Intense debate (1) Keynes's attack on classical economics
Background: Great Depression.

Intense debate (2) S-side counter-attack against Keynesianism
Background: macroeconomic instability / stagflation of 1970s.

Dumbing down of debate? Attempts at 'consensus' / 'third way'
Background: relative macroeconomic stability since mid-1990s.

Current situation: Such consensus difficult to sustain?

7. KEYNES AND CLASSICAL ECONOMICS
– summary

7.1 The Great Depression and the classical response
Britain's commercial and financial dominance. World War I and aftermath. Conflict of goals; export recovery and strong pound. Wage flexibility. Collapse of world trade. Arguments against reflation.

7.2 Keynes's challenge to the classical approach
Effective demand; repudiation of Say's Law. Wages and output determination. Involuntary unemployment. Deficit financing. The multiplier.

7.3 "The prefix *general*"
"The classical theory comes into its own."

30

ECON1006. Topic 7: KEYNES. *Readings.*

Abbreviations:

GT: *The General Theory of Employment, Interest and Money*. London: Macmillan. 1936.

QJE 1937: "The general theory of employment". *Quarterly Journal of Economics* 1937: 212-23.

7.1 THE GREAT DEPRESSION AND THE CLASSICAL RESPONSE

[Keynes's term 'classical economics':] "The classical economists" was a name invented by Marx to cover Ricardo and James Mill and their predecessors, that is to say for the founders of the theory which culminated in the Ricardian economics. I have become accustomed, perhaps perpetrating a solecism, to include in "the classical school" the followers of Ricardo, those, that is to say, who adopted and perfected the theory of the Ricardian economics, including (for example) J. S. Mill, Marshall, Edgeworth and Prof. Pigou. (GT: 3, footnote.)

7.2 KEYNES'S CHALLENGE TO THE CLASSICAL APPROACH

["A long struggle to escape... ":] The composition of this book has been for the author a long struggle of escape, and so must the reading of it be for most readers if the author's assault upon them is to be successful,— a struggle of escape from habitual modes of thought and expression. The ideas which are here expressed so laboriously are extremely simple and should be obvious. The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds. (GT, Preface.)

[Say's Law:] From the time of Say and Ricardo the classical economists have taught that supply creates its own demand... The doctrine is never stated today in this crude form. Nevertheless it still underlies the whole classical theory, which would collapse without it. (GT: 18-19.)

[Effective demand, Ricardo, Spanish Inquisition, Malthus, Marx, 'underworld'.] The idea that we can safely neglect the aggregate demand function is fundamental to the Ricardian economics, which underlie what we have been taught for more than a century. Malthus, indeed, had vehemently opposed Ricardo's doctrine that it was impossible for effective demand to be deficient; but vainly... Ricardo conquered England as completely as the Holy Inquisition conquered Spain. Not only was his theory accepted by the city, by statesmen and by the academic world. But controversy ceased; the other point of view completely disappeared; it ceased to be discussed. The great puzzle of effective demand with which Malthus had wrestled vanished from economic literature. You will not find it mentioned even once in the whole works of Marshall, Edgeworth and Professor Pigou, from whose hands the classical theory has received its most mature embodiment. It could only live on furtively, below the surface, in the underworlds of Karl Marx, Silvio Gesell or Major Douglas. (GT: 32.)

[Attractions of classical economics:] The completeness of the Ricardian victory is something of a curiosity and a mystery. It must have been due to a complex of suitabilities in the doctrine to the environment into which it was projected. That it reached conclusions quite different from what the ordinary uninstructed person would expect, added, I suppose, to its intellectual prestige. That its teaching, translated into practice, was austere and often unpalatable, lent it virtue. That it was adapted to carry a vast and consistent logical superstructure, gave it beauty. That it could explain much social injustice and apparent cruelty as an inevitable incident in the scheme of progress, and the attempt to change such things as likely on the whole to do more harm than good, commended it to authority. That it afforded a measure of justification to the free activities of the individual capitalist, attracted to it the support of the dominant social force behind authority. (GT: 32-3.)

[Failure of classical theory in confronting economic realities:] But although the doctrine itself has remained unquestioned by orthodox economists up to a late date, its signal failure for purposes of scientific prediction has greatly impaired, in the course of time, the prestige of its practitioners. For professional economists, after Malthus, were apparently unmoved by the lack of correspondence between the results of their theory and the facts of observation;—a discrepancy which the ordinary man has not failed to observe, with the result of his growing unwillingness to accord to economists that measure of respect which he gives to other groups of scientists whose theoretical results are confirmed by observation when they are applied to the facts. (GT: 33.)

[Classical theory assumes out of existence the problem of insufficient demand:] The celebrated optimism of traditional economic theory, which has led to economists being looked upon as Candides, who, having left this world for the cultivation of their gardens, teach that all is for the best in the best of all possible worlds provided we will let well alone, is also to be traced, I think, to their having neglected to take account of the drag on prosperity which can be exercised by an insufficiency of effective demand. For there would obviously be a natural tendency towards the optimum employment of resources in a society which was functioning after the manner of the classical postulates. It may well be that the classical theory represents the way in which we should like our economy to behave. But to assume that it actually does so is to assume our difficulties away. (GT: 33-4.)

[Absolute necessity of demand stimulation argued through extravagant examples: (1) "Fill old bottles with banknotes... ":] If the Treasury were to fill old bottles

with banknotes, bury them at suitable depths in disused coalmines which are then filled up to the surface with town rubbish, and leave it to private enterprise on well-tried principles of *laissez faire* to dig the notes up again . . . there need be no more unemployment... It would indeed be more sensible to build houses and the like; but if there are political and practical difficulties in the way of this, the above would be better than nothing. (*GT*: 129.)

[(2) "Pull down the whole of South London":] There are today many wellwishers of their country who believe that the most useful thing which they and their neighbours can do to mend the situation is to save more than usual . . . Now in certain circumstances all this would be right, but in present circumstances it is quite wrong. Suppose we were to stop spending our incomes altogether and were to save the lot. Why, everyone would be out of work. And before long we would have no incomes to spend . . . Now is the time for municipalities to be busy and act with all kinds of sensible improvements . . . I read a few days ago of a proposal to drive a great new road, a broad boulevard, parallel to the Strand, on the south side of the Thames, as a new thoroughfare joining Westminster to the City . . . But I would like to see something bigger still. For example, why not pull down the whole of south London from Westminster to Greenwich, and make a good job of it . . . at the same time providing hundreds of acres of squares and avenues, parks and public spaces . . . Is it better that men should stand idle and miserable drawing the dole?[i]

[Cannot wait for long run – "all dead":] Long run is a misleading guide to current affairs. In the long run we are all dead.[ii]

[Involuntary unemployment:] In addition to 'frictional' unemployment, the [classical] postulate is also compatible with 'voluntary' unemployment due to the refusal or inability of a unit of labour, as a result of legislation or social practices or of combination for collective bargaining or of slow response to change or of mere human obstinacy, to accept a reward corresponding to the value of the product attributable to its marginal productivity. But these two categories of 'frictional' unemployment and 'voluntary' unemployment are comprehensive. The classical postulates do not admit of the possibility of the third category, which I shall define below as 'involuntary' unemployment... (GT: 6)

...Admittedly, more labour would, as a rule, be forthcoming at the existing money-wage if it were demanded. [But] the classical school... [argue] that, while the demand for labour at the existing money-wage may be satisfied before everyone willing to work at this wage is employed, this situation is due to an open or tacit agreement amongst workers not to work for less, and that if labour as a whole would agree to a reduction of money-wages more employment would be forthcoming. If this is the case, such unemployment, though apparently involuntary, is not strictly so, and ought to be included under the above category of 'voluntary' unemployment due to the effects of collective bargaining, etc. (GT: 7-8.)

[Classical theory and wage flexibility:] The Classical Theory has been accustomed to rest the supposedly self-adjusting character of the economic system on an assumed fluidity of money-wages; and, when there is rigidity, to lay on this rigidity the blame of maladjustment. (GT: 237.)

[Classical economics, money wages and the depression:] [T]he contention that the unemployment which characterises a depression is due to a refusal by labour to accept a reduction of money-wages is not clearly supported by the facts. It is not very plausible to assert that unemployment in the United States in 1932 was due either to labour obstinately refusing to accept a reduction of money-wages or to its obstinately demanding a real wage beyond what the productivity of the economic machine was capable of furnishing. Wide variations are experienced in the volume of employment without any apparent change either in the minimum real demands of labour or in its productivity. Labour is not more truculent in the depression than in the boom—far from it. Nor is its physical productivity less. These facts from experience are a prima facie ground for questioning the adequacy of the classical analysis. (GT: 9.)

[Classical economics, the wage bargain and the market-clearing real wage:] The traditional theory maintains... that the wage bargains between the entrepreneurs and the workers determine the real wage. (GT: 11.)

In assuming that the wage bargain determines the real wage the classical school have slipt in an illicit assumption... There may exist no expedient by which labour as a whole can reduce its real wage to a given figure by making revised money bargains with the entrepreneurs. This will be our contention. We shall endeavour to show that primarily it is certain other forces which determine the general level of real wages. (GT: 13.)

Every trade union will put up some resistance to a cut in money-wages, however small. But since no trade union would dream of striking on every occasion of a rise in the cost of living, they do not raise the obstacle to any increase in aggregate employment which is attributed to them by the classical school. (GT: 15.)

7.3 "THE PREFIX *GENERAL*"

[Classics apply to a 'special case' only:] I have called this book the *General Theory of Employment, Interest and Money*, placing the emphasis on the prefix *general*. The object of such a title is to contrast the character of my arguments and conclusions with those of the classical theory of the subject, upon which I was brought up and which dominates the economic thought, both practical and theoretical, of the governing and academic classes of this generation, as it has for a hundred years past. I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience.

[Classical economics "comes into its own":] Our criticism of the accepted classical theory of economics has consisted not so much in finding logical flaws in its analysis as in pointing out that its tacit assumptions are seldom or never satisfied, with the result that it cannot solve the economic problems of the actual world. But if our central controls succeed in establishing an aggregate volume of output corresponding to full employment as nearly as is practicable, the classical theory comes into its own again from this point onwards. (GT: 378.)

[Classical economics and the actual employment of the available resources:] Most treatises on the theory of value and production are primarily concerned with the distribution of a given volume of employed resources between different uses and with the conditions which, assuming the employment of this quantity of resources, determine their relative rewards and the relative values of their products.

The question, also, of the volume of the available resources, in the sense of the size of the employable population, the extent of natural wealth and the accumulated capital equipment, has often been treated descriptively. But the pure theory of what determines the actual employment of the available resources has seldom been examined in great detail. To say that it has not been examined at all would, of course, be absurd. For every discussion concerning fluctuations of employment, of which there have been many, has been concerned with it. I mean, not that the topic has been overlooked, but that the fundamental theory underlying it has been deemed so simple and obvious that it has received, at the most, a bare mention.

[Footnote:] For example, Prof. Pigou in the *Economics of Welfare*... writes (my italics): "Throughout this discussion, except when the contrary is expressly stated, the fact that some resources are generally unemployed against the will of the owners is ignored. *This does not affect the substance of the argument,* while it simplifies its exposition.". Thus... Prof. Pigou, in a book which is specifically directed to the problem of the national dividend, maintains that the same theory holds when there is some involuntary unemployment as in the case of full employment. (GT: 4-5.)

[From micro to macro:] He [Marshall] assumed, as Ricardo did, that the amounts of the factors of production in use were given and that the problem was to determine the way in which they would be used and their relative rewards. Edgeworth and Professor Pigou and other later and contemporary writers have embroidered and improved this theory by considering how different peculiarities in the shapes of the supply functions of the factors of production would affect matters, what will happen in conditions of monopoly and imperfect competition, how far social and individual advantage coincide, what are the special problems of exchange in an open system and the like. But these more recent writers like their predecessors were still dealing with a system in which the amount of the factors employed was given... (QJE 1937.)

[Keynes on the influence of ideas:] [T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil. (GT: 383-4.)

References besides GT and QJE 1937:

[i] Radio talk by Keynes, January 14 1931. Reprinted in *Essays in Persuasion.*

[ii] Keynes 1923: *A Tract on Monetary Reform*, ch. 3.

ECON1006. History of Economic Thought.
Topic 8. Overview and up-date (1): TWO TRADITIONS IN MACROECONOMICS. *Outline.*

8.1 Post-war Keynesian demand management

In the years following the publication of Keynes's *General Theory* in 1936, the orthodoxy changed, and, in the post-war period, macroeconomic theory and practice in the UK became dominated by Keynesianism, a textbook – and arguably debased – version of Keynes's theory which provided the theoretical underpinning for post-war demand management. This was a period of low unemployment and low inflation. However, the UK's growth rate was comparatively poor and the Keynesian policies were criticized by their opponents as 'stop-go'. With the intensification of the UK's balance of payments problems and the breakdown of the Phillips curve in the 1970s, criticisms of Keynesianism gained increasing influence in policy-making circles.

8.2 Classical revival: the monetarist critique of demand management

In the post-war period, monetary policy was assigned the subordinate role of 'accommodating' the effects of fiscal policy. Long-standing criticisms of this policy gained influence in the 1970s and, in Friedman's 'monetarism', were elaborated into an all-round theoretical critique of post-war Keynesianism. Friedman aimed to reestablish the fundamental principles of 'classical economics', though in a modified form: he conceded that interventionist monetary policy is, in a sense, 'effective', but argued that its effects are destabilizing, and, indeed, the principal cause of the economic cycle. Long and variable lags occur before macroeconomic interventions take effect, and its effects may be counter-productive; monetary policy should consequently be subject to rules rather than discretion. The theoretical features of monetarism included a new formulation of the long-run-short-run distinction based on the 'Adaptive Expectations Hypothesis'.

8.3 Rational expectations and supply-side economics

The 'Rational Expectations Revolution', based on a repudiation of Friedman's Adaptive Expectations Hypothesis, provided a theoretical basis for a restatement of classical principles in more extreme form as 'New Classical Macroeconomics'. This school of thought argued that monetary interventions, if anticipated, would be ineffective even in the short run due to instantaneous adaptation of expectations, and that, though a surprise intervention may have an effect, this offers no reliable basis for policy. This approach justified down-playing the recessionary effects of deflationary policy, and its adoption in the UK has been associated by its critics with the fact that the early 1980s recession was particularly severe in that country. A further 'supply-side' school was based on the concept of the 'Real Business Cycle', which adopted an even more dismissive approach to demand-side intervention, holding that fluctuations in output could in many cases be explained by wholly supply-side issues such as technological developments, oil price 'shocks', etc.

8.4 'New Keynesian' responses to the supply-side critique.

The questioning of the record of monetarism and its even more extreme supply-side offshoots led to a revival of criticism of excessive reliance on market forces, and, in turn, to a re-examination of Keynesian principles, though this time on 'microfoundations', with rigidities in the economy being explained by microeconomic models of nominal variables (wage contracts, price agreements, 'menu costs') and real wages (efficiency wages model, insider-outsider model). Current textbook macro largely displays this 'New Keynesian' character, which attempts to provide a 'consensus' that avoids the extremes of the previous supply-side theories and yet takes on board many of their criticisms of the former Keynesian policies for a one-sided reliance on demand-side interventions. It is notable that the intensity of macroeconomic debate has tended to coincide with periods of macroeconomic turbulence, as illustrated by the fact that such consensus is becoming increasingly difficult to sustain in the present period.

Textbook readings: Sloman and Wride (or previous Sloman editions): chapter 16 ("The roots of modern macroeconomics"); Rima 528-31 (monetarism).
Prescribed readings: Mostly from Snowdon and Vane, *A macroeconomics reader.*

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT. Hugh Goodacre.

8. Overview and up-date (1)

TWO TRADITIONS IN MACROECONOMICS

8.1 Post-war Keynesian demand management

8.2 Classical revival: the monetarist critique of demand management

8.3 Rational expectations and supply-side economics

8.4 'New Keynesian' responses to the supply-side critique.

Last three topics of the module: Overview and up-date sessions:

(1) Macroeconomics (Week 8).
(2) Monetary theory (Week 9).
(3) Trade theory (Week 10).

Seminar schedule → no Problem Sets on these topics.

Issues which are newly introduced in these sessions are not examined in Part A (compulsory) of the exam.

They are to give scope to those with wider background in areas of economics to draw on what they have learned elsewhere in their answers to the optional essay questions in Part B.

Main task for revision is to concentrate on Topics 1 to 7; these last three weeks are to consolidate and revise what has been learned, and add optional extra discussion for those with particular interest in these three topics.

8.1 Post-war demand management

The orthodoxy changes

Keynes as oppositionist vs. entrenched **classical orthodoxy**.
"Ricardo conquered England..."

Publication of GT [*EIM!*] (1936), World War 2, Treasury turnaround → Keynes led UK negotiations:

- for war-time **loans from US**
- for post-war **global reconstruction**
  1944 Bretton Woods → IMF, WB (IBRD), initial trade framework (→ GATT and eventually WTO).

'Keynesian***ism***' the **new orthodoxy** till mid-1970s. (K died 1946.)

Keynes:

Investment behaviour (principal cause of fluctuations) cannot be 'modelled' in simple way: expectations, mood (opti-/ pessimistic), 'animal spirits', etc.

BUT: Post-war Keynes*ians*

Phillips Curve appeared to be **stable** – a policy 'menu'.
Choose whether u or π is problem at given moment, and re- or de-flate accordingly.

Post-war Keynesian **Demand Management Policy:**

- Not only Fiscal Policy, as emphasised by Keynes, but also ***Monetary Policy***
- Not only expanding / 'reflating' economy in recession, but also contracting / '***deflating***' 'over-heated' economy.

UK demand management in post-war boom – *assessment.*

Could claim success?
e.g. 1950s-60:

- average π 3.8%
- average u 1.7%
- cyclical fluctuations comparatively small

BUT:

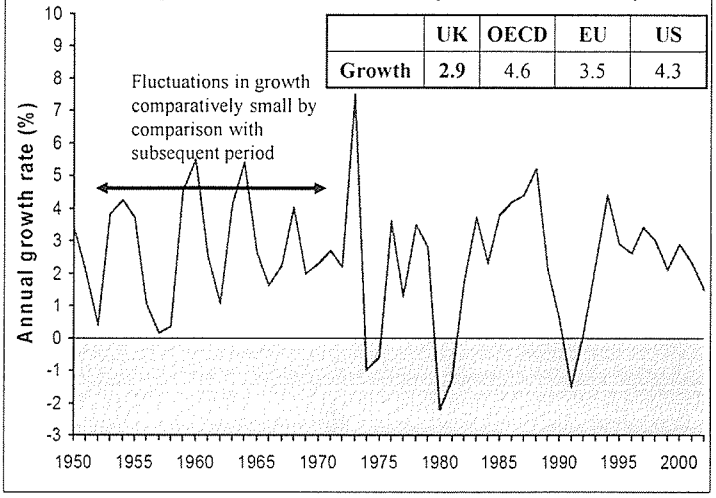
Just reflected favourable *global* conditions?
Relatively speaking, UK performance was *poor*.

By late 1960s, increasing problems / criticisms of UK macro policy:

(1) Comparatively poor growth rate.
(2) Conflict of policy goals: BOP and domestic cycle.
(3) Breakdown of Phillips Curve.

Problems of post-war DMP: (1) Growth positive but **relatively** low

	UK	OECD	EU	US
Growth	2.9	4.6	3.5	4.3



Problems of post-war DMP: (2) BOP and the domestic cycle.

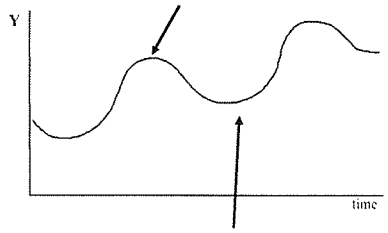
Critics called the policy 'stop-go!'

Excess Demand through economy growing too fast ('over-heating'):

→ **Inflationary** pressure

→ International **competitiveness** suffers → **BOP** deteriorates

→ **Deflationary** (contractionary) Fiscal and/or Monetary policy – **'STOP!'**

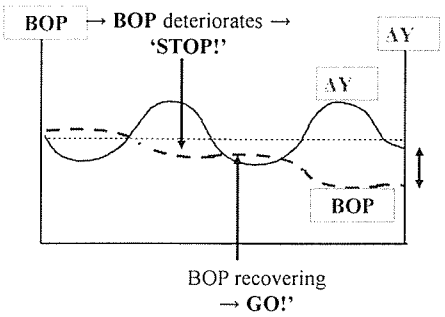


Deficient Demand / looming recession / threat of u↑

BOP (hopefully) sufficiently improved

→ **Reflationary** (expansionary) Fiscal and/or Monetary policy – **'GO!'**

Problems of post-war DMP: (2) BOP and the domestic cycle: Conflict of goals!

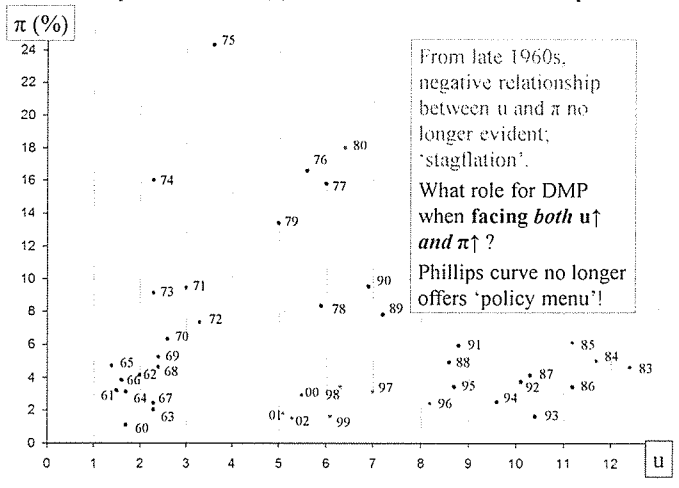


BUT: UK BOP: **long term deterioration.**

→ What to do when **BOTH** a BOP **AND** a low growth problem?

Conflict of goals!

Problems of post-war DMP: (3) Breakdown of the stable Phillips Curve



8.2 Classical revival: the monetarist critique of demand management

Keynesian view of Monetary Policy:

MP (ΔMS, Δi) a *less reliable* tool of DMP than FP (ΔG and / or ΔT):

Extra M may not be spent on real economic transactions.

May just → **speculation** or **hoarding** – **'Idle Balances'.**

Post-war Keynes*ian* DMP: MP subordinate to FP:

'Accommodating MP': G↑ → r↑ **BUT ALSO M↑**

Aim: **M↑** → **r↓** → net effect: r unchanged

G↑ is '**accommodated**' by M↑.

Criticism of this from Friedman / 'Chicago' school in US:

Called for **return to fundamentals of classical tradition**:

- Return to emphasis on **supply side** > DMP
- Return to call for ***laissez-faire*** > intervention

But little influence in post-war period.

Expectations, the LR and the SR

Keynes: emphasis on expectations; but unmodellable.

Friedman contrast: price expectations formally modelled:

Adaptive Expectations Hypothesis

Suppliers of Labour (i.e. wage-earners) base decisions (i.e. working more or less) on **expected** real wage, W / P^e

BUT P^e only adapts *gradually* for a discrete **time interval**:

$P\uparrow \rightarrow P > P^e \rightarrow W / P < W / P^e$ until $P = P^e$

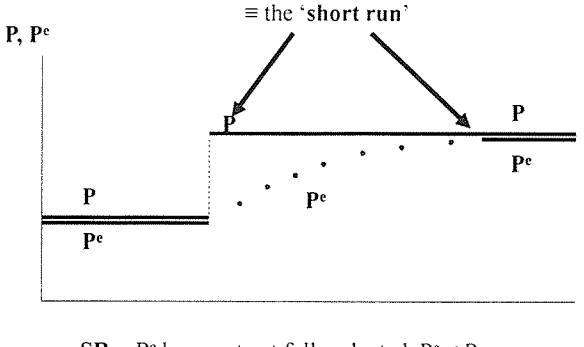
and conversely:

$P\downarrow \rightarrow P < P^e \rightarrow W / P > W / P^e$ until $P = P^e$

i.e. Wage-earners temporarily over- / under-estimate real wage.

Period in which P^e are adapting **defined as SR**; wage-earners **fooled**. When P^e have fully adapted, wage-earners supply the same amount of labour as at first – defined as '**natural rate**'.

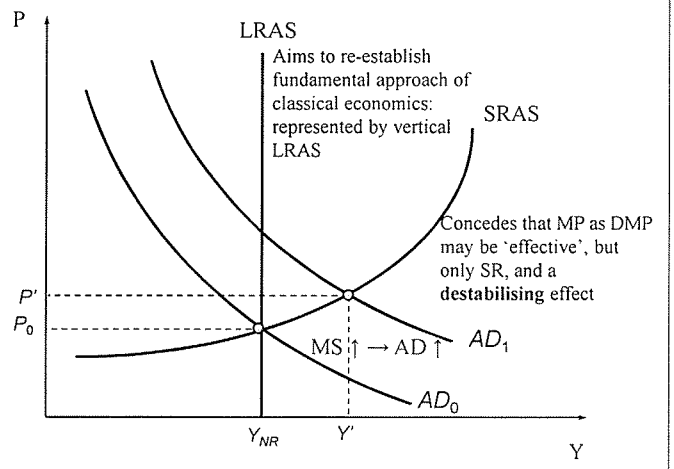
Wage-earners' price-expectations (P^e) adapt *gradually* to the actual level of prices (**P**), across a **series of time periods**, modelled as a **constant proportion** each time. e.g. in case of **under**-estimation:

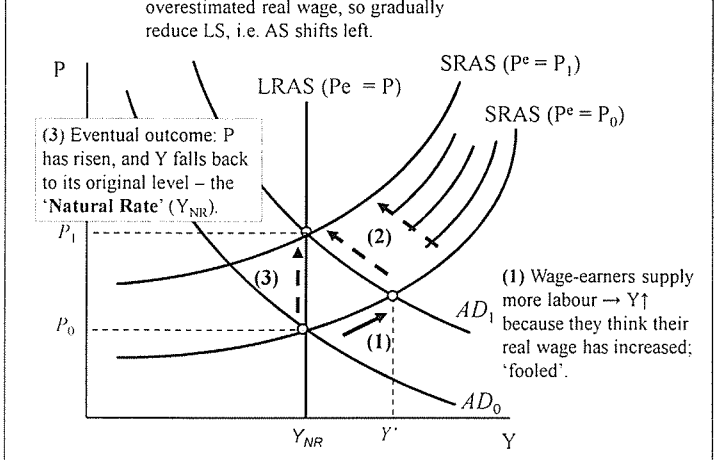


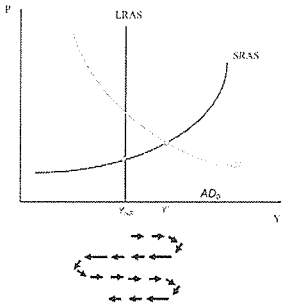
SR: P^e have not yet fully adapted: $P^e < P$.

LR: P^e have fully adapted: $P^e = P$.

Friedman's LR-SR distinction in the AS/AD framework







Monetary authorities **over-react** → overshooting → instability and **cycle**

No **LR** trade-off between u and π – '**Classical dichotomy**' between real and nominal variables / money neutrality – in **LR**.

Net result is just **inflation** and **instability**.

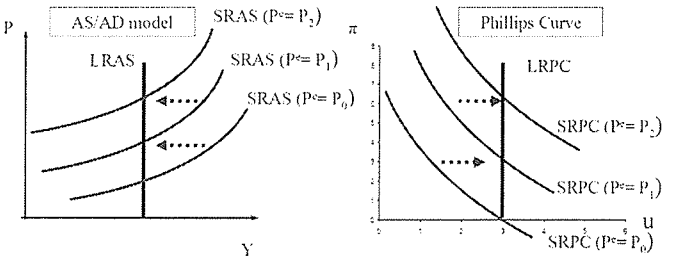
'Old' classical: Unique point of equilibrium is $\mathbf{Y_{FE}}$.

Friedman: '**Natural rate**':

(1) Is always *some* u; at equilibrium / self-sustaining level, u is defined as 'natural rate' – **NRU**.

(2) NRU is *not constant*; changes with changing labour market conditions, i.e. conditions on **SUPPLY** side.

Note: Friedman's formulation was i.t.o. vertical LR **PC** > LRAS:



Friedman: LR economic growth → ΔMS *is* necessary.

BUT: MS should be set in way that *minimises inflationary expectations*.

Governments **cannot be trusted** with discretion to do this: they have other motives ('political business cycle', etc.).

Discretionary MP has been **principal cause** of fluctuations

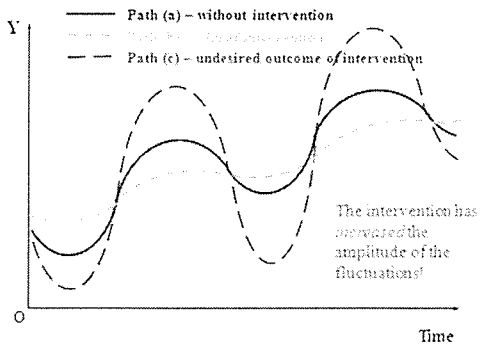
→ Monetary policy should be set by ***rules*** that **influence π^e:**

- clearly-identifiable
- publicly-announced
- credibly enforceable

e.g. in step with the trend rate of growth / administered by a monetary authority ***independent of government***.

Monetary policy *should* be taken seriously:
not for any ***good*** it might do
but for ***harm*** if misguidedly adopted as tool for DMP.

Fluctuations and lags



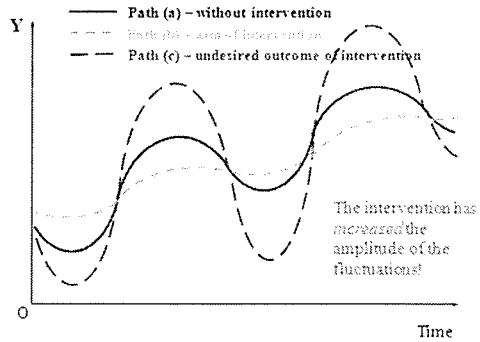
Unpredictable and variable '**lag**' before MS intervention takes effect:

macropolicies take time to *formulate*
take time to *implement*
take time to *influence economic activity*

→ DMP measures may take effect at wrong time

→ *increase* > reduce amplitude of fluctuations:

Fluctuations and lags



Unpredictable and variable '**lag**' before MS intervention takes effect:

macropolicies take time to *formulate*
take time to *implement*
take time to *influence economic activity*

→ DMP measures may take effect at wrong time

→ *increase* > reduce amplitude of fluctuations:

8.3 Rational Expectations and Supply-side theory.

'Rational Expectations Revolution':

Review: Assumptions of Friedman's **AEH**:

(1) P^e adjustment takes discrete time period – 'SR'.

(2) Adjustments all in same direction, i.e. error is *systematic*.

REH: Rejects both assumptions:

(1) Wage-earners are rational – use *all* relevant information (not just past forecast errors, as in AEH).

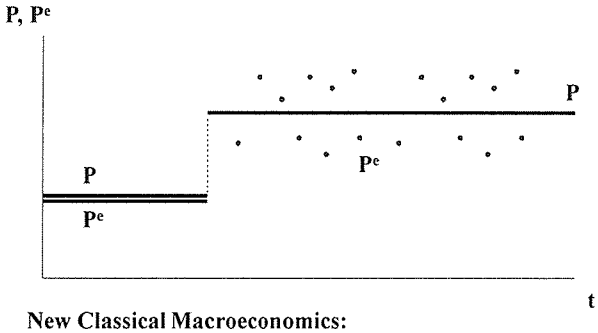
(2) Under-prediction in one time period just as likely to lead to *over*-prediction next time > another under-prediction!

Note: REH still acknowledges **Imperfect Information (II)**, i.e. expectations bound to be in error, but *not systematically so:*

- On average, predictions likely to be right, or at least not *systematically* wrong.

Expectations adjustment with **REH**:

Agents are in error (II), but *not systematically so*, as in AEH.

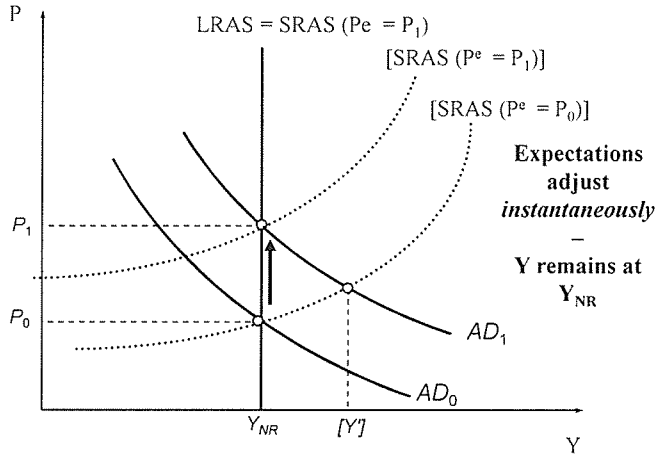


New Classical Macroeconomics:

(1) Markets clear very quickly – P and W are fully flexible.

(2) Expectations adjust almost instantaneously / REH

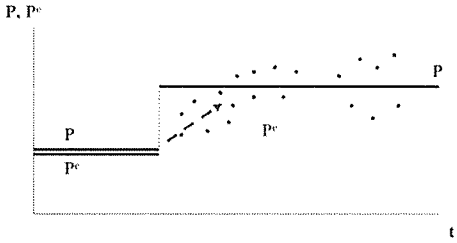
The effects of an increase in AD with RE (1) When ΔP is anticipated



New Classical Macroeconomics – the 'Surprise' Model

May be *some* occasions when governments *can* affect Y through MP:

If public is taken by **surprise**, e.g. ΔMS is *unanticipated*.



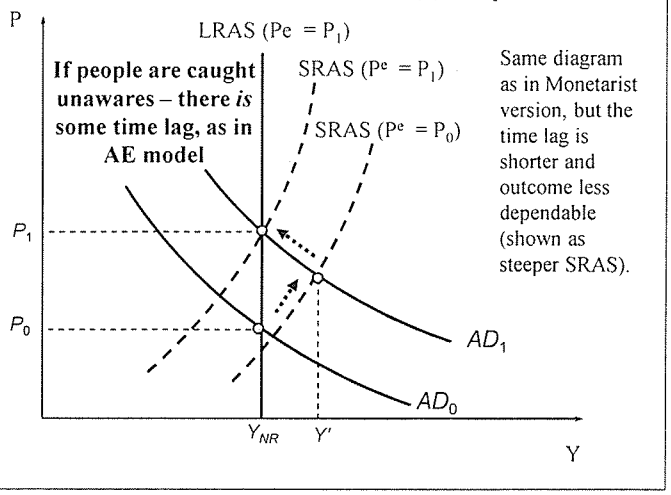
However, one-off effect unlikely to be repeatable (no longer surprising!).

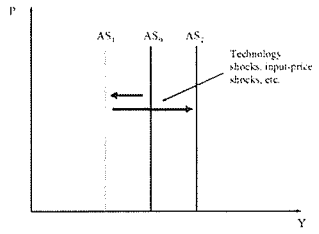
i.e. **AEH**: Governments can systematically fool people in SR.

REH: Governments usually cannot fool people **even in SR**.

Might with a surprise, but not a reliable policy instrument.

The effects of an increase in AD with RE (2) 'Surprise' model





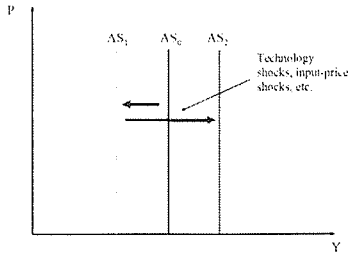
Real Business Cycle theory.

In NCM, ΔAD → no effect on Y; so how come fluctuations in Y exist??

RBC answer: each 'fluctuation' has its own explanation, usually S-Side, e.g.

- Technological 'shocks' (positive or negative)
- Changes in labour productivity
- Changes in input prices, e.g. 'oil shocks'
- (Might also be D shocks – change in tastes, etc.)

The most extreme S-side theory; D normally totally irrelevant to determination of Y.



Problems with RBC:

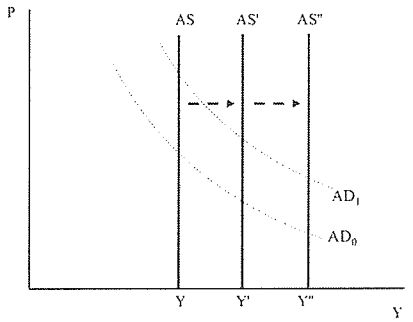
What real shocks are of sufficient magnitude to explain the very large ΔYs that occur?

OK for oil shocks, but what about 1930s recession?

Supply costs?? Technological shocks??

And might not technological developments be generated *in response* to ΔAD?

Supply-side approach



Government should only be concerned with supply side.

i.e. policies to encourage stability / **outward shifts in vertical AS**.

e.g. conditions in the labour market ('flexibility') extending competition, etc.

Abandon DMP: D looks after itself (i.e. Say's Law holds).

Examples of supply-side policies to free up market forces

- Reduce G – 'cuts'.
- Increase incentive to work through T↓.
- Reduce power of labour.
- Reduce UB; narrowing of gap between low W and UB → 'Poverty trap'.
- Encourage competition: Privatisation, Deregulation.
- 'Market relations' in the public sector.
- Free capital markets, free trade.
- Labour government 'third way' / S-side interventionism in labour market: more emphasis on training; link UB to obligation to look for work, etc.

Criticisms of excessive reliance on the market.

Markets / individual FF may not direct I towards **socially optimal** ends:

- e.g. FF may **lack motive** to maximise expenditure on R&D, training (trained employees may leave!), etc.

Markets may **distort investment,** due to nature of

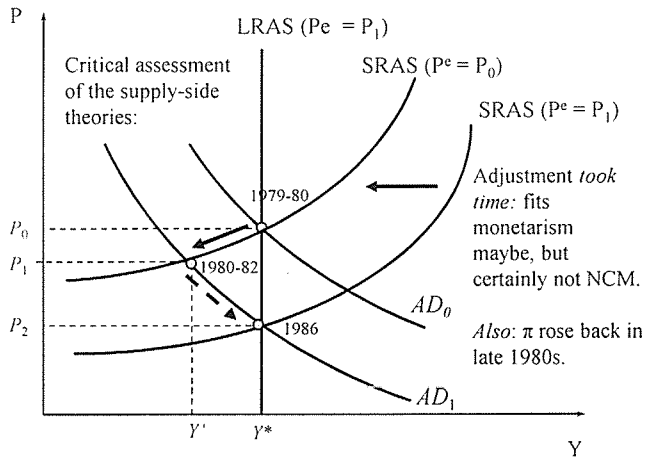
- Capital Markets (Stock Market, Bond Market)
- Foreign Exchange market

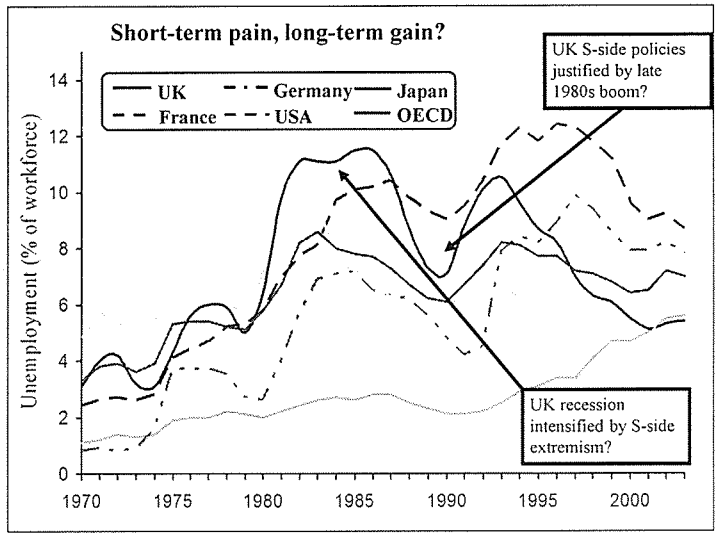
These are all subject **to violent SR movements** → encourage '**short-termism**'

Markets may inflict **unacceptable social costs**

- Social costs of market, e.g. high u, may be unacceptable to government / **electorate** → governments may bail out failing FF.

8.4 New Keynesian responses to the supply-side critique





NKM responses to S-side policies of Thatcher / Reagan period:

(1) u 'structural' > 'voluntary':

- Workers laid off from declining industries / manufacturing, etc., not eligible for jobs in rising service sector:
- Wrong age, location, sex, skills > excessive UB, etc.

(2) Claim was: **SR pain** but **LR gain** → justified early 1980s recession.
BUT (as seen):

The 'pain' of u was not just SR.

The 'gain' of the late 1980s was more like a 'bubble':

- Asset boom: house prices, stock market.
- In any case soon reversed by early 1990s recession

	Post-war Keynesianism	Classical revival	'New Keynesian' responses
Theoretical basis	Macro / Keynesianism	Micro / classical	'Consensus' macro: Keynesianism on 'Microfoundations'
Issues centralised	Fluctuations / cycle	Growth	Both fluctuations and growth
Time horizon	SR	LR	SR and LR
S-side or D-side	D	S	D and S
Goal	Stabilisation over the cycle	Improvement in Supply / increase Y_{NR}	Stabilisation and growth mutually reinforcing
Policy stance	Interventionist / Demand management	*Laissez-faire*	'S-side interventionism' and *laissez-faire* where possible

New Keynesian responses to S-side extremism

Aim: Reassert fundamentals of Keynesianism:

- Markets *fail*
- Say's Law does *not* apply
- QTM does *not* apply

But **up-date** return to Keynesianism with insights and methods from classical revival:

e.g. New microeconomic models of 'rigidities':

- Sticky W (Efficiency Wages, etc.)
- Sticky P (LR supply / purchase contracts, etc.).

i.e. Aims at 'consensus' approach, distinguished from both

- 'Stop-Go!' Keynesianism, criticized for neglecting S-side
- S-side extremism, criticized for
  - Neglect of D-side
  - Excessive reliance on market to solve S-side problems

Conclusions: **Alternating dominance of S-side and D-side approach**

School of thought		S-side or D-side
'Old' Classical / TV	S	S-side
Post-war Keynesianism	D	D-side
Friedman's Monetarism	S (D in SR only)	Reassertion of S-side, modified by discussion of SR D-side effects.
New Classical Macro	S (D in SR surprise only)	More extreme S-side; D-side effects confined to 'surprise' only.
Real Business Cycle Theory	S	Even more extreme S-side -- D-side discounted
'New Keynesian' macro	D (+S)	Reassertion of D-side, but incorporates aspects of S-side as well, while rejecting S-side extremism

8. TWO TRADITIONS IN MACROECONOMICS – *summary.*

8.1 Post-war Keynesian demand management
The orthodoxy changes. Keynes and Keynesianism. Post-war Keynesian demand management: assessment.

8.2 Classical revival: the monetarist critique of demand management
Accommodating monetary policy. Long run and short run: Adaptive Expectations. Fluctuations and lags.

8.3 Rational expectations and supply-side economics
Rational Expectations. New Classical Macroeconomics: anticipated and 'surprise' models. Inflation policy. Real Business Cycle theory.

8.4 'New Keynesian' responses to the supply-side critique
Criticisms of excessive reliance on the market. Short-termism, social costs. Keynesian theory on 'microfoundations': new explanations for rigidities. Alternating influence of the two traditions. Debate and macro turbulence.

ECON1006. Topic 8. Overview and up-date (1) TWO TRADITIONS IN MACROECONOMICS. *Readings.*

Note: Many of these quotations are from articles included in:

> Snowdon, B and Vane, H. R. (1997). *A macroeconomics reader*. London and New York: Routledge.

References to the pages in that volume (abbreviation SV) are given in the endnotes; asterisk (*) indicates that the volume includes the entire article cited.

8.1 POST-WAR KEYNESIAN DEMAND MANAGEMENT

[Keynes on intervention and the capitalist system:] For my part I think that capitalism, wisely managed, can probably be made more efficient for attaining economic ends than any alternative system yet in sight, but that in itself it is in many ways extremely objectionable. Our problem is to work out a social organization which shall be as efficient as possible without offending our notions of a satisfactory way of life.[1]

[The 1944 White Paper: proposals for demand management in the post-war economy; note fiscal emphasis:] It should be possible for the Government to maintain the stability of public investment when private investment is beginning to fall off at the onset of a depression. This may not be enough. For the purpose of maintaining general employment it is desirable that public investment should actually expand when private investment is declining and should contract in periods of boom... Speed here is crucial, for if a decline in demand can be caught quickly enough and corrected, a comparatively modest amount of compensating expenditure will be sufficient to restore the balance... The Government believe that in the past the power of public expenditure, skillfully applied, to check the onset of a depression has been under-estimated.[2]

[The Phillips Curve; note that original formulation was in terms of wage inflation, not price level inflation:] The statistical evidence... seems in general to support the hypothesis... that the rate of change of money wage rates can be explained by the level of unemployment and the rate of change of unemployment, except in or immediately after those years in which there is a sufficiently rapid rise in import prices to offset the tendency for increasing productivity to reduce the cost of living... These conclusions are of course tentative. There is need for much more detailed research into the relations between unemployment, wage rates, prices and productivity.[3]

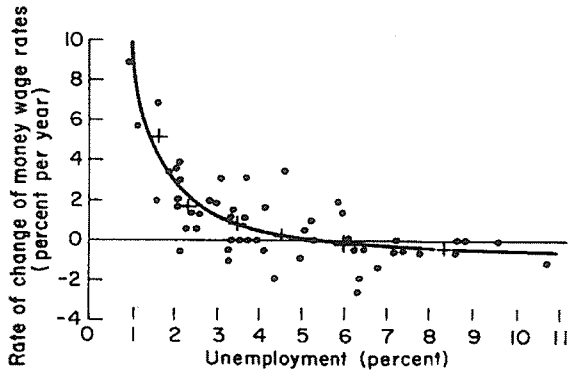


FIGURE 1. 1861–1913.

[Loasby asserts the impossibility of a fully specified macroeconomic model:] If one can summarize in one sentence the theory of employment set forth by Keynes in his [QJE] article of 1937, it is this: unemployment in a market economy is the result of ignorance too great to be borne. The fully-specified macroeconomic models miss the point – which is precisely that no model of this situation can be fully specified.[4]

[Shackle asserts the incompatibility of Keynes's theory with the concept of equilibrium:] The elemental core of Keynes' conception of economic society is uncertain expectation, and uncertain expectation is wholly incompatible and in conflict with the notion of equilibrium.[5]

[Victoria Chick on Keynes and Keynesianism:] The macroeconomics that has been developed after Keynes, though claiming inspiration from the *General Theory*, in my view has not, with some outstanding exceptions, been macroeconomics after the manner of Keynes – with the method and perspective and insight of Keynes...

I would go so far as to argue not only that Keynesian economics is no Macroeconomics After Keynes, but that it is not even macroeconomics! Consider the approach in any textbook... Flying in the face of what is (usually) said in introducing macroeconomics about the fallacy of composition, the equations representing individual behavior are regarded as relating to aggregates and given the simultaneous-solution treatment...

I believe passionately that the urge to simplify a theory, to reduce it to its component parts chiefly because these are easy to handle mechanically, is largely responsible for the unhappy state of the subject and of economic policy.[6]

8.2 THE MONETARIST CRITIQUE

[Friedman on monetary policy – "twice damned":] If liquidity preference is absolute or nearly so – as Keyes believed likely in times of heavy unemployment – interest rates cannot be lowered by monetary measures.

If investment and consumption are little affected by interest rates... lower interest rates, even if they could be achieved, would do little good. Monetary policy is twice damned... But there was available an alternative – fiscal policy. Government spending could make up for insufficient private investment. Tax reductions could undermine stubborn thriftiness.

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[1] *The end of laissez-faire.* 1924. SV1: 5.

[2] Quoted in "On different interpretations of the General Theory." Don Patinkin *Journal of Monetary Economics* (1990) 26, October, pp. 205-43. SV3*: 74.

[3] W. Phillips (1958) "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957". *Economica*, New Series, 25: 100. pp. 283-299.

[4] Brian J. Loasby. *Choice, complexity and ignorance*. Cambridge: Cambridge University Press. 1976. SV2: 42.

[5] Shackle, G. L. S. (1982). "Sir John Hicks' IS-LM: an explanation": a comment". *Journal of Post Keynesian Economics* 2: 435-8. SV3: 64.

[6] Victoria Chick (1983). *Macroeconomics after Keynes: a reconsideration of the* General Theory. Cambridge, Massachusetts; The MIT Press. SV4: 96

The wide acceptance of these views in the economics profession meant that for some two decades monetary policy was believed by all but a few reactionary souls to have been rendered obsolete by new economic knowledge. Money did not matter. Its only role was the minor one of keeping interest rates low, in order to hold down interest payments in the government budget... and maybe stimulate investment a bit to assist government spending in maintaining a high level of aggregate demand.[7]

[Friedman on "danger of assigning to monetary policy a larger role than it can perform":] [In the late 'twenties] the chief roles assigned monetary policy were to promote price stability and to preserve the gold standard... Today, primacy is assigned to the promotion of full employment, with the prevention of inflation a continuing but definitely secondary objective...

I stress nonetheless the similarity between the views that prevailed in the late 'twenties and those that prevail today because I fear that, now as then, ... we are in danger of assigning to monetary policy a larger role than it can perform, in danger of asking it to accomplish tasks that it cannot achieve...

[Friedman on Mill's comment that money is a machine which is only influential when it gets out of order:] My own studies of monetary history have made me extremely sympathetic to the oft-quoted, much reviled, and as widely misunderstood, comment by John Stuart Mill. "There cannot...," he wrote, "be intrinsically a more insignificant thing, in the economy of society, than money; except in the character of the contrivance for sparing time and labour. It is a machine for doing quickly and commodiously, what would be done, though less quickly and commodiously, without it: and like many other kinds of machinery, it only exerts a distinct and independent influence of its own when it gets out of order"...

But money has one feature that these other machines do not share. Because it is so pervasive, when it gets out of order, it throws a monkey wrench into the operation of all the other machines...

The first and most important lesson that history teaches about what monetary policy can do – and it is a lesson of the most profound importance – is that monetary policy can prevent money itself from being a major source of economic disturbance.

[Friedman on fluctuations and lags:] The reason for the propensity to overreact seems clear: the failure of monetary authorities to allow for the delay between their actions and the subsequent effects on the economy. They tend to determine their actions by today's conditions – but their actions will affect the economy only six or nine or twelve or fifteen months later. Hence they feel impelled to step on the brake, or the accelerator, as the case may be, too hard. ....

We simply do not know enough to be able to recognize minor disturbances when they occur or to be able to predict either what their effects will be with any precision or what monetary policy is required to offset their effects... In this area particularly the best is likely to be the enemy of the good...

[Friedman advocates rules rather than discretion:] My own prescription is still that that monetary authority go all the way in avoiding such swings by adopting publicly the policy of achieving a steady rate of growth in a specified money total.

... steady monetary growth would provide a monetary climate favourable to the effective operation of those basic forces of enterprise, ingenuity, invention, hard work, and thrift that are the true springs of economic growth. That is the most that we can ask from monetary policy at our present stage of knowledge. But that much – and it is a great deal – is clearly within our reach.

[7] This and the following quotations all from "The role of monetary policy." Milton Friedman. *American Economic Review* (1968) 58, March, pp. 1-17 . SV7*.

8.3 SUPPLY-SIDE ECONOMICS

[Nelson and Plosser: 'real business cycle' theory – focus should be on real variables rather than monetary disturbances:] We conclude that macroeconomic models that focus on monetary disturbances as a source of purely transitory (stationary) fluctuations may never be successful in explaining a very large fraction of output fluctuations and that stochastic variation due to real factors is an essential element of any model of economic fluctuations.[8]

[Lucas on post-war macroeconomic policy:] For the applied economist, the confident and apparently successful application of Keynesian principles to economic policy which occurred in the United States in the 1960's was an event of incomparable significance and satisfaction. These principles led to a set of simple, quantitative relationships between fiscal policy and economic activity generally, the basic logic of which could be (and was) explained to the general public and which could be applied to yield improvements in economic performance benefiting everyone...

In the present decade [i.e. the 1980s], the US economy has undergone its first major depression since the 1930's to the accompaniment of inflation rates in excess of 10 per cent per annum. These events have been transmitted (by consent of the governments involved) to other advanced countries and in many cases have been amplified. ...they were accompanied by massive government budget deficits and high rates of monetary expansion, policies which, although bearing an admitted risk of inflation, promised, according to Keynesian doctrine rapid real growth and low rates of unemployment.[9]

[Lucas: outright repudiation of Keynesianism:] That these predictions were widely incorrect and that the doctrine on which they were based is fundamentally flawed are now simple matters of fact, involving no novelties in economic theory. The task now facing contemporary students of the business cycle is to sort through the wreckage, determining which feature of that remarkable intellectual event called the Keynesian Revolution can be salvaged and put to good use and which others must be discarded...Our intention is to establish that the difficulties are fatal, that modern macroeconomic models are of no value in guiding policy, and

[8] Nelson, C. and Plosser, C. I. (1982) "Trends and random walks in macroeconomic time series: some evidence and implications". *Journal of Monetary Economics* 10: 139-62. SV:15.

[9] "After Keynesian macroeconomics". Robert E. Lucas and Thomas J. Sargent. In *After the Phillips Curve: Persistence of High Inflation and High Unemployment*. (1978) Boston, MA: Federal Reserve Bank of Boston, pp. 49-72. SV11*: 270.

that this condition will not be remedied by modification along any line which is currently being pursued.[10]

[Prescott on the policy implication of real business cycle theory:] The policy implication of this research is that costly efforts at stabilization are likely to be counterproductive. Economic fluctuations are optimal responses to uncertainty in the rate of technological change. However, this does not imply that the amount of technological change is optimal or invariant to policy. The average rate of technological change varies much both over time within a country and across national economies. What is needed is an understanding of the factors that determine the average rate at which technology advances. Such a theory surely will depend on the institutional arrangements societies adopt. If policies adopted to stabilize the economy reduce the average rate of technological change, then stabilization policy is costly. To summarize, attention should be focused not on fluctuations in output but rather on determinants of the average rate of technological advance.[11]

[Summers on the standpoint of real business cycle theorists towards Keynesianism:] According to the views espoused by enthusiastic proponents of real business-cycle theories, astrology and Keynesian economics are in many ways similar: both lack scientific support, both are premised on the relevance of variables that are in fact irrelevant, both are built on a superstructure of nonoperational and ill-defined concepts, and both are harmless only when they are ineffectual.[12]

[Summers criticizes 'real business cycle' theory:] Even at this late date, economists are much better at analyzing the optimal response of a single economic agent to changing conditions than they are at analyzing the equilibria that will result when diverse agents interact. This unfortunate truth helps to explain why macroeconomics has found the task of controlling, predicting, or even explaining economic fluctuations so difficult. Improvement in the track record of macroeconomics will require the development of theories that can explain why exchange sometimes works well and other times breaks down. Nothing could be more counterproductive in this regard than a lengthy professional detour into the analysis of stochastic Robinson Crusoes.[13]

[Plosser on post-war Keynesian demand management:] The 1960s were a time of great optimism for macroeconomists. Many economists viewed the business cycle as dead. The Keynesian model was the reigning paradigm and it provided all the necessary instructions for manipulating the levers of monetary and fiscal policy to control aggregate demand. Inflation occurred if aggregate demand was stimulated "excessively" and unemployment arose if demand was "insufficient." The only dilemma faced by policymakers was determining the most desirable location along this inflation-unemployment tradeoff or Phillips curve. The remaining intellectual challenge was to establish coherent microeconomic foundations for the aggregate behavioral relations posited by the Keynesian framework, but this was broadly regarded as a detail that should not deter policymakers in their efforts to "stabilize" the economy.

The return of the business cycle in the 1970s after almost a decade of economic expansion, and the accompanying high rates of inflation, came as a rude awakening for many economists. It became increasingly apparent that the basic Keynesian framework was not the appropriate vehicle for understanding what happens during a business cycle nor did it seem capable of providing the empirically correct answers to questions involving changes in the economic environment or changes in monetary or fiscal policy. The view that Keynesian economics was an empirical success even if it lacked sound theoretical foundations could no longer be taken seriously.[14]

[Mankiw outlines 'real business cycle' theory:] The debate over the source and propagation of economic fluctuations rages as fiercely today as it did 50 years ago in the aftermath of Keynes's *The General Theory* and in the midst of the Great Depression. Today, as then, there are two schools of thought. The classical school emphasizes the optimization of private economic actors, the adjustment of relative prices to equate supply and demand, and the efficiency of unfettered markets. The Keynesian school believes that understanding economic fluctuations requires not just studying the intricacies of general equilibrium, but also appreciating the possibility of market failure on a grand scale. Real business cycle theory is the latest incarnation of the classical view of economic fluctuations. It assumes that there are large random fluctuations in the rate of technological change. In response to these fluctuations, individuals rationally alter their levels of labor supply and consumption. The business cycle is, according to this theory, the natural and efficient response of the economy to changes in the available production technology.[15]

[Lucas pronounces the death of Keynesian economics:] One cannot find good under-forty economists who identify themselves or their work as Keynesian. Indeed, people often take offence if referred to as Keynesians. At research seminars, people don't take Keynesian theorising seriously any more; the audience starts to whisper and giggle at one another.[16]

8.4 NEW KEYNESIAN RESPONSES TO THE SUPPLY-SIDE CRITIQUE

[Blinder outlines the "world" of New Keynesian macroeconomics:] Decision variables, including nominal prices and wages, are inertial. Markets often equilibrate with excess supply. So, in particular, involuntary unemployment is common and firms have chronic excess capacity. At least within some range, the economy's equilibrium can be changed

[10] *Ibid.*

[11] "Theory ahead of business cycle measurement". Edward C. Prescott. *Federal Reserve Bank of Minneapolis Quarterly Review* (1986) Fall, pp. 9-22. SV15*: 385.

[12] "Some skeptical observations on real business cycle theory". Lawrence H. Summers. *Federal Reserve Bank of Minneapolis Quarterly Review* (1986) Fall, pp. 23-7. SV16*: 389.

[13] *Ibid.*: 394.

[14] "Understanding real business cycles." Charles I. Plosser *Journal of Economic Perspectives* (1989) 3, Summer, pp. 51-77. SV17*: 396.

[15] "Real business cycles: a new Keynesian perspective." N. Gregory Mankiw *Journal of Economic Perspectives* (1989) 3, Summer, pp. 79-90. SV18*: 425.

[16] "The death of Keynesian economics". *Issues and Ideas.* Winter 1980. Chicago: University of Chicago. SV: 445.

by demand management policies because there is no natural rate...

This world is different in every particular from the world envisioned by the new classical economics. But its theoretical foundations are no less strong, and perhaps stronger, which is why Keynesian economics now seems to be on the ascendancy in academia. More importantly, it sounds more like the world we live in, which is why some of us find new Keynesian theorizing so hopeful.[17]

[Laidler on macroeconomic 'revolutions':] Macroeconomics is prone to 'revolutions' – intellectual upheaval in which some new idea or ideas claiming to establish fresh and valid insights into the workings of the economic system sweep away a prevailing orthodoxy. Since the mid-1930s the 'Keynesian revolution' has overwhelmed 'classical economics' so-called, to be succeeded in turn by a 'monetarist revolution' which seemed to overthrow 'Keynesian' economics. Since the early 1970s 'monetarism' has in turn yielded to a 'new-classical revolution' which self-consciously, and much more thoroughly than monetarism, has sought to reestablish macroeconomics on foundations that bear a close resemblance to those of certain strands in pre-Keynesian economics. In every case, the superiority of the 'new' approach has undoubtedly been oversold by its adherents, but, at the same time, insights and tools of lasting value have also been added to the corpus of economic knowledge.[18]

[Mankiw on the two traditions in macroeconomics:] In some ways, the history of macroeconomic thought seems like a pendulum swinging between two views of the economy. On the right is the classical view of a well-functioning economy; on the left is the Keynesian view of an economy fraught with market failure. The Great Depression of the 1930s swung the pendulum decisively from the right to the left, and Keynes could plausibly call classical economics 'misleading and disastrous'. The new classical economics of the 1970s swung the pendulum back to the right, and Robert Lucas could plausibly proclaim the 'death of Keynesian economics'. The new Keynesian economics of the 1980s swung the pendulum back toward the left (at least somewhat), and today one can plausibly say that Keynesian economics has been reincarnated.

One might be tempted to conclude from these developments that macroeconomics does not make progress, that it is destined to oscillate between two irreconcilable extremes. Yet one can also take a more sanguine view. The new classical revolution of the 1970s left an indelible mark on the way macroeconomists of all stripes think about the economy, just as the Keynesian revolution of the 1930s did before it. New Keynesian economics is far different from old Keynesian economics – so different, in fact, that today the label 'Keynesian' may generate more confusion than understanding. With new Keynesians looking so much like old classicals, perhaps we should conclude that the term 'Keynesian' has out-lived its usefulness. Perhaps we need a new label to describe the school of macroeconomics that accepts the existence of involuntary unemployment, monetary non-neutrality, and sticky wages and prices. Until a new label is found, however, we can safely say that Keynesian economics is alive and well.[19]

[Wicksell on opposing views in economics:] There is no single doctrine taken to be a scientific truth without the diametrically opposed view being similarly upheld by authors of high repute . . . in other fields of science these conflicts usually come to an end . . . It is only in the field of economics that the state of war seems to persist and remain permanent.[20]

[Robinson on the irreconcilability of differences regarding macroeconomic policy:] [O]n questions of policy the differences can never be resolved. Even such an apparently simple problem as, for instance, the extension of public works as a remedy for unemployment, is found to give rise to violent conflicts of interest... Revolutionaries who regard unemployment as only one of the evils of a system of private enterprise are not anxious for capitalist governments to learn the trick of reducing fluctuations in trade... The adherents of *laissez-faire*, on the other hand, fear that, if it once became clear to the public that state interference can reduce unemployment, the public might begin to think that state interference could do much else besides.[21]

[First use of the word 'stagflation':] We now have the worst of both worlds – not just inflation on the one side or stagnation on the other, but both of them together. We have a sort of 'stagflation' situation.[22]

[Title of Friedman article in Time Magazine:] "We Are All Keynesians Now".[23]
[Letter from Friedman to Time Magazine about this title:] Sir: You quote me [Dec. 31] as saying: "We are all Keynesians now." The quotation is correct, but taken out of context. As best I can recall it, the context was: "In one sense, we are all Keynesians now; in another, nobody is any longer a Keynesian." The second half is at least as important as the first.[24]

[17] "The fall and rise of Keynesian economics". Alan S. Blinder *Economic Record* (1988) December, pp. 278-94. SV5*: 130

[18] "Monetarism: an interpretation and an assessment". David Laidler *Economic Journal* (1981) 91, March, pp. 1-28. SV9*: (cited SV: 17).

[19] "The reincarnation of Keynesian economics". N. Gregory Mankiw *European Economic Review* (1992) 36, April, pp. 559-65. SV19*: 450.

[20] Knut Wicksell. "Ends and means in economics." In *Selected Papers on Economic Theory*. Ed. E Lindahl. London: Allen and Unwin. 1958. SV: 452.

[21] Joan Robinson (1937). *Introduction to the theory of employment*. London: Macmillan. SV: 20.

[22] Iain Macleod, Conservative party conference, 1965.

[23] Title of article by Friedman in *Time Magazine*. December 31, 1965.

[24] Letter to *Time Magazine*. February 4 1966.

ECON1006. History of Economic Thought.
Topic 9. Overview and up-date (2): MONETARY ECONOMICS. *Outline.*

9.1 The Quantity Theory of Money and early modern monetary theory – *review*

Price inflation associated with the influx of precious metals into Europe from the Americas in the sixteenth century led to early formulations of the Quantity Theory of Money, i.e. the idea that the effect of a change in money supply is limited to a proportionate change in the price level. This idea appeared to undermine the arguments in favour of a bullionist policy. However, 'mercantilists' argued that, just as too little money was a hindrance to trade, so also, conversely, an increase in the money supply could "quicken" trade, i.e. increase the number of transactions taking place, thus neutralizing inflationary pressure. Note that both these arguments assume that the velocity of circulation of money is constant, as may be shown by representing them in terms of Fisher's 1912 'Equation of Exchange' (MV = PT).

9.2 The Equation of Exchange as Money Demand

The 'Cambridge' version of the equation of exchange addressed the question of the level of the holding of money balances, i.e. not velocity of circulation considered directly, but its inverse (the 'Cambridge k'), thus reformulating the equation from a simple identity into a theory of economic behavior, the theory of 'money demand'. Note that the same constancy assumption applies to this 'k' as to the velocity of circulation in former monetary theories.

9.3 Keynesian monetary theory

Keynes took the analysis of the 'Cambridge k' further, arguing that it is not constant, but varies with the interest rate, so that the quantity theory of money does not hold. This is because money is demanded not only to carry out transactions ('transactions demand'); there is also a 'speculative demand', due to the fact that money may also be held as an alternative to holding other financial assets (from among which he singled out, in particular, bonds), and demand for these varies with interest rates. Since interest rates vary cyclically, 'k' is not constant. Moreover, it is not only speculative demand which varies: since expectations of market conditions also affect investment decisions, transactions demand is unpredictable and volatile. Consequently, the classical market-clearing assumption of the loanable funds model does not hold: investment may not be interest-rate elastic, and investments and savings may not be equated through interest rate adjustment.

9.4 Friedman: the Quantity Theory of Money restated

Friedman, as part of his project to reestablish the fundamental principles of 'classical economics', formulated a 'restatement' of the Quantity Theory of Money based on the argument that the demand for money is stable. Rejecting Keynes's focus on the influence on money demand of the inverse relation between bond prices and interest rates, Friedman argued that money demand is affected by other assets besides bonds, that that their relation to interest rates is not in every case negative; indeed, these various relations net out, so that money demand is overall inelastic with respect to interest rates. With 'k', and thus also its inverse, the velocity of circulation, rendered constant, the Quantity Theory of Money holds.

Textbook readings: Revise: Rima: 33 (mercantilism); 39-40 (quantity theory of money). Rima 528-31 (monetarism). From Keynes's *General Theory*, and his 1937 article in the *Quarterly Journal of Economics.*

Prescribed readings: From Keynes, Friedman, etc.

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT.

9. Overview and up-date (2) MONETARY THEORY

9.1 Early modern monetary theory – *review*

9.2 The Equation of Exchange as Money Demand

9.3 Keynesian monetary theory

9.4 Friedman: the Quantity Theory of Money restated

1

Quantity Theory of Money – *review.*

Price level changes proportionately with money supply.

Equation of Exchange (Fisher 1912):

MV = PT

M	Money supply / total amount of money in the economy
P	Price level
T	Transactions (within a given time period – see below)
V	Velocity of Circulation: The number of times per year that a given unit of currency (e.g. £1) is spent on the goods and services that make up GDP.

Usually discussed in terms of transactions *in a given year*, i.e. National Income (Y), thus:

MV = PY – 'Income Equation of Exchange'

2

Overview and preview:

QTM and two traditions in macroeconomics:

Assumptions of 'classical economics':

V is stable and Y_{FE} is unique point of equilibrium.

→ MV = PY can be written **P = V/Y.M – QTM holds.**

Challenged by Keynes – hoarding, 'Liquidity Trap', etc.

Policy implications

- Classical economics: uses QTM as argument against demand-side / monetary policy as aspect of DMP.
- In particular, expansionary MP futile: only consequence is inflation.

3

The Quantity Theory of Money -- *preview*

Fisher EE: MV = PT

Classical assumptions: V is constant, Y_{FE} is unique equilibrium.

→ P = V/Y.M – QTM holds.

Cambridge: $M^D = kPY$

Reformulates QTM as theory of money demand.

k (i.e. inverse of V) is constant → QTM holds.

Keynes: $M^D = k(r).PY$

k *not* constant (speculation, uncertainty, etc.) → QTM does *not* hold.

Note: Focus on relation between M^D and return on bonds (r_B).

Friedman: $M^D = k(r_B, r_1 \ldots r_n).PY^P$

i.e. k determined NOT ONLY by r_B, BUT ALSO $r_1 \ldots r_n$: rates of return (explicit or implicit) on *other assets besides bonds.*

These influences net out against each other → stabilizes k → QTM holds.

Note also: Y defined as Y^P → stabilises MD_{TR}.

4

9.1 Early modern monetary theory.

Topical issue in early modern period: influx of precious metals from Americas in 16th century → rise in prices.

- → first clear statements of QTM, i.e. M↑ → P↑

Problem for bullionists: this would mean price inflation, whereas, even for Mun, etc., more gold is good.

But mercantilist argument: this inflationary pressure would be neutralised:

- Lack of M (i.e. gold, silver) is an obstacle to trade.
- Equivalently, more M "quickens trade" / "drives trade", i.e. stimulates an increase in transactions (T).

5

Quantity Theory of Money (QTM) in early modern period, *contd*

'Quickening' / 'driving' trade in terms of Fisher (1911) Equation of Exchange:

Assume V = V, (as was normally assumed), we have:

M.V = P.T so that P = V .M/T

Gold / silver from Americas → $M_1 > M_0$

BUT this "quickens trade" → $T_1 > T_0$

i.e. Denominator increase of denominator of M/T as well as numerator.

→ Inflationary pressure is mitigated; at the limit eliminated:

i.e. If M and T increase **proportionately**, then at the limit:

$M_1/T_1 = M_0/T_0 \rightarrow P_1 = M_1/T_1.V = M_0/T_0.V = P_0$

6

Petty's suggestion that V could be measured DIRECTLY.

Petty suggests that V could be measured directly if enough data were available on transactions payments.

He assumes V depends on frequency of payments of income:

- Estimates annual expense as £40m and assumes this is equal to income.
- If all income payments were weekly, as normal for wage-earners, then V would need to be 52, so £40m/52, or less than £1m, would be needed to 'drive the trade' of the nation.
- If all payments were quarterly, as rent and tax payments were, then £40m/4 would be needed, i.e. £10m.

Petty assumes a mixture of the two; crudely calculates:

- £10m + £1m = £11m.
- Halve this, and we have £5 ½ m, which will be enough to 'drive trade'.

7

Velocity of circulation and national income accounts today.

Not measured directly (as by Petty); just use Equation of Exchange:

Data for P	Price Index
	(Consumer Price Index, Retail Price Index, etc.)
Data for M	Money Supply (*Problem*: M0? M1? M4?, etc.)
Data for T	Transactions within a given year
	i.e. Y (National Income)

$M.V = P.Y \rightarrow V = P.Y / M$

We have data for P, Y and M → we just 'read off' what V must be.

i.e. V given as an **identity**; not measured directly.

8

9.1 Early modern monetary theory – *review from Topic 1.*

9.2. The QTM as a theory of money demand ('Cambridge' version).

Cambridge version: Late Marshall / early Keynes:

Reformulates QTM as **theory of money demand.**

Shifts focus:

from:

determinants of V (institutional / frequency of payments, etc.)

to:

determinants of people's **decisions** to **hold money** / 'money balances' rather than spend it – **'money demand'**.

9

Cambridge version, *contd*

Identical to Fisher EE algebraically:

$k = 1/V$ – just the inverse!

where k is the proportion of PY that is held as M:

'Factor of proportionality' / 'Marshallian' or 'Cambridge' k.

But substituted into EE, k shifts the focus onto determinants of money balances, i.e. **money demand**:

$$M^D = kPY$$

Advantage: EE explained in terms of **economic behaviour / decisions** regarding use of money.

> V as a simple identity / 'truism', as in Fisher EE.

But **still k = k** ; irrational to increase money balances beyond transactions needs, i.e. to hold money as asset.

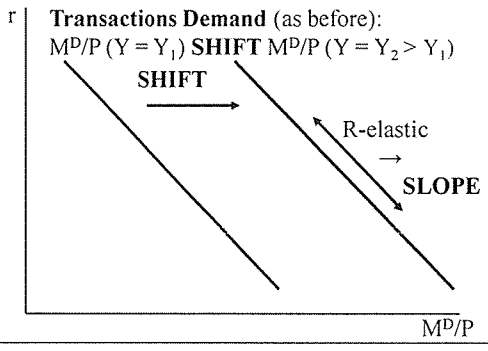
10

3. Keynes's monetary theory.

There is still Transactions Demand, so MD still shifts with ΔY.

But there is *also* now **Speculative Demand**:

MD_{SP} is **interest-rate elastic**: MD curve has a **slope**.



Speculative Demand: Δr affects decisions on holding of M balances; may be rational to hold 'idle' balances; r-elastic → **SLOPE**

Keynes: k **NOT** constant: varies with *interest rate*:

$M^D = k(r).PY$

→ $P = 1/k(r).M$, i.e. QTM does *not* hold.

Variations in k defined as variations in **'liquidity preference'**.

Three motives for holding money / preferring liquidity:

Transactions Demand – i.e. the classical / 'obvious' motive.

- Still assumed a constant proportion of P.Y, as in Fisher EE.

Precautionary Demand – extension of transactions demand.

Speculative Demand – Keynes's innovation:

- Reaction to uncertainty about direction of interest rates, **expectations** of market conditions, etc.
- Money held as asset for this reason may be rational.

12

Keynes: k not constant → QTM does not hold →

ΔMS may not primarily affect P, as in QTM.

'Idle balances', hoarding may reflect *rational* decisions at micro level.

- **BUT** with *macro* consequences.
- In particular, monetary policy may become impotent – monetary expansion merely falls into 'Liquidity Trap'.

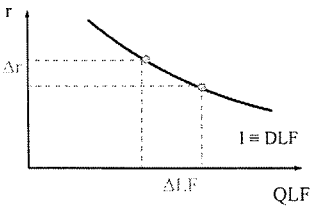
i.e. Money market no longer compartmentalised from real economy (as in **'classical dichotomy'**).

Money no longer **neutral**; plays *active* part in real outcomes.

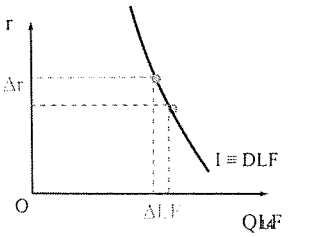
13

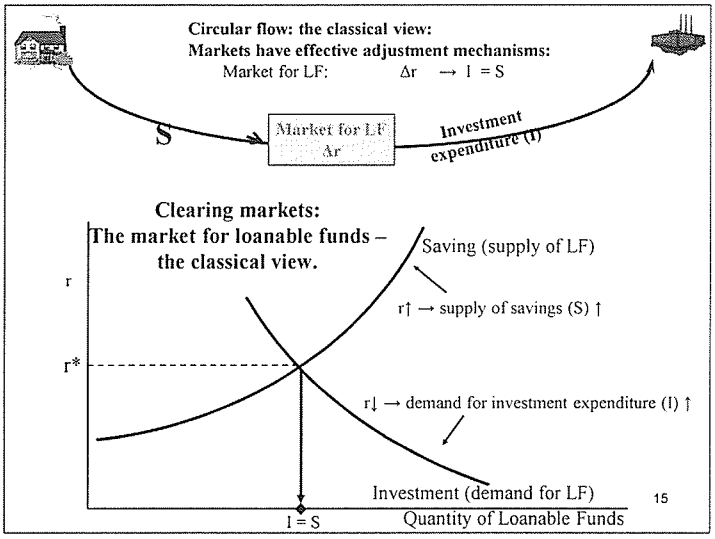
ALSO: Instability of Transactions Demand, particularly for Investment Expenditure

Classical view:
I is highly **interest-rate elastic**:
Small change in r → large / market-clearing change in QLF demanded.



Keynesian view:
Investment decisions likely to be **long term**, not cyclical.
e.g. long term **expectations** of profitability.
→ Main considerations is not fluctuations in r, which are SR.
i.e. I is likely to be quite **'interest rate inelastic'**:
Change in r may → little change in QLF demanded.





15

Keynes on volatility of investment

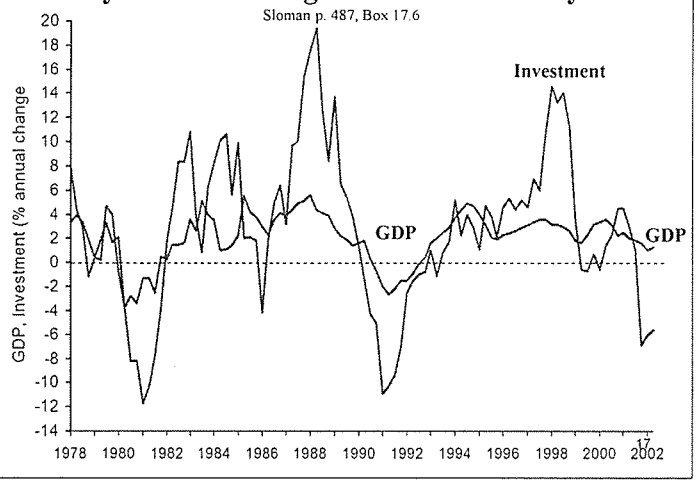
Components of AD:
- C + I + G + (X – M)

Of all these, Keynes saw I as the **most volatile**:
- Sensitive to changes in **expectations** of investors
- Such expectations **cannot be modeled simply**, e.g. as rational / proportional response to Δr:
  Future is *unknowable*.
- May be **waves of optimism and pessimism**: 'animal spirits'

Thus Transactions Demand varies / is non-constant, as well as speculative demand.

16

Volatility of Investment greater than Volatility of GDP



17

9.4 Friedman: the Quantity Theory of Money restated.

Friedman's 'monetarism: key elements (interconnected):

New theoretical distinction between SR and LR – *review*:
- SR: period when expectations have not fully adapted.
- LR: employment, output, etc., reach 'natural' level.

A restatement of the Quantity Theory of Money – *preview*:
- Money demand fairly constant.
- Active MP is destabilising; set MP rules not discretion.

18

The Quantity Theory of Money restated

Keynes: MD is **unstable** / interventionist MP necessary.

Friedman's counter-arguments: Stability of MD:

(1) **Transactions demand: Permanent Income Hypothesis.**
LR consumption behaviour: saving / dis-saving smoothes expenditure:
→ reflects LR / 'permanent' income > fluctuations in Y.
→ Stabilises MD_{TR}.

(2) '**Speculative demand**': r is **relatively insignificant** in determining MD.
Does affect money-versus-bonds decision, as in Keynes.
BUT: There are also influences from various **other** assets besides bonds: consumer durables (house), shares, etc.
These influences net out against each other.
→ MD is **overall interest-rate-inelastic**

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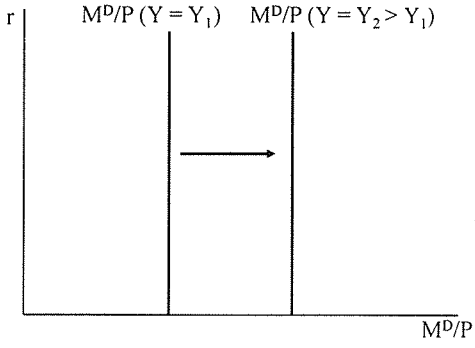
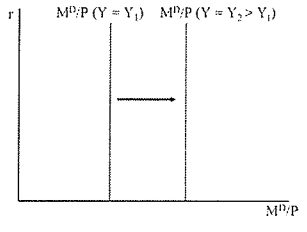
Money demand: 'old' and 'Cambridge' view:
MD is **Transactions Demand** only – just shifts with ΔY:
M Balances are '**active**' only.

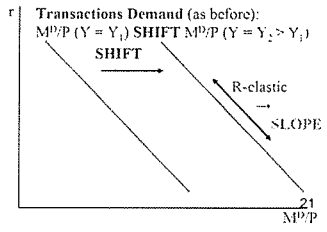


20

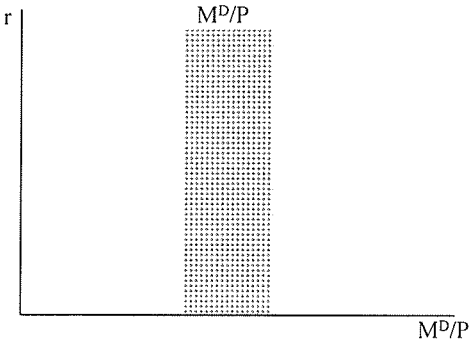
Money demand:
'Old' and 'Cambridge' view:
- Just shifts with Y (i.e. Transactions Demand only).
- Independent of r

Keynes:
- Still shifts with Y (Trans. Demand).
- But also varies with r (Spec. Demand).





Money demand: Friedman / Monetarist view:
MD is quite stable in LR – the various influences net out



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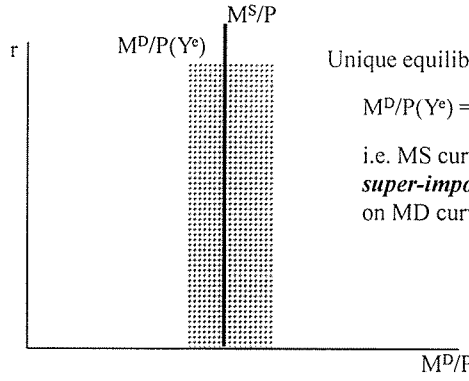
Monetary policy: Monetarist view:
Money market equilibrium with monetarist assumptions:
- MS exogenous – set by monetary authority.
- MD a stable function of income.



Unique equilibrium:

$M^D/P(Y^e) = M^S/P$

i.e. MS curve ***super-imposed*** on MD curve.

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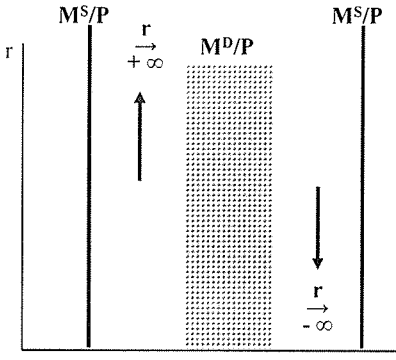
Disequilibrium in money market, i.e. MS < or > MD:
- r rise (fall) without limit, i.e. r ***undetermined*** in money market.
- upward / downward pressure on investment as r rise above / fall below 'Marginal Efficiency of Capital'.
- I is interest-rate elastic → **destabilisation of Y.**



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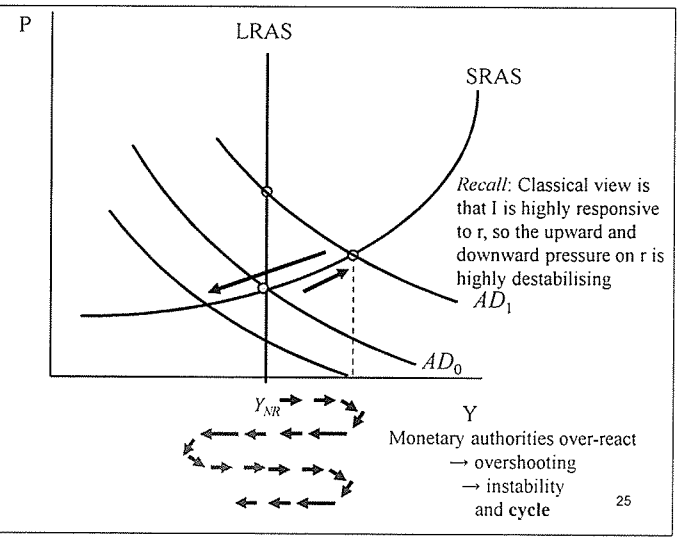


Recall: Classical view is that I is highly responsive to r, so the upward and downward pressure on r is highly destabilising

Monetary authorities over-react → overshooting → instability and **cycle**

Friedman: LR economic growth → ΔMS *is* necessary.

BUT: MS should be set in way that *minimises inflationary expectations*.

Governments **cannot be trusted** with discretion to do this: they have other motives ('political business cycle', etc.).

Discretionary MP has been **principal cause** of fluctuations

→ Monetary policy should be set by ***rules*** that **influence π^e:**

- clearly-identifiable
- publicly-announced
- credibly enforceable

e.g. in step with the trend rate of growth / administered by a monetary authority ***independent of government***.

Monetary policy *should* be taken seriously:
not for any ***good*** it might do
but for ***harm*** if misguidedly adopted as tool for DMP.

Two traditions in macro:

Keynes	**Monetarist critique**–*preview*
Things go wrong / markets 'fail' / 'stick'.	True in SR, but still self-adjusting in LR
Failure of AD → question of whether resources are used at all, rather than optimal allocation.	Reassert S-side; allocation of available resources still the fundamental issue.
Money is an active element in the economy, unlike in 'classical dichotomy'; effect of QTM is to treat economy as 'barter' only, with M just a *numéraire*.	True in SR, but intervention to take advantage of this is de-stabilising; QTM / classical dichotomy / neutrality of M holds in LR.

Conclusions: **Alternating dominance of S-side and D-side approach**

School of thought		**S-side or D-side**
'Old' Classical / TV	S	S-side
Post-war Keynesianism	D	D-side
Friedman's Monetarism	S (D in SR only)	Reassertion of S-side, modified by discussion of SR D-side effects.
New Classical Macro	S (D in SR surprise only)	More extreme S-side; D-side effects confined to 'surprise' only.
Real Business Cycle Theory	S	Even more extreme S-side -- D-side discounted
'New Keynesian' macro	D (+S)	Reassertion of D-side, but incorporates aspects of S-side as well, while rejecting S-side extremism

9. Overview and up-date (2) MONETARY THEORY – summary.

9.1 Early modern monetary theory

Arguments against and for bullionism. Velocity of circulation and its measurement.

9.2 The Equation of Exchange as Money Demand

Equation of exchange: Fisher, Cambridge.

9.3 Keynes: Money, interest, investment and expectations.

Keynes and loanable funds model. Expectations and volatility of investment.

9.4 Friedman: the Quantity Theory of Money restated.

Rules and discretion.

ECON1006. History of Economic Thought.

Topic 9. Overview and up-date: MONETARY ECONOMICS. *Readings.*

9.1 The Quantity Theory of Money and early modern monetary theory.

See Topic 1.2

9.2 The Equation of Exchange as Money Demand

9.3 Keynesian monetary theory.

[Speculative demand for money:] In any given state of expectation there is in the minds of the public a certain potentiality towards holding cash beyond what is required by the transactions-motive or the precautionary-motive, which will realise itself in actual cash-holdings in a degree which depends on the terms on which the monetary authority is willing to create cash....

Corresponding to the quantity of money created by the monetary authority, there will, therefore, be *cet. par.* a determinate rate of interest or, more strictly, a determinate complex of rates of interest for debts of different maturities. (GT: 205.)

[Holding money as a store of wealth:] Money.... is a store of wealth... But in the world of the classical economy, what an insane use to which to put it! For it is a recognized characteristic of money as a store of wealth that it is barren; whereas practically every other form of storing wealth yields some interest or profit. Why should anyone outside a lunatic asylum wish to use money as a store of wealth?

Because, partly on reasonable and partly on instinctive grounds, our desire to hold Money as a store of wealth is a barometer of the degree of our distrust of our own calculations and conventions concerning the future... The possession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of the degree of our disquietude... (QJE 1937.)

[Hoarding primarily affects interest rates, not prices:] The significance of this characteristic of money has usually been overlooked... For what has attracted attention has been the quantity of money which has been hoarded; and importance has been attached to this because it has been supposed to have a direct proportionate effect on the price-level through affecting the velocity of circulation. But... fluctuations in the degree of confidence are capable of having quite a different effect, namely, in modifying not the amount that is actually hoarded, but the amount of the premium which has to be offered to induce people not to hoard. And changes in the propensity to hoard, or in the state of liquidity-preference as I have called it, primarily affect, not prices, but the rate of interest... (QJE 1937.)

[Expectations, risk and uncertainty:] At any given time facts and expectations were assumed to be given in a definite and calculable form; and risks, of which, though admitted, not much notice was taken, were supposed to be capable of an exact actuarial computation. The calculus of probability, though mention of it was kept in the background, was supposed to be capable of reducing uncertainty to the same calculable status as that of certainty itself...

This theory might work very well in a world in which economic goods were necessarily consumed within a short interval of their being produced. But it requires, I suggest, considerable amendment if it is to be applied to a world in which the accumulation of wealth for an indefinitely postponed future is an important factor...

By "uncertain" knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty; nor is the prospect of a Victory bond being drawn. Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealth-owners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know...

I accuse the classical economic theory of being itself one of these pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future. (QJE 1937.)

[Professional investment as beauty competition:] Professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not a case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees. (GT: 156.)

[Speculation:] If I may be allowed to appropriate the term speculation for the activity of forecasting the psychology of the market, and the term enterprise for the activity of forecasting the prospective yield of assets over their whole life, it is by no means always the case that speculation predominates over enterprise. As the organisation of investment markets improves, the risk of the predominance of speculation does, however, increase. In one of the greatest investment markets in the world, namely, New York, the influence of speculation (in the above sense) is enormous. Even outside the field of finance, Americans are apt to be unduly interested in discovering what average opinion believes average opinion to be; and this national weakness finds its nemesis in the stock market. It is rare, one is told, for an American to invest, as many Englishmen still do, "for income"; and he will not readily purchase an

investment except in the hope of capital appreciation. This is only another way of saying that, when he purchases an investment, the American is attaching his hopes, not so much to its prospective yield, as to a favourable change in the conventional basis of valuation, i.e. that he is, in the above sense, a speculator. Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of laissez-faire capitalism — which is not surprising, if I am right in thinking that the best brains of Wall Street have been in fact directed towards a different object. (GT: 158-9.)

9.4 Friedman: the Quantity Theory of Money restated

[Friedman on the Quantity Theory of Money:] There is perhaps no other empirical relation in economics that has been observed to recur so uniformly under so wide a variety of circumstances as the relation between substantial changes over short periods in the stock of money and in prices; the one is invariably linked with the other and is in the same direction; this uniformity is, I suspect, of the same order as many of the uniformities that form the basis of the physical sciences... This very stability and regularity contributed to the downfall of the quantity theory, for it was overstated and expressed in unduly simple form; the numerical value of the velocity itself, whether income or transactions, was treated as a natural "constant." Now this it is not... The studies in this volume... are premised on a stability and regularity in monetary relations of a more sophisticated form than a numerically constant velocity. And they make, I believe, an important contribution toward extracting this stability and regularity, toward isolating the numerical "constants" of monetary behavior.[1]

[1] Friedman, M. "The Quantity Theory of Money – a restatement". In: *Studies in the Quantity Theory of Money*, edited by M. Friedman. Chicago: University of Chicago Press. 1956.

ECON1006. History of Economic Thought.
Topic 10. Overview and up-date (3): TRADE THEORY. *Lecture outline.*

10.1 'English' classical political economy and the gains from trade – *review.*
i.e. Revise: 2.3 The benefits of trade: from Mun to Smith, and 5.3 Ricardo and resource allocation: comparative advantage.

Adam Smith concurred with the Physiocrats in their call for free trade, but elaborated it into a far more wide-ranging critique of the 'commercial school', in which he argued the case for countries to specialise rather than aim for self-reliance. However, international trade only played a secondary role in his overall political economy; productive resources should be accumulated to the greatest possible extent in the domestic sphere, and only diverted into international trade as a 'vent for surplus'. Ricardo, in his theory of comparative advantage, shifted the emphasis decisively onto the allocational, or efficiency, effects of international division of labour, his motivation being to reinforce his arguments for lifting the Corn Laws, as a measure to lower the price of the principal wage good. Ricardo's theory has served as a reference point for much of trade theory ever since, largely negatively, by considering the effects of lifting the extremely restrictive assumptions on which it relies.

10.2 'Late-comers': arguments for protection – *review. i. e. Revise*: 5.4.

The first critique of the argument of the 'English' political economists in favor of free trade originated in the US, and was developed into an all-round argument for the protection of infant industries by the German journalist Friedrich List. 'Late-comers', he argued, need to protect a few 'high class progressive industries', whose 'energy' would spread to other sectors of the economy – the 'infant industries' argument.

10.3 From post-war Keynesianism to Washington Consensus.

The International Financial Institutions were established at Bretton Woods in a climate of opinion relatively favourable to pro-development policies. However, the trade order established under GATT, by its across-the-board restrictions on trade protection, fostered a long-term decline in the commodity terms of trade. In response, a movement for a New International Economic Order arose, and, during the period of high oil prices following the 1973-4 oil crisis, the industrialised countries were forced to accept an interruption to this trend. However, changes in the international balance of power in the mid-1980s allowed the IFIs, and the industrialised countries generally, to roll back the economic power of commodity-exporters and to impose policies reflecting a so-called Washington Consensus, the international dimension of the supply-side turn in domestic macroeconomics.

10.4 'Post Washington Consensus' and current trade issues.

When the pendulum swung away from supply-side extremes to 'New Keynesianism', the international reflection was the so-called 'Post Washington Consensus', which applied 'New Keynesian' concepts to issues of development. It was emphasised, for example, that the theory of comparative advantage only held on the basis of the classical full-employment assumption, and there was a revival of Listian arguments, re-formulated on the basic of microeconomic concepts, such as externalities, positive informational spillovers, etc. This approach was taken up in international trade negotiations and provided theoretical underpinning for the 'Doha Round' of trade negotiations. Meanwhile, positions reflecting non-Western currents of thought began to gain standing, in pace with changes in the global pattern of distribution of economic activity and wealth.

Textbook readings: Rima: 115-7 (Smith), 161-4 (Ricardo), 175-80 (John Stuart Mill).
Prescribed readings from Smith, Ricardo, List, Marshall, Stiglitz, Chang, etc.

UCL ECON1006. HISTORY OF ECONOMIC THOUGHT.

10. Overview and up-date (3)

TRADE THEORY.

10.1 'English' classical political economy and the gains from trade -- *review.*

Revise: 2.3 The benefits of trade: from Mun to Smith
5.3 Ricardo and resource allocation: comparative advantage.

10.2 Trade and 'late-comers': arguments for protection-- *review.*

Revise: 5.4.

10.3 From post-war Keynesianism to Washington Consensus.

10.4 'Post Washington Consensus' and current trade issues.

10.1 'English' classical political economy and the gains from trade.

The benefits of trade: from Mun to Smith, *i.e. Review Topic 2.3.*

Mun: trade as a **zero sum game.**

Classical trade theory: the first stage:

Physiocrats:

- Free trade in agricultural products: *"Laissez-faire, laissez-passer!"*

Adam Smith.

- Specialization better than self-sufficiency.

'English' CPE – the second stage: Ricardo and comparative advantage., *i.e. Review Topic 5.3.*

	Labourers for a year to produce a given quantity of	
	Wine	Cloth
Portugal	80	90
England	120	100

Contrast with Smith's simple gains from trade (absolute advantage):

Smith: no numerical example, but might have been, e.g.

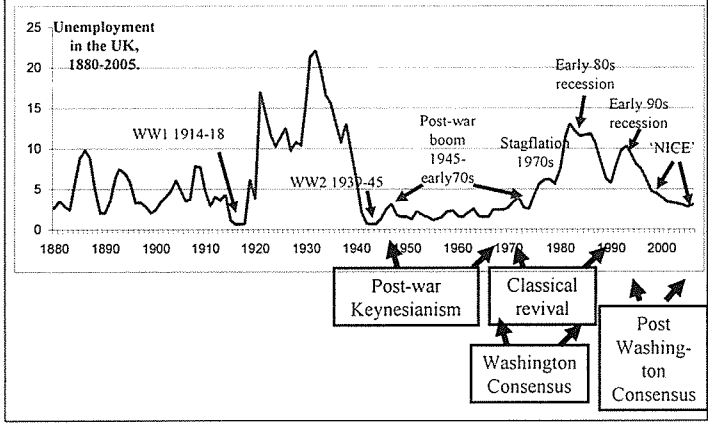
	Labourers for a year to produce a given quantity / 'unit'	
	Wine	Cloth
Portugal	100	120
England	120	100

All this shows is the simpler idea that specialization is better than self-sufficiency.

	S/D	Ideology	Trade	Intellectual tradition
'Classical economics'	S	*Laissez-faire*	Free trade (Britain)	'English' Classical political economy; Smith, Ricardo
			Protection (US, Germany)	Hamilton, List
Post-war consensus	D	Tolerance of intervention	Some tolerance of protection	Keynes / Keynesianism
Washington Consensus	S	*Laissez-faire*	Free trade	Classical revival, Friedman, neoliberalism
Post Washington Consensus	S *and* D?	Market economy *and* some intervention?	Free trade *and* some protection (for 'sequencing')	'Consensus' between the two [Western] traditions? 'New Keynesianism'; Stiglitz, etc.
Beyond PWC?	—	Intervention not 'second best'?	Protection not 'second best'?	Non-Western traditions? Beijing? Experience of socialist period? Revival of NIEO issues?

10.2 Trade and 'late-comers': arguments for protection– *review* 5.4.

10.3 From post-war Keynesianism to Washington Consensus.



The post-war economic order: (1) Fiscal and monetary policy, 1944-75.

(a) Industrialised countries.

- DMP / sustain global demand / prevent new Depression.
- Deficit financing OK if economy slows down.
- Consensus always uneasy:
  - **Europe**: State intervention -- prestige high: Soviet 5-year plans, war-time planning in Western Europe.
  - **US**: less positive about intervention / active DMP.

(b) Developing countries. Consensus relatively favourable:

- Sustaining global demand
- IMF: Deficit financing (on global scale); opposite of its role later!

The post-war economic order: (2) Trade policy, 1944-75.

Recall: ITO → GATT → (eventually) WTO

- Reduce tariffs / prevent new breakdown in trade.
- BUT: powerful US protectionist lobbies.

Deteriorating commodity terms of trade (TOT): P_X / P_M

Example: Say we have country where:

90% of its exports are coffee.

90% of its imports consist of agricultural machinery.

i.e. Its TOT clearly dominated by $P_{coffee} / P_{machinery}$

Now suppose P_{coffee} slumps but $P_{machinery}$ soars.

→ TOT suffers a drastic deterioration.

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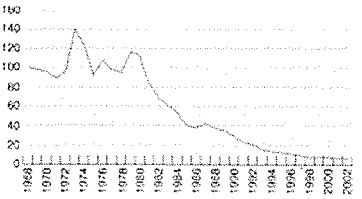
Deteriorating commodity TOT:
'Prebisch-Singer Hypothesis'.

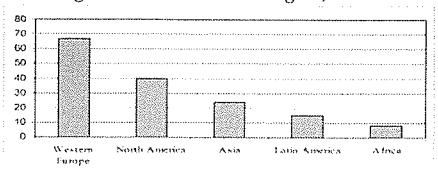
e.g. Real agricultural raw material prices, 1968-2002



Recall: Ricardo's range of TOTs: 0.89:1, plausibly simplified to 1:1 → both countries benefit equally.

Contrast the **much wider range** (and volatility) in this real data, which rises to 1.4:1, but then falls to 1:14.

Percentage of trade within own region, 2002:



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Pressure for a New International Economic Order, 1970s.

From early 1960s: newly independent countries enter UN, etc.

→ International institutions had to respond / take development issues on board:

1968-1981: Declared aim of World Bank was to alleviate world poverty.

(From early 1980s, focus shifted to debt management.)

1986 / Uruguay (8th) round:

Declared aim was to bring developing countries into the institutions' decision-making process.

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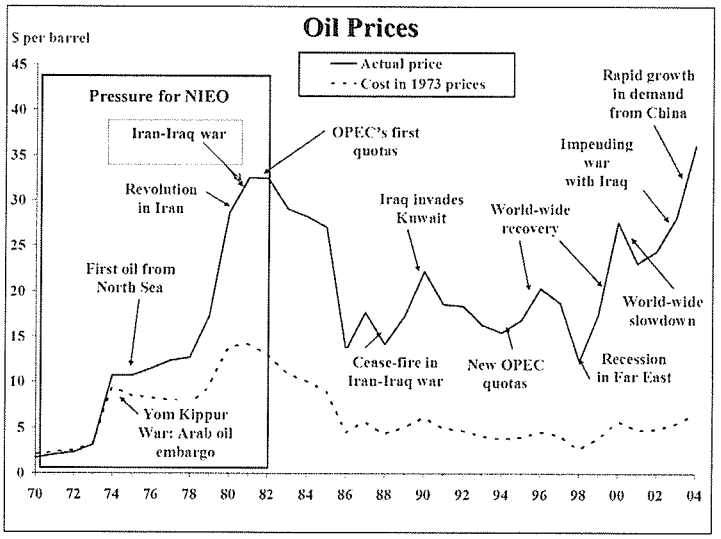

Classical counter-attack: 'Washington Consensus', 1975-96.

Pressure for NIEO eases.

Bargaining power of newly-independent countries losing force from mid-80s.

Global political developments:

- Iran-Iraq war; mid-1980s oil price collapse.
- Faltering then collapse of Soviet Union, etc.
- East Asian examples of rapid growth through integration with market system dominated by older market economies.

→ By the early 1980s, the pendulum swings back:

'Washington Consensus' becomes dominant in the IFIs, i.e. IMF, WB, as well as nearby US Treasury.

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'Washington Consensus', *contd*

i.e. Reverse Bretton Woods / Keynesian consensus.

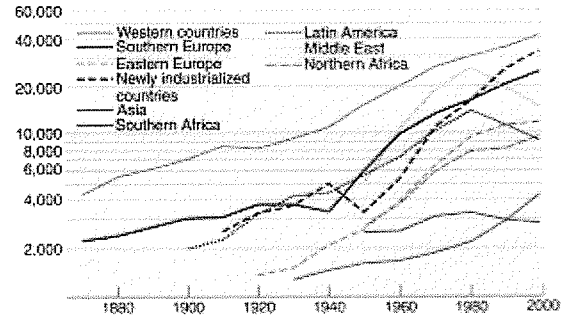
→ All-round classical revival:

- **minimise** role of government
- reduce taxes / **balance budget**
- eliminate impediments to **free flow of capital**
- **liberalise trade**
- **privatize** state-owned enterprises.

'Washington Consensus':

- Expression of this classical revival at **international** level.12

Classical counterattack: arguments for shift to LR perspective:
Cross-country comparison of growth in output per worker since 1870:



LR Growth rate: the supply-side emphasis:

Has begun to rise at different points in time ('take-off').

Has then continued at **different rates.**

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10.4 'Post Washington Consensus' and current trade issues.

- Aim should be: How to *deal with* market imperfections
- No point imagining market can somehow be perfected.

Theory: **'Market failure'** / imperfect markets – *preview*:

(1) **Full employment assumption** and development.

(2) **Dynamic effects**: comparative advantage can *change*.

(3) '**Externalities**', negative *and positive.*

Policy: Shift emphasis :

from **benefits** of mutually advantageous trade

May be limited, even in first instance negative.

to **managing** liberalisation of trade ('make globalisation work')

Emphasis on minimising **costs** of adjustment.

PWC and market failure theory:

(1) The classical full employment assumption and development.

Ricardian ('static') TCA: Advantages of ***redeploying*** resources / labour

FROM less efficient (and/or protected) TO more efficient industries.

BUT: This requires 'classical' FE assumption!

High u in many developing countries.

→ being laid off from low-productivity industry

→ not 'redeployed' at all, but → ***un***employed / *zero* productivity!

Note: Even in industrialised countries, re-training, etc., little success.

i.e. Return to Keynesian critique:

'Static' TCA "applicable to a **special case** only" – Y_{FE}.

Need to 'sequence' liberalisation reforms.

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PWC and market failure theory:

(2) Dynamic effects: comparative advantage can *change.*

Static TCA failing to capture **precisely what is most important** about development??

Example: Countries in East and South East Asia:

Static TCA → South Korea specialise in rice / industry not feasible.

i.e. CA can *change* / respond to developmentalist *policy,* etc.

→ relevance of '**dynamic' comparative advantage.**

Revival of interest in List (Hajoon Chang, etc.).

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PWC and market failure theory:

(3) Externalities.

Costs or benefits do not accrue to those conducting the activity:

Negative externalities: pollution, etc.

Positive externalities:

Activities benefit economy as a whole, but firm receives no reward. e.g.

Contributing to regional advantages.

Training activities.

→ Rationale for subsidy → increase 'positive spillovers' / reach **social** optimum / List's 'high-class progressive industries'.

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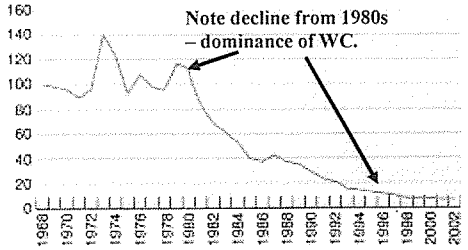
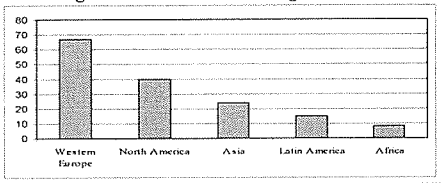
Commodity TOT and pressure to export: fallacy of composition.

Real agricultural raw material prices, 1968-2002:



Percentage of trade within own region, 2002:



18

Historical background – *overview*:

WW1: Interruption of world trade.

Bretton Woods: Aim of proposed ITO:
Promote multilateral agreements > bilateral.

GATT: Nine '**rounds**' of negotiations:
8 under GATT: Kennedy (1963-7), Tokyo, Uruguay (1986), etc.
9th (current) under WTO.

From optimism to breakdown -- Millennium Development Goals.
Doha WTO 2001 / 9th round of trade negotiations:
- Culmination of the call for a Development Round / high point of 'Post Washington Consensus'.
- Breakdown and recrimination since **Cancun 2003.**

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Beyond the Post Washington Consensus?
Trade negotiations and the dominant currents in economic analysis.

NICE period (Non-Inflationary Constant Expansion)

Background to growing 'consensus' between formerly opposed currents of macroeconomic thought.
e.g. 'New Keynesian' 'supply-side interventionism'.
e.g. Sloman and other macroeconomic textbooks.

BUT: These debates remain confined within terms of reference developed from within **Western** intellectual traditions (Stiglitz, Chang, etc.)

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Beyond the PWC?

Besides PWC, also: Growing challenges from *other* quarters:
- Increasing impact of emecs:
  - negotiating power (G2??)
  - power of example.

Estimates of potential gains from trade from Doha Round are quite small in scale.
BUT:
- The debates are highly symbolic:
- All-round challenge to economic policies inherited from WC.

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Beyond the PWC?

Non-Washington Consensus? Journalistic catchwords.
Beijing Consensus
Shanghai Consensus (China-Russia-former Soviet Countries).
South-South.

i.e. Variety of non-Washington standpoints emerging.
Symbolises shift of locus of momentum / consensus from Washington (*both* 'old' WC *and* PWC), e.g.
- ASEAN; China-India trade talks; APEC in Hanoi.
- China-Africa links; recalls Marshall Plan?
- Latin American challenges to US dominance

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Elements which distinguish 'Beyond PWC' from *both* WC *and PWC*:

Protection not assumed 'least worst'.

Different assessments of socialist period.

Repudiation of attitudes seen as patronising / inherited from colonial era.

More positive slant on developmental achievements:
- Not a 'paradox' that achievements have violated received / WC principles.
- On contrary: questioning motives / why advocate principles clearly demonstrated to be counter-developmental in practice?

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<u>9. HISTORY OF TRADE THEORY</u> -- *summary.*

9.1 'English' classical political economy and the gains from trade.
Smith: The gains from trade. Ricardo: comparative advantage.

9.2 Late-comers: arguments for protection.
Hamilton. List. Free trade and 'Workshop of the World'. Infant Industries. Technical progress and dynamic comparative advantage.

9.3 From post-war Keynesianism to Washington Consensus.
Post-war Keynesian consensus, 1944-75. Development economics. Pressure for a New International Economic Order, 1970s. Washington Consensus: the pendulum swings back.

9.4 'Post Washington Consensus' and current trade issues.
'Post Washington Consensus'. Perspectives on globalisation. Global imbalances. Current issues in international trade negotiations. Beyond the 'Post Washington Consensus'?

Topic 10. Overview and up-date (3):TRADE THEORY.
Readings..

10.1 'ENGLISH' CLASSICAL POLITICAL ECONOMY AND THE GAINS FROM TRADE.

See the Readings for:

Topic 2.3 The benefits of trade: from Mun to Smith

Topic 5.3 Ricardo and resource allocation: comparative advantage.

10.2 TRADE AND 'LATE-COMERS': ARGUMENTS FOR PROTECTION.

See the Readings for **Topic 5.4.**

10.3 FROM POST-WAR KEYNESIANISM TO WASHINGTON CONSENSUS.

10.4 'POST WASHINGTON CONSENSUS' AND CURRENT TRADE ISSUES.

[Critique of Washington Consensus by Stiglitz and Charlton (2006):] Fifteen years after the Washington Consensus, the world has come to acknowledge that free trade is not a magic wand. Trade may be necessary for sustained industrial development, but it is not sufficient. In the right circumstances, trade liberalisation creates opportunities for development, but other factors determine the extent to which those opportunities are realised. In addition, any 'gross' welfare gains from trade liberalisation must be balanced against its associated costs. Liberalisation incurs adjustment costs as resources are moved from one sector to another in the process of reform and whereas it may take decades for multilateral trade reform to deliver gains to developing countries, the adjustment costs are automatic and usually upfront.

Furthermore developing countries will need to incur additional costs if they are to realise the full benefits of new market opportunities. In many cases they lack the necessary exporting infrastructure (e.g. efficient ports, adequate roads, reliable electricity and communications) or lack the necessary technology and knowledge to meet product standards prevailing in high value markets (sanitary measures, technical barriers, certification, etc.). To benefit from liberalisation developing countries will need to make public investments in infrastructure and institutions as well as private investment in productive capacity.

The aid for trade agenda reflects the realisation that, for developing countries, the necessary investments are particularly large, and the capacity to meet them is particularly small. There is an emerging consensus that the current WTO Doha Round will require adequate trade-related assistance to mitigate the detrimental effects of trade reforms, and to enhance the trading capacity of developing countries.

The next two years represent a critical opportunity for progress on trade-related development assistance. Following the G8 and EU summits in 2005 and various other recent commitments by developed countries, annual development aid is expected to increase by US$50 billion between now and 2010. This will make more resources available for all kinds of aid. However aid for trade will attract a special focus. This is partly because donors are aware that increased aid flows may have unintended negative consequences for developing countries if more aid leads to real exchange rate appreciations (Dutch disease) which reduce their international competitiveness. The threat of such an outcome will focus donors' attention on counterbalancing programs, including trade development, trade facilitation, and other programs to boost competitiveness.[1]

[Ha-Joon Chang on the 'Washington Consensus':] There is currently great pressure on developing countries from the developed world, and the international development policy establishment that it controls, to adopt a set of 'good policies' and 'good institutions' to foster their economic development. According to this agenda, 'good policies' are broadly those prescribed by the so-called Washington Consensus. They include restrictive macroeconomic policy, liberalization of international trade and investment, privatization and deregulation. The 'good institutions' are essentially those that are to be found in developed counties, especially the Anglo-American ones...

'How did the rich counties *really* become rich?' The short answer to this question is that the developed counties did not get where they are now through the policies and the institutions that they recommend to developing countries today. Most of them actively used 'bad' trade and institutional policies, such as infant industry protection and export subsidies – practices that these days are frowned upon, in not actively banned, by the WTO...[2]

[Wen Jiabao, Chinese Prime Minister -- a view from the emerging economies:] This crisis is attributable to a variety of factors and the major ones are: inappropriate macroeconomic policies of some economies and their unsustainable model of development characterized by prolonged low savings and high consumption; excessive expansion of financial institutions in a blind pursuit of profit; lack of self-discipline among financial institutions and rating agencies and the ensuing distortion of risk information and asset pricing; and the failure of financial supervision and regulation to keep up with financial innovations, which allowed the risks of financial derivatives to build and spread. As the saying goes, "A fall in the pit, a gain in your wit," we must draw lessons from this crisis and address its root causes. In other words, we must strike a balance between savings and consumption, between financial innovation and regulation, and between the financial sector and real economy.[3]

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[1] *Aid for Trade A report for the Commonwealth Secretariat.* By Joseph E. Stiglitz and Andrew Charlton. March 2006.

[2] Ha-Joon Chang, *Kicking away the ladder*. 2003. Chapter 1.

[3] Speech at the World Economic Forum, Davos, Switzerland, January 2009.

Problem sets.

All the following questions are of exam type, most of them actually from previous exams. The exam is divided into Part A, which consists of some brief questions, and for which 40% of the mark is awarded, and Part B, for which you will have to answer two essay-type questions, for each of which 30% of the mark is awarded. In answering the following questions, your answers should be such as could be reproduced in exam conditions in around 10 to 15 minutes for those of Part A type, and around 30-35 minutes for those of Part B type.

The questions are divided into Problem Sets, of which you MUST hand in two for marking and discussion in the Seminars. (Though it is recommended that you write out answers to all of them in any case, for discussion in the seminars.)

Problem Set 1.

1.1. How did European 'mercantilists' respond to the problem of inflation arising from the influx of precious metals from the Americas from the sixteenth century onwards? Explain your answer in terms of the 'Equation of Exchange', showing how the debates on this question depended on the assumption that the velocity of circulation of money is constant. [Part A type.]

1.2. What are 'invisible exports'? Outline an early mercantilist argument that these might make more of a contribution to 'wealth of nation' than the accumulation of precious metals. [Part A type.]

1.3. Briefly outline some features of the transition from a 'mercantilist' focus on the expansion of trade to a 'classical' focus on efficiency in production, taking the writings of William Petty as an illustration. [Part B type.]

Problem Set 2.

2.1. Briefly outline how the concepts of surplus and distribution were viewed in classical political economy, from Petty to the Physiocrats to Adam Smith. In your answer, make reference to the following issues:

- The main orders of society and the sources of their revenues.
- The means for increasing efficiency in production and output generally.
- The respective roles of state and market in bringing about such improved efficiency and output.
- The domestic and international context. [Part B type.]

2.2. Briefly explain why Ricardo came to the conclusion that mechanisation might lead to immiseration of the labouring population, and contrast this view with that of Smith. In your answer, you may wish to include a table, and/or a diagram, and to discuss broader issues of economic growth and stagnation. [Part B type.]

Problem Set 3.

3.1. Compare Ricardo's approach to questions of distribution with that of Adam Smith.

In your answer, you may wish to discuss:

- The general contrast in their viewpoint, and the historical context.
- Trends in distributional shares and the danger of a stationary state.
- The particular role of rent in this situation, and the role ascribed by Ricardo in his rent theory to diminishing returns in agriculture and increasing population.
- Smith's view of the natural order of society.
- Smith's comparatively optimistic view of the problem of technological unemployment. [Part B type.]

3.2. Why were the 'first generation' of marginalist economists so anxious to transfer their analysis from value to price?

In your answer, you may wish to discuss:

- Issues of distribution and equity, particularly as regards the role of labour in value theory.
- The concept of a distinction between positive and normative issues.
- Pessimistic predictions of Ricardo regarding the effects of mechanisation (brief).
- Enthusiasm for the idea that the economy is a system of markets whose unimpeded functioning is capable of leading to a socially-optimal outcome.
- The contrast between the steady state in classical political economy and equilibrium in marginalist economics.
- The aim of constituting economics as a distinct discipline, and the potential of the concept of utility in facilitating this. [Part B type.]

3.3. Outline features of debates on development issues today which address the issue to which Friedrich List alluded in the following statement:

> "The energy developed in a few 'high-class progressive industries' may spread over a great part of the industrial system of the country..."
>
> (Friedrich List, *The National System of Political Economy*, 1841.)

- In your answer, try to make reference to concepts such as 'dynamic comparative advantage', learning effects, protection versus free trade, late-comers, infant industries, etc. [Part B type.]

Problem Set 4.

4.1. Very briefly contrast the concept of distribution in classical political economy with the concept of distribution in marginalist economics.

In your answer, you may wish to mention:

- Income shares and the social order (static, dynamic).
- Factor rewards and the marginal productivity of factors of production.
- Shift of focus from cost of production to price determination in the market.
- Shift of focus from social relations to quantitative calculation.
- Separation of economics from other spheres of social inquiry. [Part A type.]

4.2. Keynes stated that, if an economy can successfully achieve full employment, then "the classical theory comes into its own again from this point onwards". Briefly explain this statement, with a diagram. [Part A type.]

Problem Set 5.

Note: You will not be able to hand in answers to these questions for marking and discussion in the Seminars, but it is recommended that you consider writing answers to them.

5.1 "Ricardo conquered England as completely as the Holy Inquisition conquered Spain". Keynes, John Maynard (1936) *The General Theory of Employment, Interest and Money.*

> What did Keynes mean by this statement? How might it be relevant to the applicability of the theory of comparative advantage in the context of economic development today?

5.2 Outline Friedman's critique of interventionist monetary policy. Explain why the stability of money demand is an essential aspect of that critique.

5.3 Discuss the history of the theory of Rational Expectations, with particular reference to (a) the rise of Information and Communications Technology, and (b) the macroeconomic experience of the 1970s to 1990s.

ECON1006. HISTORY OF ECONOMIC THOUGHT. Exam, Summer 2012.

TIME ALLOWANCE: 2 HOURS

The exam is in two parts.
Part A accounts for 30 marks.
Part B accounts for 70 marks.

Answer BOTH the questions in Part A.
Answer TWO questions from Part B.
In cases where a student answers more questions than requested by the examination rubric, the policy of the Economics Department is that the student's first set of answers up to the required number will be the ones that count (not the best answers). All remaining answers will be ignored.

PART A.

Answer BOTH the questions in this Part, which accounts for 30 marks.
Each answer carries equal weight, i.e. 15 marks.

A1.

> "It would be very beneficial to export money as well as wares, being done in trade only, it would encrease our Treasure... This Position is so contrary to the common opinion, that it will require many and strong arguments to prove it before it can be accepted of the Multitude, who bitterly exclaim when they see any monies carried out of the Realm..."
>
> Thomas Mun, *England's treasure by forraign trade*. 1621 [published 1664].

Use the 'Equation of Exchange' to show how Mun's argument countered the idea that the only effect of the influx of precious metals into Europe from the Americas was price inflation. In your answer, show how the argument depended on the assumption that the velocity of circulation of money is constant.

15 Marks

A2.

> "Our criticism of the accepted classical theory of economics has consisted not so much in finding logical flaws in its analysis as in pointing out that its tacit assumptions are seldom or never satisfied, with the result that it cannot solve the economic problems of the actual world".
>
> John Maynard Keynes, 1936.

To what did Keynes refer in his term "tacit assumptions"? Illustrate your answer with an appropriate diagram, and with comment on the title of the book in which he made this statement.

15 Marks

PART B.

Answer TWO of the questions in this Part, which accounts for 70 marks.

Each answer carries equal weight, i.e. 35 marks.

B1.

> "The German economists… resented the way in which the English advocates of free trade tacitly assumed that a proposition which had been established with regard to a manufacturing country, such as England was, could be carried over without modification to agricultural countries."
>
> Marshall, *Principles of Economics*, Appendix B.

Discuss this issue, with particular reference to the arguments of Friedrich List regarding the potential influence within a country of "a few 'high-class progressive industries'". Is List's idea relevant to debates on development issues in the world today?

B2. Adam Smith praised the achievement of the Physiocrats in "representing the wealth of nations as consisting, not in the unconsumable riches of money, but in the consumable goods annually reproduced by the labour of the society". However, he regarded their arguments as "perhaps too narrow and confined" (*Wealth of Nations*, p. 678). Outline both the similarities and the differences in their respective views to which Smith is referring.

B3. Briefly outline the history of the theory of Rational Expectations and its role in macroeconomic theory and practice from the 1970s to the 1990s.

In your answer, you may wish to comment on:

- The rise of Information and Communications Technology.
- Criticisms of the Adaptive Expectations Hypothesis.
- 'New Classical' macroeconomics and the concept of 'anticipation'.
- The macroeconomic experience of the UK and other governments in the 1980s.
- The argument for a 'consensus' in macroeconomics.

B4.

> "In different stages of society, the proportions of the whole produce of the earth which will be allotted... under the names of rent, profit, and wages, will be essentially different… To determine the laws which regulate this distribution, is the principal problem in Political Economy."
>
> David Ricardo, *Principles of Political Economy and Taxation*, Preface.

Discuss the contrast between this standpoint and that of Adam Smith and other previous writers on political economy, who, Ricardo states, "afford very little satisfactory information respecting the natural course of rent, profit, and wages".

In your answer, you may wish to comment on:

- Smith's view of the natural order of society.
- Smith's comparatively optimistic view of the problem of technological unemployment.
- The danger of a stationary state.
- The role ascribed by Ricardo in his rent theory to diminishing returns in agriculture and increasing population.
- Ricardo's standpoint on the Corn Laws.

B5.

> "The conclusion to which I am ever more clearly coming is that the only hope of attaining a true system of Economics is to fling aside, once and for ever, the mazy and preposterous assumptions of the Ricardian School."
>
> William Stanley Jevons, *Theory of Political Economy*, 1871: xlix-xlv.

What were the "mazy and preposterous assumptions" to which Jevons refers? How did his standpoint influence the consolidation of economics as a distinct academic discipline.

B6. Why did the UK's Treasury not undertake reflationary measures at the time of the Great Depression of the late 1920s to early 1930s? In your answer, briefly outline the theoretical assumptions underlying their standpoint, and show how their attempts to implement their policies resulted in a conflict of goals.

END OF PAPER

BIBLIOGRAPHY

The module does not follow any particular textbook, but the following book is currently available and has up-to-date references, and is probably the best one to buy:

Rima, Ingrid H. (2009). *Development of Economic Analysis.* Seventh edition. London and New York: Routledge.

A good background to the history of macroeconomics is:

Sloman, John. *Economics*. Latest (2006) edition is sixth. Harlow: FT Prentice Hall. Chapter 15 (16 in older editions) "The roots of modern macroeconomics". A copy of this chapter is available on the library website at: http://ls-tlss.ucl.ac.uk/cgi-bin/displaylist?module=07ECON1006

The following are other textbooks which might be found useful:

Backhouse, Roger E. (2002). *The Penguin history of economics*. London: Penguin Books.

Barber, William J. (1967 but still in print) *A history of economic thought*. Harmondswoth: Penguin Books.

Blaug, Mark (1997). *Economic theory in retrospect*. Fifth edition. Cambridge: Cambridge University Press.

Medema, Steven G., and Samuels, Warren J. (2003). *The history of economic thought: a reader.* London and New York: Routledge.

Sandelin, Bo, Trautwein, Hans-Michael, and Wundrak, Richard (2008) *A short history of economic thought*. Second edition. London and New York: Routledge.

Vaggi, Gianni and Groenewegen, Peter D. (2003) *A concise history of economic thought from mercantilism to monetarism*. Basingstoke: Palgrave Macmillan.

Examples of classic texts from which selected passages will be studied:

Mun, Thomas (1664) *England's treasure by forraign trade.*

Petty, William (c. 1672) *Political arithmetic.*

Cantillon, Richard (ca. 1720) *Essai sur la nature du commerce en général.* [English translation.]

Smith, Adam (1776) *An inquiry into the nature and causes of the wealth of nations.*

Say, Jean-Baptiste (1803) [1880 tr.] *A Treatise on Political Economy.*

Ricardo, David (1817) [1971] *On the principles of political economy and taxation.*

List, Friedrich (1856 tr.) *National system of political economy.*

Mill, John Stuart (1848) *Principles of political economy.*

Marshall, Alfred (1890) [1920] *Principles of economics.*

Keynes, John M. (1936) *The general theory of employment, interest and money.*

Friedman, Milton (1956) "The quantity theory of money – a restatement". *Econometrica*, and (1968) "The role of monetary policy". *American Economic Review.*

Abbreviations.

AD	Aggregate demand
AEH	Adaptive expectations hypothesis
APEC	Asia-Pacific Economic Cooperation
AS	Aggregate supply; also Adverse selection.
AS_{CM}	AS – classical model (i.e. vertical).
AS_{KM}	AS – Keynesian model (i.e. has slope)
ASEAN	Association of Southeast Asian Nations
BB	Banks
BoE	Bank of England
BOP	Balance of payments
BOT	Balance of trade
BW	Bretton Woods
C	Consumption expenditure
CA	Comparative Advantage
CB	Central Bank
CB	Central bank
CCC	Competition and Credit Control
CF	Circular flow
CM	Classical model
DL	Discount loan
DM	Deutschmark
DMP	Demand management policy
emecs	emerging economies
ER	Exchange rates
ER	Exchange rates, Excess reserves
ERM	[European] Exchange Rate Mechanism.
FE	Foreign Exchange
FF	Firms
FP	Fiscal policy
G	Government expenditure
GDP	Gross Domestic Product
HH	Households
I	Investment expenditure
i.t.o.	in terms of
ICT	Information and Communication Technology
IFIs	International Financial Institutions
IMF	International Monetary Fund
IS	Investment [and other injections] = Savings [and other withdrawals]
J	Injections (in CF)
LD	Labour demand
LF	Loanable funds, or Labour force
LH	Left hand
LM	Liquidity [demand] = Money [supply]
LR	Long run
LS	Labour supply
M	Money OR Imports
MB	Monetary base
MD	Money demand
MH	Moral hazard
MP	Monetary policy
MPC	Monetary Policy Committee (of BoE)
MS	Money supply
MTFS	Medium Term Financial Strategy
NBP	Non-bank public
nbfi	Non-bank financial institution
NCM	New Classical Macroeconomics
NIAs	National Income Accounts
NICE	Non-Inflationary Constant Expansion
NKM	New Keynesian macroeconomics
NX	Net exports (= X - M)
OBS	Off-Balance-Sheet
OECD	Organisation of Economic Cooperation and Development
omks	Older market economies
OMO	Open Market Operation
OMP	Open Market Purchase
OMS	Open Market Sale
P	Price level
P&I	Prices and incomes policy
PIP	Policy ineffectiveness postulate
PPP	Purchasing power parity
PSBR	Public Sector Borrowing Requirement
PSNCR	Public Sector Net Cash Requirement
PWC	Post-Washington Consensus
PX	Price of exports
QTM	Quantity theory of money
R	Reserves of the commercial banking system
R&D	Research and development
RBC	Real business cycle
REH	Rational expectations hypothesis
RER	Real exchange rate
RF	Foreign exchange reserves
RH	Right hand.
RRR	Required reserve ratio
S	Savings
SAP	Structural Adjustment Programme
SDM	Simple deposit multiplier
SR	Short run
SV	State verification
T	Taxation
TCA	Theory of Comparative Advantage
TV	Treasury View
u	unemployment
UB	Unemployment benefit
V	Velocity of circulation
W	Withdrawals (in CF)
WB	World Bank
X	Exports
Y	GDP
Y_{FE}	Full-employment level of Y
π	Inflation