

Chapter 2
Efficiency,
Exchange, and
Comparative
Advantage

(效率、交换与比较 优势)

ALWAYS LEARNING PEARSON

Learning Objectives (学习目标)

- Distinguish between free goods, scarce goods, and bads (区分免费品、稀缺品与坏东西)
- Explain the notion of economic efficiency and its relation to subjective values (解释经济效率的概念及其同主观价值的联系)
- Understand the mutual benefits of voluntary exchange (理解资源交 换的互利性)
- Analyze comparative advantage through the use of production possibilities frontiers(使用生产可能性前沿分析比较优势)
- Explore the function of middlemen in reducing transactions costs and providing scarce information(探索中间人在降低交易成本和提供稀缺信息上的作用)
- Introduce the explanation for long run economic growth (初步解释 长期经济增长)

Chapter Outline(本章大概)

- Goods and Bads (好东西和坏东西)
- The Myth of Material Wealth (物质财富的误区)
- Trade Creates Wealth (贸易创造财富)
- Is it Worth It? Efficiency and Values (值不值?效率与价值)
- Recognizing Tradeoffs: Comparing Opportunity Costs of Production (学会权衡: 比较生产的机会成本)
- The Gains from Specialization and Exchange (从专业化和交换中获益)
- Why Specialize? (从专业化和交换中获益)

Chapter Outline(本章大概)

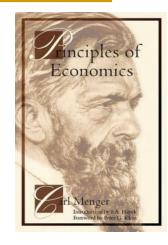
- From Individual Trade to International Trade and Back Again (从人际贸易到国际贸易再到人际贸易)
- Transactions Costs (交易费用/成本)
- Incentives to Reduce Transactions Costs: Middlemen (降低交易费用的激励:中间人)
- Middlemen Create Information (中间人创造信息)
- Markets as Discovery Processes (市场作为发现的过程)
- The Big Picture: First Thoughts on Economic Growth (大图景: 对于 经济增长的初步思考)

Good and Bad (好东西和坏东西)

- A thing is a good if it is better than nothing (有胜于无的东 西都是好东西/物品)
 - □ 不一定是物质的、有形的
- Or, it is a bad (无胜于有的东西都是坏东西)
- 主观性!



Prerequisites for a thing to be a good (一样东西成为物品的前提)



- 四个必要前提
 - □ 1.人的欲望
 - □ 2. 这样东西具有的使得它可以用来与上述欲望的满足之间产生因 果关联(也即被认为是有用的东西)的属性
 - □ 3. 人对上述因果关系的认识
 - □ 4. 人能够支配这样东西以满足其欲望
- 参考: Carl Menger*,Principles of Economics*,1871,Chapter 1.



Free Good and Economic Good (免费品和经济物品)

- A free good can be acquired without sacrifice (免费品不需要做出牺牲就可以获得)
 - 免费品是人的行动的外部条件,不是行动的对象!
- Scarce or economic good: more of it is preferred to less
 (多胜于少)
 - □ requires sacrifice (获得稀缺品需要做出牺牲)

Free Good and Economic Good (免费品和经济物品)

- E.g.空气
 - 免费品:在空气清新的地区,空气用之不竭,没有人会 争取多一点空气
 - □ 稀缺品: 在人烟稠密之区, 空气污浊

Economic Good (经济物品)

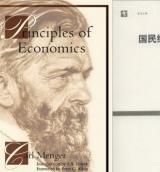
- 凡是人愿意付出或多或少的代价来争取多一点的物品,都 是稀缺的、不足够的,是经济物品
- 凡有价格的物品都是经济物品
- 没有价格的物品也可能是经济物品
 - □ 在极端的计划经济中,市场不存在,没有价格
- 如没有特殊说明,本课程所使提及的物品,均指经济物品

Pecuniary Goods vs. Non-pecuniary Goods (金 钱物品与非金钱物品)

- 物品的分类:
 - □ Pecuniary Goods (金钱物品)
 - 能够用货币购买的物品
 - □ Non-pecuniary Goods (非金钱物品)
 - 无法用货币购买的物品,如友情

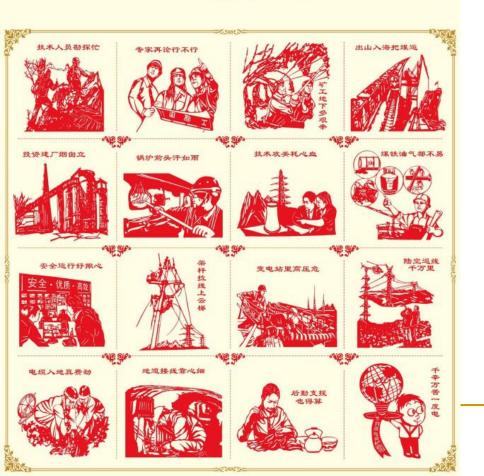
Different Order of Goods(不同级别的物品

- 按照距离最终消费品的远近,可以对物品分级/阶(order)
 - □ consumer goods(消费品),可称为first-order goods(一阶物品)
 - □ capital goods(资本品)or producer goods(生产资料) ,可称 为higher-order goods(高阶物品)
 - Carl Menger, Grundsätze der Volkswirthschaftslehre (Vienna: Wilhelm Braumüller, 1871). English translation by J. Dingwall and B. Hoselitz,
 Principles of Economics (New York: New York University Press, 1981).





千辛万苦 一度电



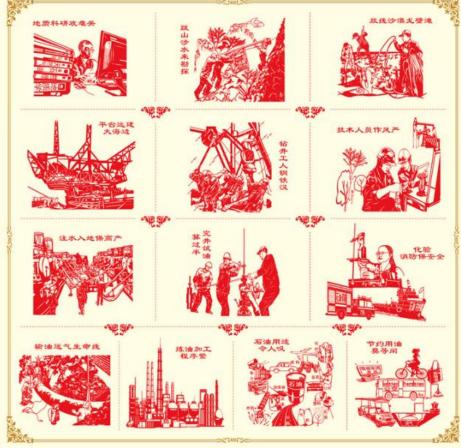
千辛万苦 一粒粮



千辛万苦 一张纸



千辛万苦 一点油



The Myth of Material Wealth(物质财富的误区)

- Of what does wealth consist? (财富由什么组成?)
 - wealth, in the economic way of thinking, is whatever people value(用经济学的思维方式来看,财富就是人们认为有价值的任何东西)
 - □ value is in the eye of the chooser(价值是选择者眼中的价值)

The Myth of Material Wealth(物质财富的误区)

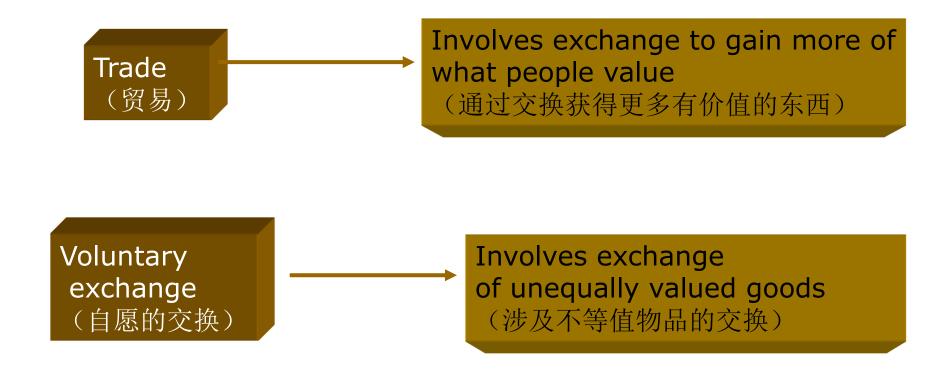
- **Economic** *growth* consists not in increasing production of *things*, but increasing the production of *wealth* (经济增长并不在于生产更多的东西,而在于生产更多的财富)
- "Wealth = Material things" is not a valid claim.
 - It blocks an understanding of such aspects of economic life like "specialization" and "exchange" in Adam Smith's commercial society("财富等于有形物质"不是有效的主张,它妨碍我们理解经济生活中的很多方面,例如亚当·斯密的商业社会中的"专业化"和"交换")

Trade Creates Wealth

Questions:

- What do we gain from trading?
- Is it accurate to say that the two goods traded have equal value?
- Does trade add value, wealth?
- Is trading efficient?

Trade Creates Wealth(贸易创造财富)



Trade Creates Wealth(贸易创造财富)

Ouestion:

Does an exchange
of a ball for a
glove, between two
people,
affect wealth?
(两个人之间用球交换
手套会影响财富吗?)

Jack

Value of glove > Value of ball

Jim

Value of ball > Value of glove

Trade Creates Wealth(贸易创造财富)

- With trade each party trades a less valued good for a more valued good (通过交易,每一方都将价值较低的物 品换成价值较高的物品)
- 交易的物品对于交易各方来说一定是不等值的——至少在 交易时是这样!
- 交易的各物品在各交易方的价值等级表(value scale)上的排序必定相反!

补充: 从主观价值到市场价格

Individuals' subjective value are transformed into objective market prices by market exchange. (经由市场交 换,众多个体的主观价值等级转换为客观的市场价格.)

□ 参考:

- 《国民经济学原理》(奥)门格尔上海人民出版社,2001.
- ■《资本实证论》(奥)庞巴维克商务印书馆,1983.
- 《人、经济与国家》穆雷·罗斯巴德,浙江大学出版社,2015.

- Technical efficiency(技术效率)
 - only focuses on the objective data (i.e. input, output)
- Economic efficiency(经济效率)
 - □ compares, from the chooser's own perspective, the additional benefits against the additional costs (基于决策者自己的视角,比较边际收益与边际成本)

- A question that asks "Is it worth it?" is a question about economic efficiency.
 - Each of us might answer that question very differently (我们每个人对这个问题的回答可能大不相同)
 - □ Their disagreements are ultimately disagreements over values (他们的分歧最终是关于价值的分歧)
 - What matters is "Who has the right to make particular decisions" (重要的是谁有决策权)

- 帕累托效率 (Pareto efficiency) /帕累托最优 (Pareto optimality)
 - 在社会中,资源的使用如果达到一个情况,在这情况下,若资源使用的任何改变使一个人得益,就必定有其它人受损
 - □ 反过来,要是资源使用的改变可使社会起码有一个人得益而没有其 它人受损,就是无效率

- 人的行动都是在局限条件(constraints)下争取最大利益
- 局限条件:约束行为的所有条件
 - □ 大概地分类,局限条件有八项:
 - 财富、知识、价格、成本、产权、竞争、边际产量下降、交易费用等
 - □ 局限条件千变万化
 - □ 局限条件的转变会导致行为的必然转变

A "Production Possibilities Frontier" illustrates maximum combinations of products that can be produced using a given set of resources and talent. (生产可能性前沿说明了使用给定资源可以生产的最大产品组合)

Jones:

5 Stout (淡啤) or 10 Lager (黑啤) therefore

1 S = cost 2 L and

 $1 L = \frac{1}{2} S$

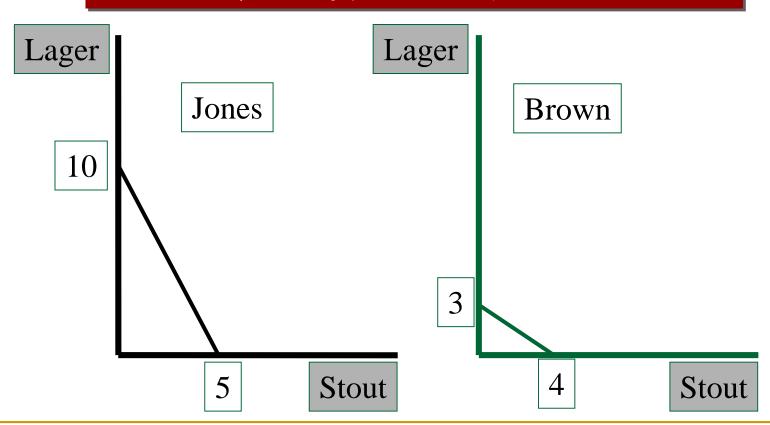
Brown:

4S(淡啤) or 3L(黑啤) therefore

 $1 S = cost \frac{3}{4} L$ and

1 L = 4/3 S

Production possibilities before Specialization and Trade (专业化和贸易之前的生产可能性)



- Note that Jones is more (technically) efficient at producing both stout and lager (琼斯在生产淡啤和黑啤 上的技术效率都高于布朗)
- Who produces stout at a relatively lower cost? (谁生产 淡啤的成本相对较低?)
- Who produces lager at a relatively lower cost? (谁生产 黑啤的成本相对较低?)

Jones:

5 S= **10** L therefore

1 S = cost 2 L and

 $1 L = \frac{1}{2} S$

Brown:

4 S= 3 L therefore

 $1 S = cost \frac{3}{4} L$ and

1 L = 4/3 S

Brown has a lower relative cost producing Stout: she only sacrifices 3/4 L for each gallon of S, while Jones must forego 2 L for each gallon of S.

Jones:

5 S= **10** L therefore

1 S = cost 2 L and

 $1 L = \frac{1}{2} S$

Brown:

4 S= 3 L therefore

 $1 S = cost \frac{3}{4} L$ and

1 L = 4/3 S

Jones has a lower relative cost producing Lager: she only sacrifices 1/2 S for each gallon of L, while Brown must forego 4/3 S for each gallon of L.

- Least cost producers have a lower opportunity cost.
- The least cost producer of a product has a *comparative advantage* (比较优势) over other producers. (一种物品的低成本生产者相对于其他生产者具有比较优势)
 - Jones has a comparative advantage in brewing lager, while
 Brown has a comparative advantage in stout production.

The Gains from Specialization and Exchange (从专业化和交换中获益)

If Brown and Jones agree to trade one for one in the production of their comparative advantage:

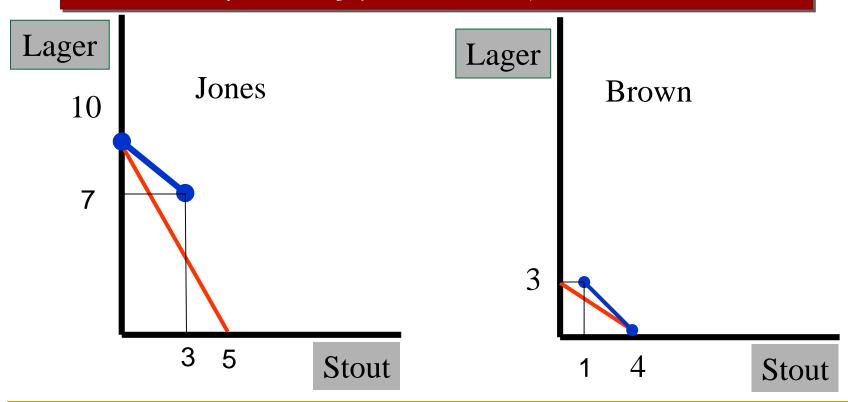
Both can now consume more than they could individually produce.

Jones can enjoy
7 lager and 3 stout
Brown can enjoy
3 lager and 1 stout.

Wealth has been increased for both through specialization and trade.

The Gains from Specialization and Exchange(从专业化和交换中获益)

Production Possibilities after specialization and trade (专业化和贸易之后的生产可能性)



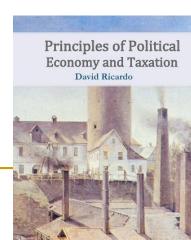
Why Specialize? (为什么要专业化)

- **Specialization** is a synonym for "**Following one**'s **comparative advantage**"(专业化是追求比较优势的另一种说法)
 - Specialization allows producers to expand their possibilities (wealth) by trading for something that is more costly to produce on their own. (专业化使得生产者能通过贸易获得那些若他们自己生产要花费更多的产品,从而增加其财富)

Why Specialize?(为什么要专业化)



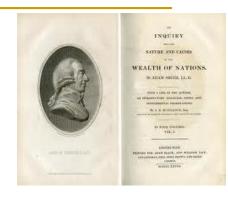
- Law of Comparative Advantage (比较优势法则)
- David Ricardo (大卫·李嘉图)
 - 《Principles of Political Economy and Taxation》,1817
 - First articulate the law of comparative advantage, and applied it chiefly to the issue of international trade.
- The Law of Association! (协作法则)



Why Specialize?(为什么要专业化)

- 比较成本的理念,无疑可以解释专业生产的行为,但是专业生产还有其它几个重要的决定因素.
 - 即便世界上所有的人天生一样,每个人的比较成本相同,专业生产 还会发生

Why Specialize?(为什么要专业化)



- (一) 分工合作
 - □ 分工(division of labor)是指不同的工人每个专于生产一件物品的 一部分,然后合并起来
 - □ 产量越大,可以选择的不同生产方法越多
- (二)熟能生巧
- (三)知识累积,这是最重要的



Why Specialize?(为什么要专业化)

■ 例子: 斯密调查的制针厂



■ 例子: 圆珠笔的生产



Why Specialize?(为什么要专业化)

- 专业分工,*一定要有自由市场*
 - 市场若受到管制,或私产不存在,以专业生产而互利就会有很多问题.
- In a private property rights system, people have strong incentives to specialize(在私有产权体系中,人们有强烈的动机进行专业化)

From Individual to International Trade, and Back Again (从人际贸易到国际贸易再到人际贸易)

- Specialization and exchange occur between cities,
 regions, and across political borders (专业化和交换发生 在城市、地区、国家之间)
- Each group pay for its imports with their exports (每个组都通过出口支付其进口)
- The same idea applies at an individual level (同样的思想适用于个人)
 - □ 严格来说,只有个体之间做贸易,并从中获益

Transaction Costs(交易成本/费用)

- Transaction costs are costs of arranging contracts and agreements trades in general among interested parties (*交易成本*是指在各方之间安排交易合同或协议的成本)
 - Physical distance, ignorance of existing trading opportunities...
- Transaction costs are just as real, just as important impediments to the production of additional wealth, as any other kind of cost. (同其他类型的成本一样,交易成本是对财富生产真实而重要的阻碍)

Incentives to Reduce Transaction Costs: Middlemen (降低交易成本的激励:中间人)

- Middlemen help interested parties find one another (中 间人帮助有兴趣的人找到彼此)
 - stockbrokers, wholesalers, job placement agencies, realtors...(股票经纪人,批发商,职业介绍所,房地产经纪人...)
- They create more desirable options for us.







Incentives to Reduce Transaction Costs: Middlemen (降低交易成本的激励:中间人)

- Middlemen's comparative advantage is to generate quality information at a low cost (中间商的比较优势是可 以低成本生成高质量的信息)
- They are specialists in organizing markets.
- They lower the hurdles that can impede exchange (它们 降低了阻碍交流的障碍)

Incentives to Reduce Transaction Costs: Middlemen (降低交易成本的激励:中间人)

- We are accustomed to comparing actual situations with nonexistent better ones. (我们习惯于把实际情况和虽然更好但并不存在的情况相比较)
 - nirvana approach (凤凰涅槃方法) as called by Harold Demsetz
 - □ 对中间人的不良评价很大程度上是由此造成的

Markets as Discovery Processes(市场作为发现过程)

- We can rarely know what someone else's comparative advantage is outside of the market-exchange process.
 (没有市场交换过程,几乎不可能知道某个人的比较优势是什么)
- People pursue their comparative advantages by choosing the most attractive option. (人们通过做出对他们而言最具吸引力的选择,来追求他们的比较优势)

Markets as Discovery Processes(市场作为发现过程)

- In most of these decisions, relative prices provide
 fundamental information. (相对价格提供了基本信息)
 - We consider our various abilities and the wages we can command at the different tasks we are capable of performing and choose the job that we think will best further the projects in which we are interested. (我们考虑自身的能力和从事不同的任务能获得的报酬, 从而选择我们认为能最大程度地推进我们感兴趣的事业的工作)

Markets as Discovery Processes(市场作为发现过程)

E.g.

计划经济中,每个人由国家分派工作,要达到李嘉图的专业互利, 是纸上谈兵

E.g.

- □ "三百六十行,行行出状元!"
- 《中华人民共和国职业分类大典》将我国职业归为8个大类,66个中类,413个小类,1838个细类(职业)

First Thoughts on Economic Growth (对经济增长的初步思考)

- Poverty has been the rule rather than the exception throughout almost all of human history. (在几乎整个人类历史中,贫穷一直是常态,而不是例外)
- 马尔萨斯(T. R. Malthus,1766-1834)《人口论》(1798)
 - □ 人口以几何级数上升,而物品供应只能以等差级数上升,僧多粥少 无可避免,最后的人口均衡点,是仅足以糊口的物质享受,以饥饿 淘汰不适者.

First Thoughts on Economic Growth (对经济增长的初步思考)

- 历史证明马尔萨斯错了
 - 今天的世界人口,比马氏时代不知上升了多少倍,但生活水平却大 大提升了
 - □ 今天的平均寿命,比二百五十年前的人大约多活三十年

First Thoughts on Economic Growth (对经济增长的初步思考)

- A big questions in economics: what has enabled some to become rich? (是什么使一些人致富?)
 - Why did it happen first in Europe and for a long time afterward outside of Europe only in nations founded on a European heritage? (为什么它首先在欧洲发生,很长一段时间之后才在欧洲以外发生,而且只在具有欧洲遗产的国家发生?)

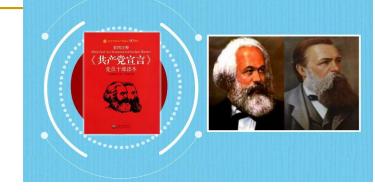
Searching for an Explanation(寻求一个解释)

- Adam Smith The Wealth of Nations (chapter 1):
 - □ It is the great multiplication of the productions of all the different arts, in consequence of the division of labor, which occasions, in a well-governed society, that universal opulence which extends itself to the lowest ranks of the people. (在一个政治修明的社会里, 造成普及到最下层人民的那种普遍富裕情况的,是各行各业的产量由于分工而大增)

Searching for an Explanation(寻求一个解释)

- Economic growth is a consequence of the evolution of commercial society (经济增长是商业社会发展的结果)
 - Everyone specializes (每个人都专业化)
 - □ Everyone exchanges(每个人都交换)
- What Smith called commercial society Marx referred to as bourgeois society(资产阶级社会)

Searching for an Explanation (寻求一个解释)



- The Communist Manifesto (共产党宣言):
 - The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together... what earlier century had even a presentiment that such productive forces slumbered in the lap of social labor? (资产阶级在它的不到一百年的阶级统 治中所创造的生产力, 比过去一切世代创造的全部生产力还要多, 还要大....过去哪一个世纪能够料想到有这样的生产力潜 伏在社会劳动里呢?")

Searching for an Explanation(寻求一个解释)

- Rule of law / Private property rights (法治/私有财产权)
 - □ allows freedom of exchange (允许自由交换)
 - provides incentives to specialize in activities of comparative advantage (提供激励措施专门从事比较优势活动)

The Evolution of Rules That Encourage Specialization and Exchange(鼓励专业化和交换的规则的演进)

- Adam Ferguson(弗格森) An Essay on the History of Civil Society (1767):
 - □ "nations stumble upon establishments, which are indeed the result of human action, but not the execution of any human design"; that communities often experience "the greatest revolutions where no change is intended"; and that even government officials "do not always know whither they are leading the state by their projects." (国家偶然发现了现存的社会体制,这是人类行为的结果,并不是人类任何计划的推行";人类社会常常经历"最伟大的变革,其中没有一个变化是人的计划";甚至政府官员也"总是不知道他们会用他们的计划把国家引向何方")





The Evolution of Rules That Encourage Specialization and Exchange(鼓励专业化和交换的规则的演进)

- The example of money.
 - □ No one invented the institution of money.(没有人发明货币制度)
 - □ It evolved through individuals acting to further the projects in which they happened to be interested and encountering others whose interactions generated a monetary system.(货币是在个体 推进他们自己感兴趣的事业,及与他人互动过程中逐渐形成的)
 - "The Theory of Money"in Carl Menger, Principles of Economics, 1871.



The Evolution of Rules That Encourage Specialization and Exchange(鼓励专业化和交换的规则的演进)

- This is not to say government has nothing to contribute toward the development of a successful economic system. (这并不是说政府无事可做)
 - □ Smith: "a well-governed society" (一个政治修明的社会)

Once Over Lightly(简短回顾)

- Exchange of Property Rights (产权交换)
- Free Good versus Scarce Good (免费品与稀缺品)
- Opportunity Cost (机会成本)
- Wealth= Whatever People Value (财富=人们珍视的一切)
- Comparative Advantage (比较优势)
- Middlemen (中间人)

Once Over Lightly(简短回顾)

- Market Specialization (市场专业化)
- Division of Labor (分工)
- Economic Growth (经济增长)
- The Rule of Law (法治)
- The Evolution of Rules (规则的演进)