

David Ricardo

Econ 605

David Au



Background

- Born in London on 18 April, 1772
- At age 14, he acquired his knack in the stock market under the acquaintance of his dad. And he subsequently work at the London Stock Exchange
- Become famous stock broker and extremely wealthy
- At age 41, he is “sufficiently rich to satisfy all my desire”(Letter to Mill)

Contd.

- Elected into the British parliament in 1819
- Interested in various areas of policy making: repayment of public debt, capital taxation and the Corn Laws.

Main Motive

- Interest in the relationship behind rising grain prices, rising rents, and the growth of technology.

- Very much against the Corn Laws during his time

Background – Influenced by – Contributions – Impact - Critique

Cont.

- Very Much against Protectionism
- Disagree with the tariffs imposed by government

Corn Laws

- Were import tariffs designed to support domestic British corn prices against competition from less expensive foreign-grain imports between 1815 and 1846

- Lead to significant rise in grain's price

Influenced By

- Adam Smith (1723 – 1790)-
considered by many to be the father
of Economic .Inspired David Ricardo
after he read “Wealth Of Nations”



- Thomas Malthus (1766-1834) -good friend of Ricardo and often had debates with Ricardo on many issues; Famous for his population thesis



Background – **Influenced by** – Contributions – Impact - Critique

Jean-Baptiste Say(1767-1832)-French economist and businessmen, his work sparks numerous debates among economists at his time.; famous for his often misinterpreted “Say’s Law”



Background – Influenced by – **Contributions** – Impact - Critique

Main Contribution

1. Deductive Analysis
2. Comparative Advantage; Gains from Trade
3. Functional Distribution of Income
4. Ricardian Equivalence

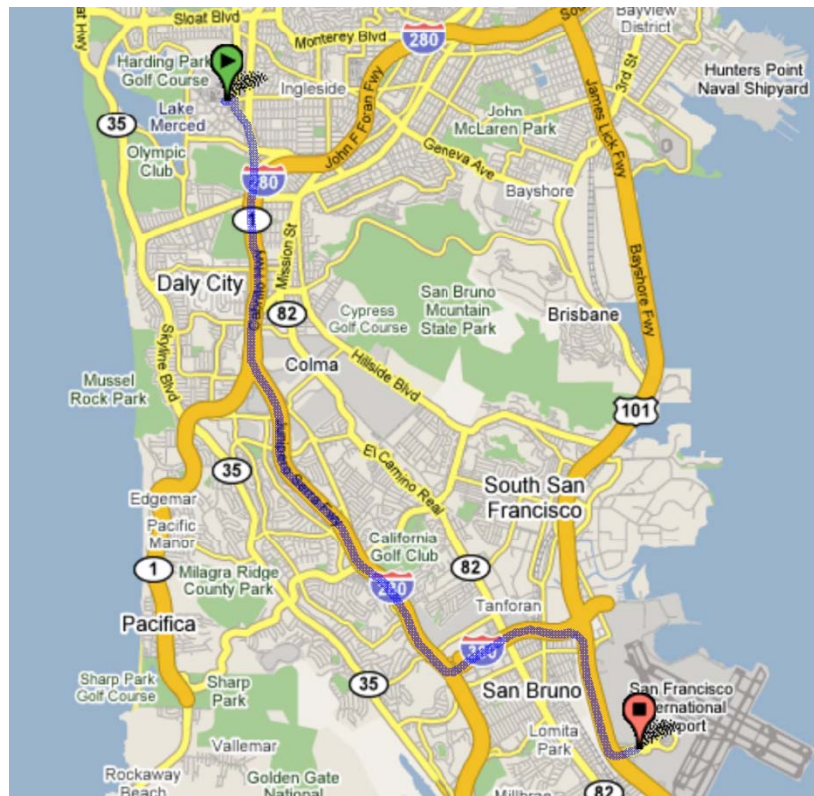
Main Influences: Written Text

- **On the Principles of Political Economy and Taxation (1817)**
- **Essay on the Influence of a Low Price of Corn on the Profits of Stock (1815)**

Background – Influenced by – **Contributions** – Impact - Critique

1. Deductive Analysis

- An approach to studying economics which is based on analyzing abstract **models**.
- Example: a map is a model



Background – Influenced by – **Contributions** – Impact - Critique

2. Comparative advantage and gains from trade

Terminology

- **Comparative advantage – a person (or a country) has a comparative advantage in producing a good if his opportunity cost in the production of that good are lower.**

- Opportunity cost –whatever must be given up to obtain some item
- Absolute advantage –the ability to produce a good using fewer inputs than another producer.
- Specialization –when a person (or a country) specializes in the production of a single good.

Numerical Example

	Production per worker	
	England	Portugal
Wine	12	8
Cloth	6	1

	Opp. Cost of Production	
	England	Portugal
Wine	0.5 cloth	1/8 cloth
Cloth	2 wine	8 wine

Result

- Opportunity cost of Cloth in England (2 gallons of wine) is less than the opportunity cost of cloth in Portugal (8 gallons of wine)
- Opportunity cost of Wine in Portugal ($1/8$ yard of cloth) is less than the opportunity cost of wine in England ($1/2$ yard of cloth).
- Thus, England has **absolute advantage** in both goods, but **comparative advantage** only in cloth.

3. Functional Income Distribution


- Ricardo's belief that total output will ultimately stop growing convinced him that the main issue in economics was not to figure out how economies grow richer but to figure out how the limited output in the economy's stationary state is distributed or shared among the various sectors of the economy.

3. Functional Income Distribution

- Question: How is the income received by various factors of production determined?

Assumptions of the agricultural model:

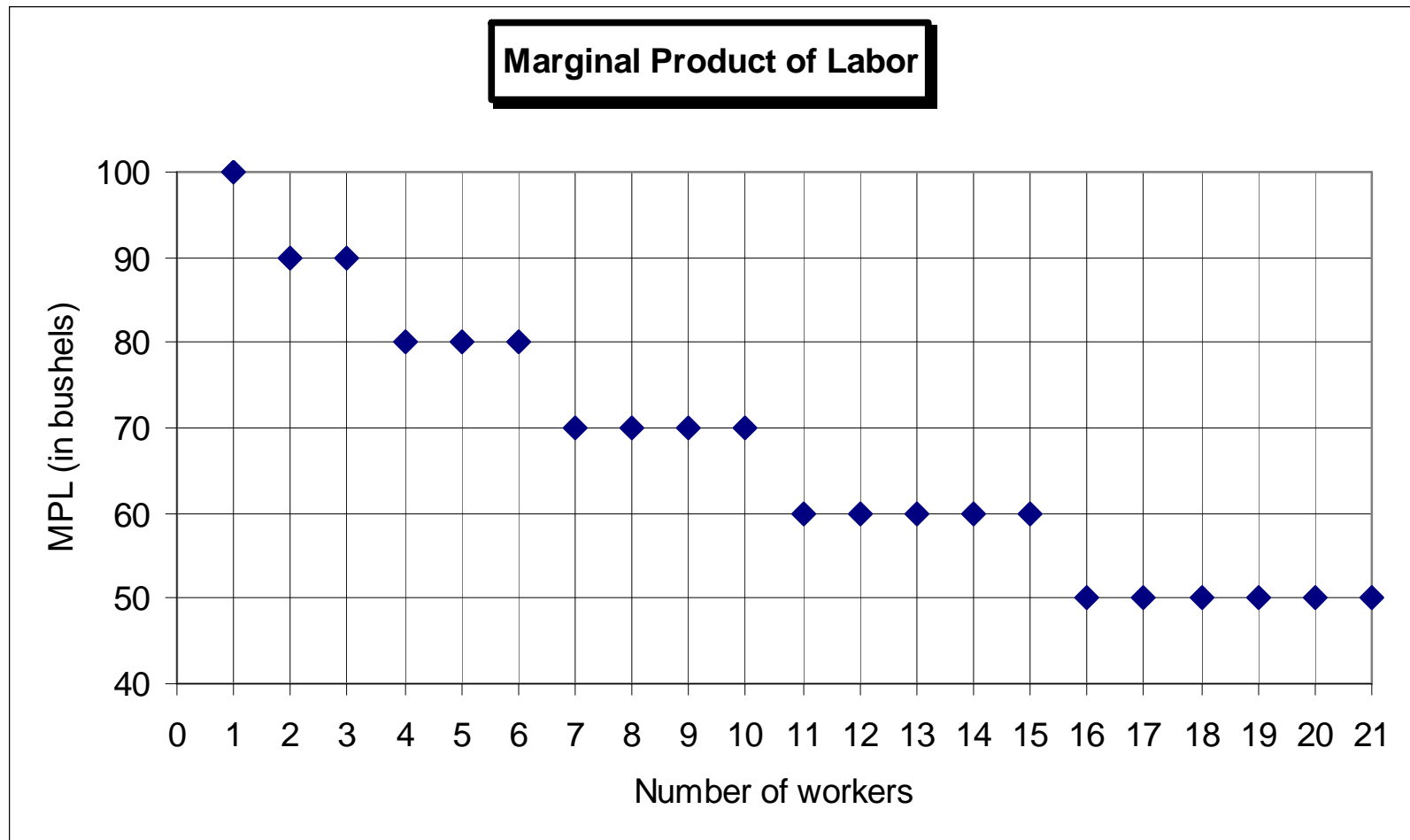
- There are three classes of people, Landlords *who earn rent*, Workers *who earn wages*, and Capitalists *who earn profits*
- Assume that wages are at **subsistence level** (25) and that capital is used in fixed proportions (1 shovel per worker).
 - **The Iron Law of Wages** - “real wage in the long run would trend toward the value needed to keep the worker’s population constant”

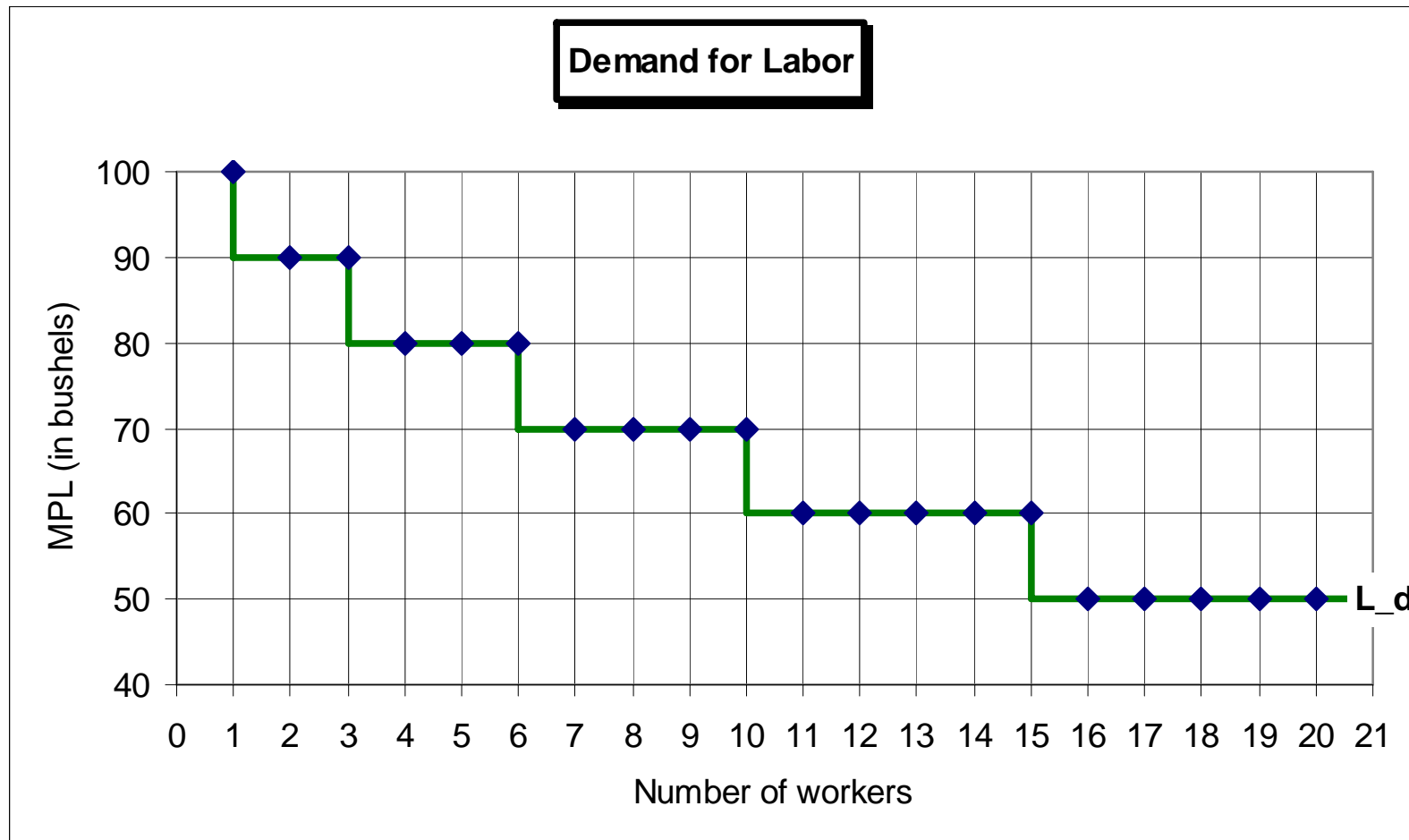
<u>Marginal product of labor (equipped with capital)</u>						
	Extensive margin 					
# workers	A	B	C	D	E	F
1	100	90	80	70	60	50
2	90	80	70	60	50	40
3	80	70	60	50	40	30
4	70	60	50	40	30	20
5	60	50	40	30	20	10
6	50	40	30	20	10	0

L	MPL
1	100
2	90
3	90
4	80
5	80
6	80
7	70
8	70
9	70
10	70
11	60
12	60
13	60
14	60
15	60
16	50
17	50
18	50
19	50
20	50
21	50

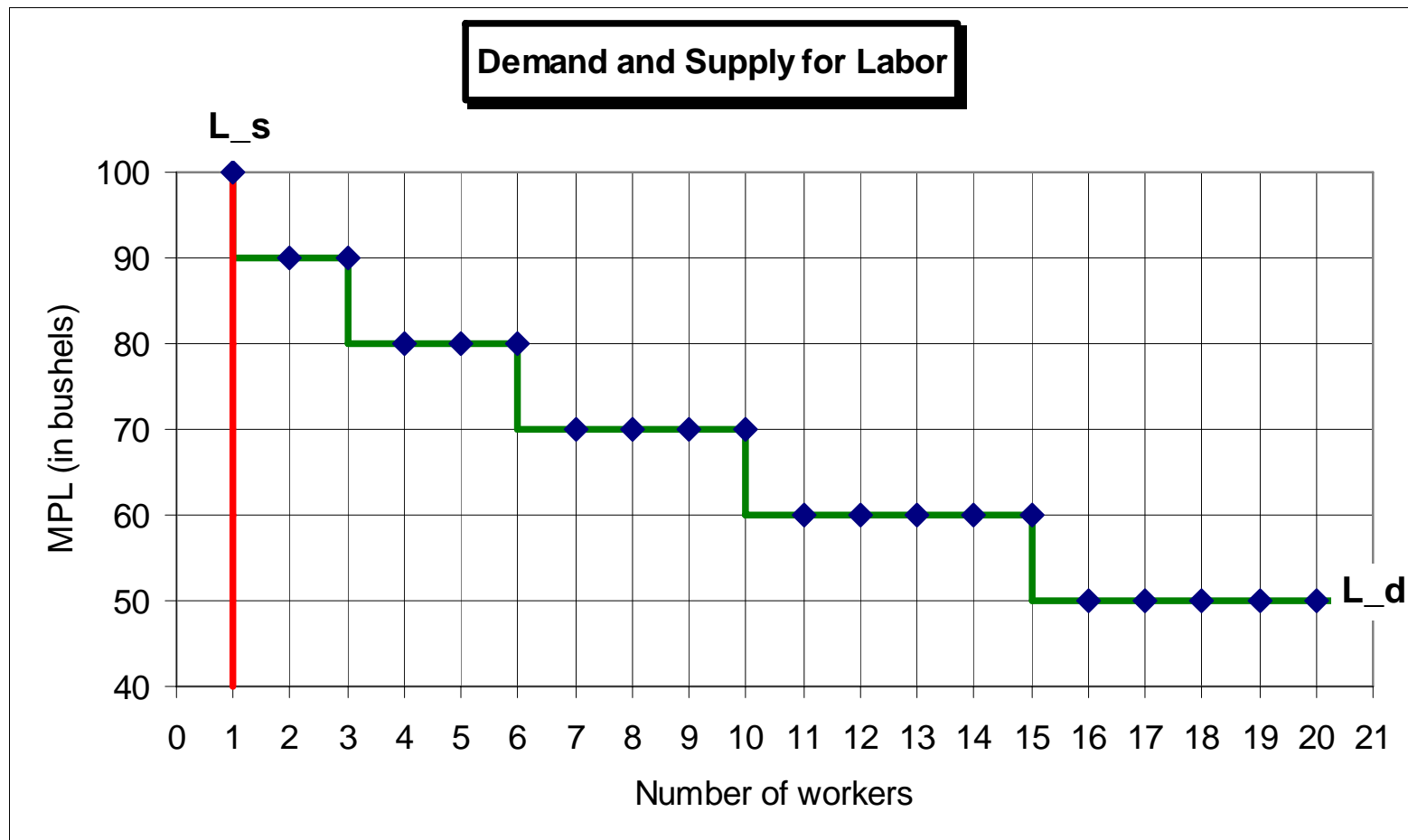
Diminishing Returns

- *“If, then, good land existed in quantity much more abundant than the production of food for an increasing population required, or if capital could be indefinitely employed without a diminished return on the old land, there could be no rise of rent; for rent invariably proceeds from the employment of an additional quantity of labour with a proportionally less return.”*





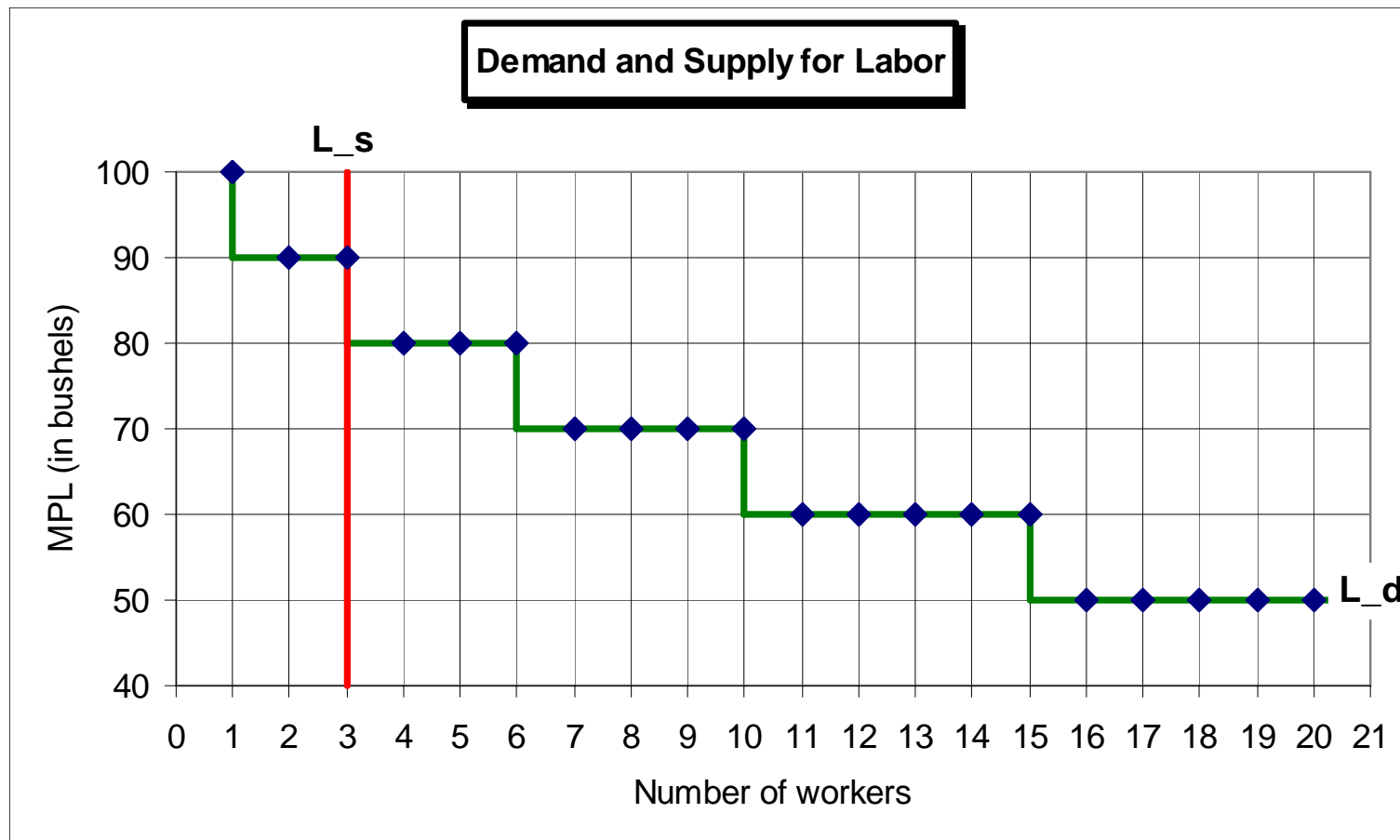
Case 1 (One Worker)



Case 1 (One Worker)

- The equilibrium payment to the worker with a shovel is 90 (or, more precisely, just slightly more than 90). Worker's wage is 25, so the payment to capital is 65 (profit).
- Total output would be 100. After paying wages = 25 and profit = 65, the residual rent would be 10.

Case 2 (Three Workers)

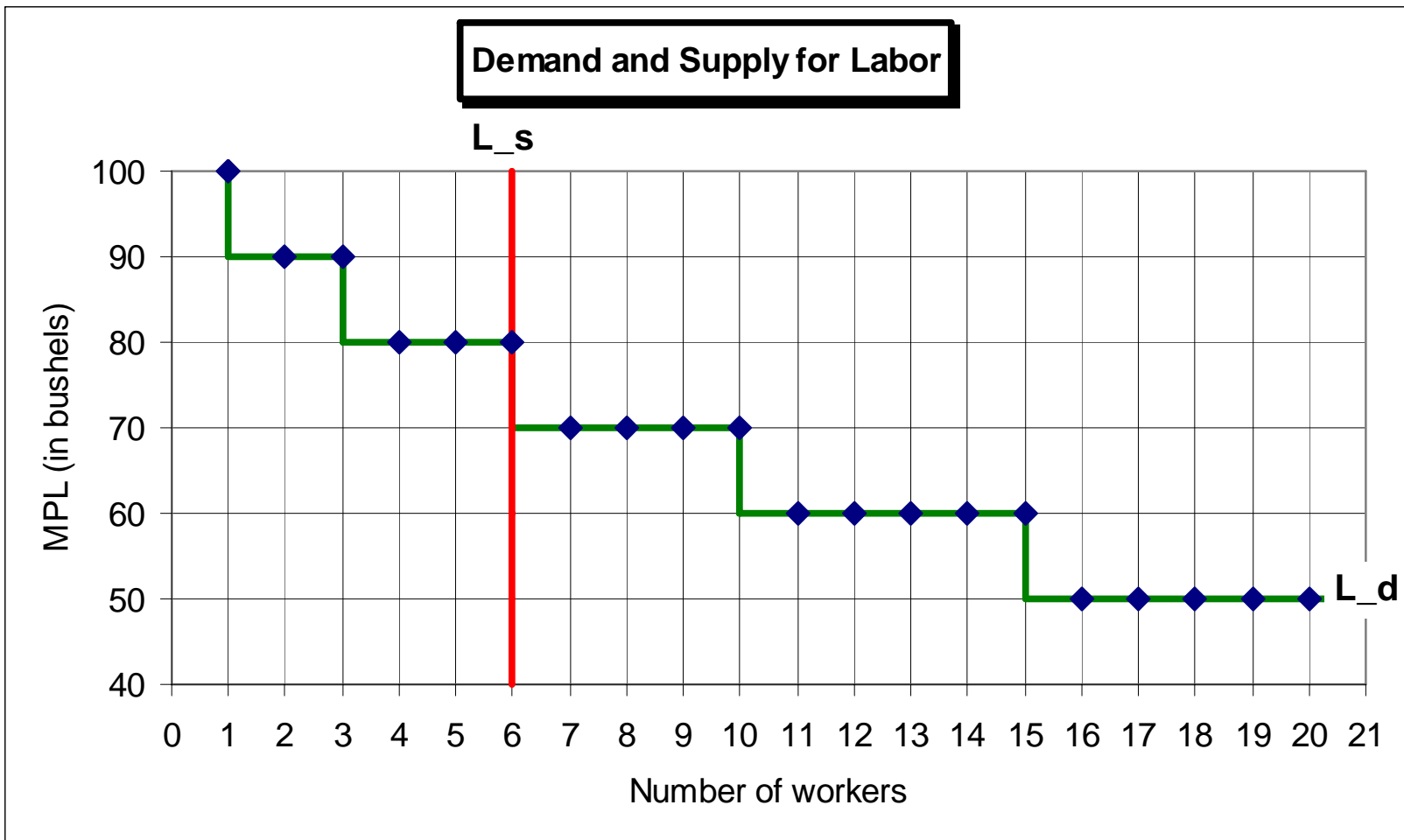


Case 2 (Three Workers)

- The equilibrium payment to workers with a shovel is 80 (or, just slightly more than 80). Worker's wage is 25, so the payment to capital is 55 (profit).

Plot	Wages	Profit	Rent	Total Output
A	$25 * 2 = 50$	$55 * 2 = 110$	$190 - 80 * 2 = 30$	190
B	25	55	$90 - 80 = 10$	90
Total	75	165	40	280

Case 3 (Six Workers)



Case 3 (Six Workers)

- The equilibrium payment to workers with a shovel is 70 (or, just slightly more than 70). Worker's wage is 25, so the payment to capital is 45 (profit).

Plot	Wages	Profit	Rent	Total Output
A	$25 * 3 = 75$	$45 * 3 = 135$	$270 - 70 * 3 = 60$	270
B	$25 * 2 = 50$	$45 * 2 = 90$	$170 - 70 * 2 = 30$	170
C	25	45	$80 - 70 = 10$	80
Total	150	270	100	520

Payments to Factors of Production When Labor Increases

# of Workers	Wage per worker	Profit per unit of capital	Rent per slot
1	25	65	10
3	25	55	20
6	25	45	33.33
10	25	35	50

Message of the Ricardian Theory of Rent

- When the number of farm laborers goes up, the ones who benefit are not the workers themselves, but the land owners.
- This finding has withstood the test of time. Economists use Ricardian reasoning today to explain why agricultural price supports do not help farm laborers per se but do make owners of farmland wealthier.

4. Ricardian Equivalence Theorem

- “statement that government borrowing has no effect on overall wealth ; it is stated that it bears no effect on demand for current consumption , and no effect on the interest rate.”

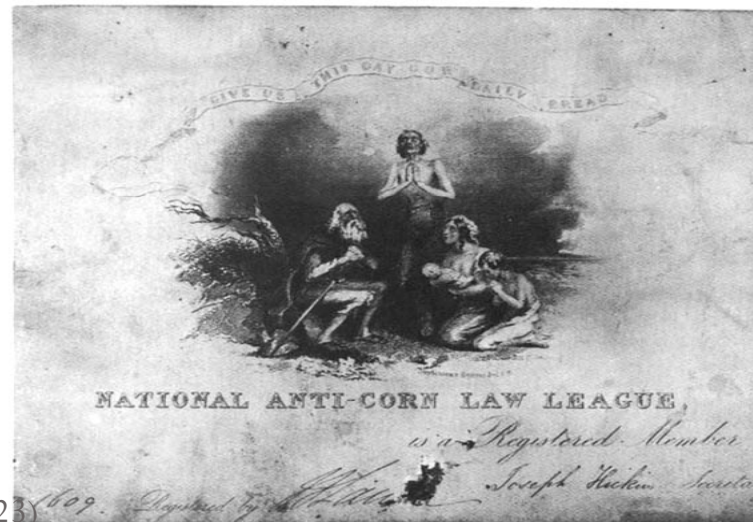
Intuition

- Consumers are **forward looking**. If the government cuts taxes now, consumers realize that taxes will increase in the future, so they save more now.
- An decrease in government saving (increase in its deficit) is offset by consumer's saving.

- Free trade
- Abstract theoretical models as the foundation for proper policy formation
- Provided a powerful impetus for a market based system
- Brought a focus on to microeconomic concerns
- Emphasized the distribution of income among landlords, laborers, capitalists (land, labor, capital)

Impact on Government Trade Policies

- The Corn Laws imposed tariffs on grain imports (**interfered with free trade**).
- Malthus supported a “fair wage” for farmers
- Ricardo’s model showed that overall productivity would be increased through examination of opportunity costs and specialization
- The Corn Laws were eventually repealed



Influences that still exist today

- policymaking based on abstract models.
- His international trade theory has evolved into new forms.

Background – Influenced by – Contributions – Impact - **Critique**

- Overly simplified assumptions of models.
 - But that is exactly what makes models useful. Today we know that models are not supposed to be realistic.
- Like Malthus, did not take into account the possibility of technological progress and economic growth. Therefore, he focused primarily on how fixed income is distributed among classes.

Questions and Discussion

1. Give example of **comparative advantage** and **specialization** in your life.
2. Would Ricardo support NAFTA if he was alive today?
3. Debate: argue in favor and against outsourcing. One student can be Ricardo (in favor of outsourcing) and another will be against it.