# T. R. Malthus 1766-1834



# Malthus

- One of 7 children
- Educated at Jesus College Cambridge and in 1788 entered the Church as a country curate
- 1793 appointed to a fellowship at Jesus College
- 1798 1st Edition of Essay on the *Principle of Population*
- Traveled extensively in Scandinavia--Diaries
- 2nd Edition of the Essay 1803
- 1804 Married and forfeited his Fellowship

#### Malthus--Biography

- 1805--appointed Professor of History and Political Economy at East India College and also retained a living in the Church
- Principles of Political Economy (1820)—intended to rival Ricardo's Principles (1817)
- Engaged in a massive correspondence with Ricardo 1811-1823
- Founding member of the Political Economy Club 1821

## Theory of Population

- Malthus very concerned by the condition of the poor and particularly by rural poverty
- Because of this he was skeptical of notions of the perfectibility of society
- 1st Edition of the Essay is an *a priori* polemic—the 2nd Edition included much empirical observation
- Inspired Darwin's idea of "the struggle for survival"

## **Basic Postulates**

- Food is necessary to the existence of man
- The "passion between the sexes" is necessary and will remain in its present state
- Given these two postulates Malthus felt that population would tend to grow until constrained by food scarcity
- The power of population to increase is greater than the power of the earth to provide subsistence
- This is the fundamental cause of poverty, and difficult to correct

# Geometric and Arithmetic Ratios

- Population, *when unchecked*, grows in a geometric ratio
- Population, if unchecked, will double every 25 years [ a geometric progression is 1, 2, 4, 8, 16, 32, 64, etc]
- Evidence from the US where land is abundant
- Subsistence grows at an arithmetic ratio [1, 2, 3, 4, 5, 6 etc]
- Subsistence still grows, but due to the different growth ratios population must eventually press against the means of subsistence

# **Diminishing Returns**

- Malthus does not *explicitly* talk of diminishing returns in agriculture
- Diminishing returns are implied
- Arithmetic increase in food supply is best that can be obtained *with* the geometric growth in poulation
- With population growth marginal and average product fall

#### Diminishing Returns Agricultural output and population

Food



Population

## Checks to Population

- *Failing* any other check, population will eventually be checked by the difficulty of subsistence or the *Positive Check*
- The Positive Check works by increasing mortality rates—poor health, disease, infant mortality
- Positive Checks can only be avoided by *Preventive Checks*
- Preventive Checks work by reducing birth rates—economic incentives to later marriage and moral restraint
- Malthus stresses Positive Checks
- Checks involve "misery and vice"

# Long Run Real Wages



An increase in the demand for labour will raise wages above subsistence in the SR, but this will be followed by population growth until wages fall back to subsistence.

#### Malthus and Landowners

- Landowners hire labour to maximize rent, and spend on unproductive servants
- Landowners don't save
- Equilibrium where labouring class at subsistence and landowning class above subsistence
- Complete equality leads to everyone being at subsistence

#### Malthus and Landowners

• With landowners equilibrium at A, with population Pa



The Debate Over Population Theory

- Malthus tended to stress
   Positive over Preventive Checks
   and defined the subsistence
   wage in largely physiological
   terms
- Malthus also saw little prospect of more rapid improvement in agricultural technique
- Not all Classical writers accepted these arguments

# Debate Over Population Theory

- Nassau Senior put much more emphasis on preventive checks: "The desire for bettering our condition is as natural a wish as the desire for marriage"
- Senior also saw greater prospects for agricultural improvement. Increased population accompanied by an increase in capital, division of labour, and skill
- J. S. Mill argued the subsistence wage was a sociologically defined minimum and might be raised

# Debate Over Population Theory

- Robert Torrens—Family size deceases with increases in per capita wealth. Large families an advantage when land is abundant but become a disadvantage in a densely populated country
- Senior versus Malthus and Ricardo on the reform of the Poor Law (Poor Relief)

## Malthus on Rent

- Rent is due to nature's productivity
- Can produce more than the subsistence need of the cultivators
- Greater agricultural productivity results in population growth
- Rent as a differential surplus on the best land—important for Ricardo's rent theory
- Malthus and support of the Corn Laws—opposed by Ricardo

# Malthus on Gluts

- Disagreed with Smith over his emphasis on thrift
- Depression of 1819 and Peterloo riots
- Labour only hired if it produces a value in excess of its cost
- Capitalists interested in saving and capital accumulation
- Thought there could be too much saving leading to a lack of effective demand for goods which would then lead to a lack of effective demand for capital

#### Malthus on Gluts

- Possibility of commodity and capital "gluts"
- Importance of rent and of Landlords' unproductive consumption to provide sufficient aggregate demand
- Role of Corn Laws
- Led to heated debate with J. B. Say and Ricardo—Say's Law