

Essentials of Economics

Chapter 1: Ten Principles of Economics

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Principle 1: People Face Trade-offs



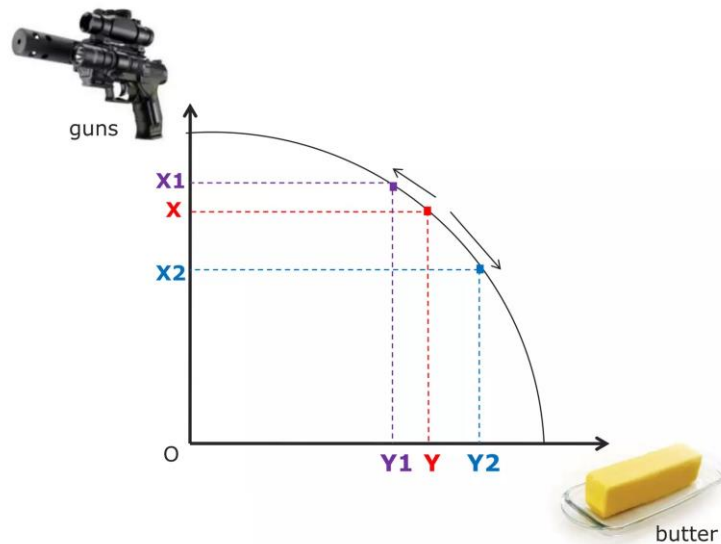
Principle 1: People Face Trade-offs

- “There isn't no such thing as a **free lunch**.”
- Consider a student who must decide how to allocate her most valuable resource her **time**. She can spend all her time studying economics, spend all of it studying psychology, or divide it between the two fields. For **every hour she studies one subject**, she gives up an hour she could have used studying the other. And for every hour she **spends studying**, she gives up an hour that she could have spent napping, bike riding, watching TV, or working at her part-time job for some extra spending money.

Principle 1: People Face Trade-offs

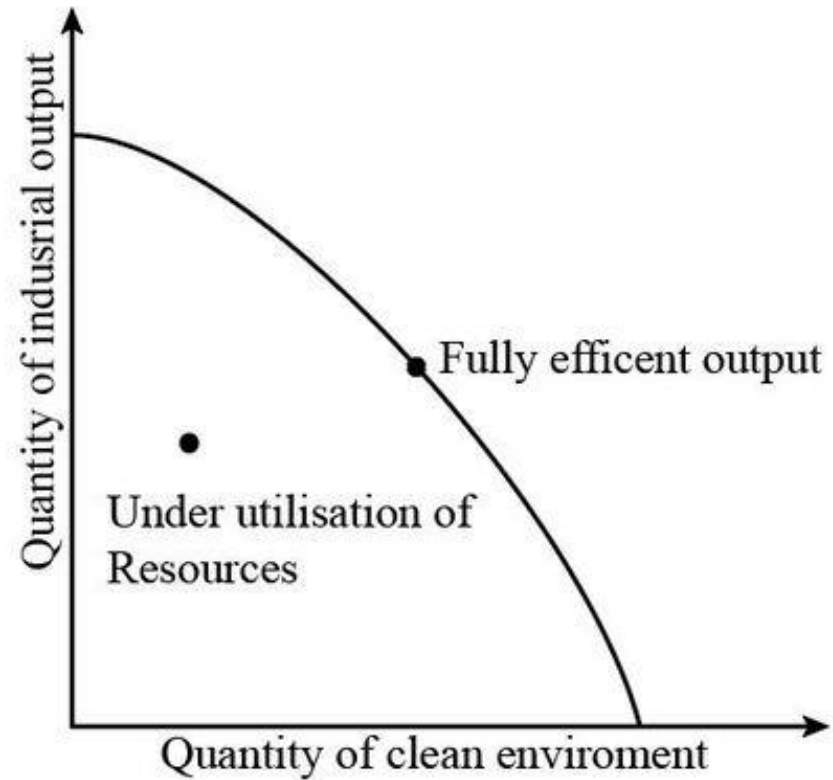
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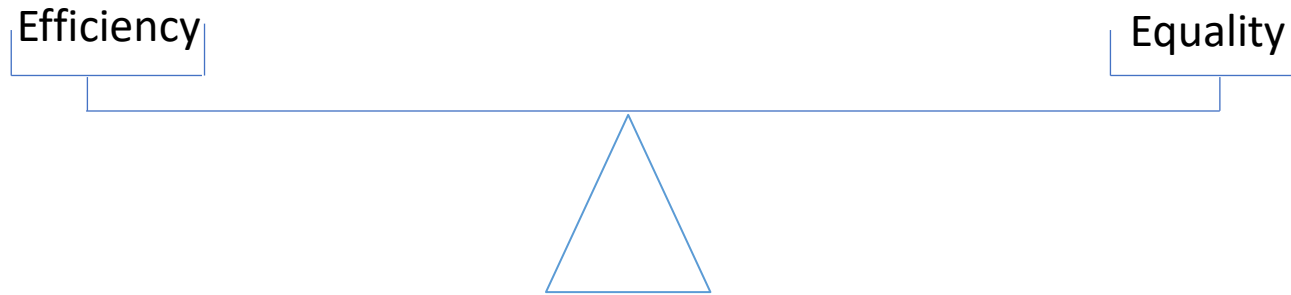
When people are grouped into **societies**, they face different kinds of trade-offs. One classic **trade-off is between “guns and butter”**.

Principle 1: People Face Trade-offs



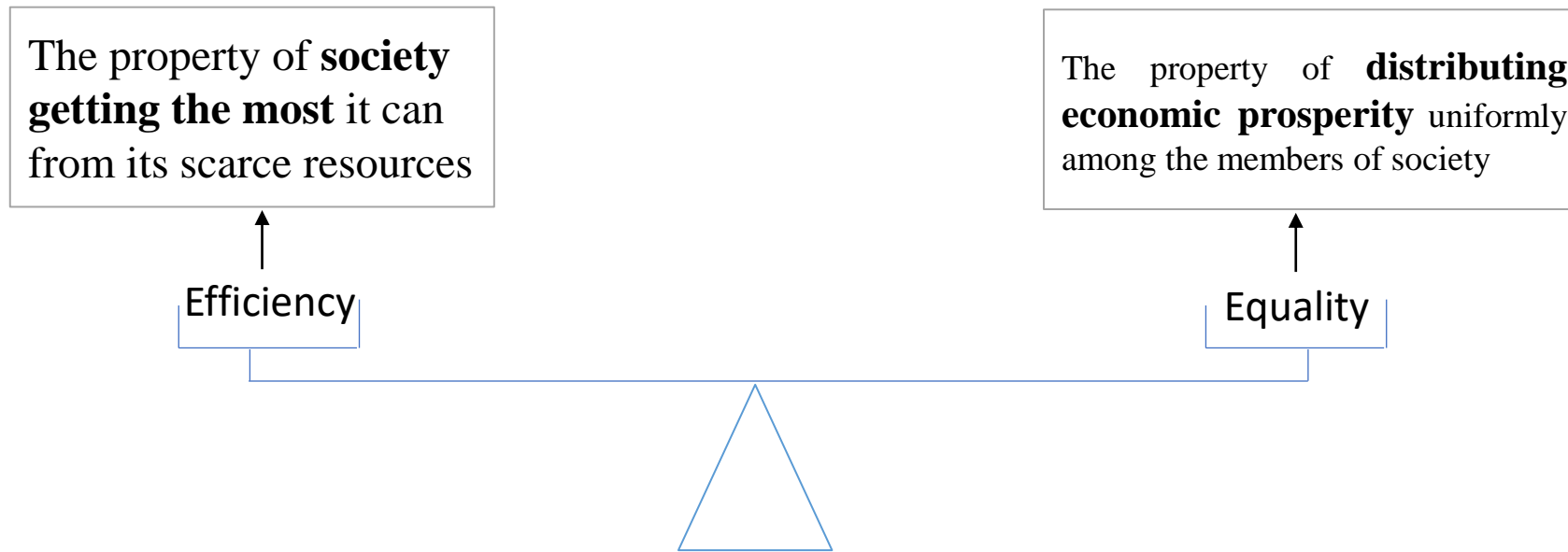
In modern society is a trade-off between a **clean environment** and a **high level of income**.

Principle 1: People Face Trade-offs



Another trade-off society faces is between efficiency and equality.

Principle 1: People Face Trade-offs



Another trade-off society faces is between **efficiency** and **equality**.

Principle 1: People Face Trade-offs

In other words, **efficiency** refers to the **size of the economic pie**, and **equality** refers to how the pie is divided into **individual slices**.

Principle 2: The Cost of Something Is What You Give Up to Get It



RISK



DECISION



ALTERNATIVE



BENEFIT



CHOICE



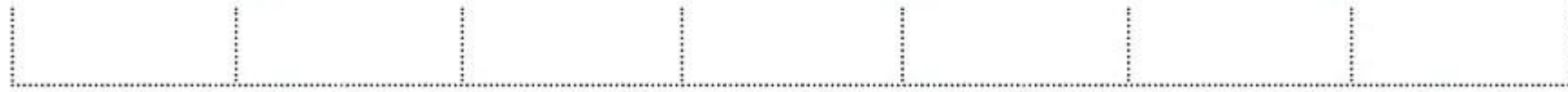
COSTS



VALUE



INVESTMENT



OPPORTUNITY COST

Principle 2: The Cost of Something Is What You Give Up to Get It

- In many cases, however, the **cost of an action** is **not as obvious** as it might first appear.
- Consider the decision to go to **college**. The main benefits are intellectual enrichment and a lifetime of better job opportunities. But what are the costs? To answer this question, you might be tempted to add up the money you spend on tuition, books, room, and board.
- Yet this total does not truly represent what you give up to spend a year in college.

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Principle 2: The Cost of Something Is What You Give Up to Get It

opportunity cost: whatever must be given up to obtain some item

Principle 2: The Cost of Something Is What You Give Up to Get It

- College athletes who can earn millions if they drop out of school and play professional sports are well aware that their **opportunity cost of college is very high**. It is not surprising that they often decide that the **benefit of a college education is not worth the cost**.

Principle 3: Rational People Think at the Margin



Rational Thinking

Principle 3: Rational People Think at the Margin

- **Rational people:** people who systematically and purposefully do the best they can to achieve their objectives.
- **Marginal change:** a small incremental adjustment to a plan of action.

Principle 4: People Respond to Incentives



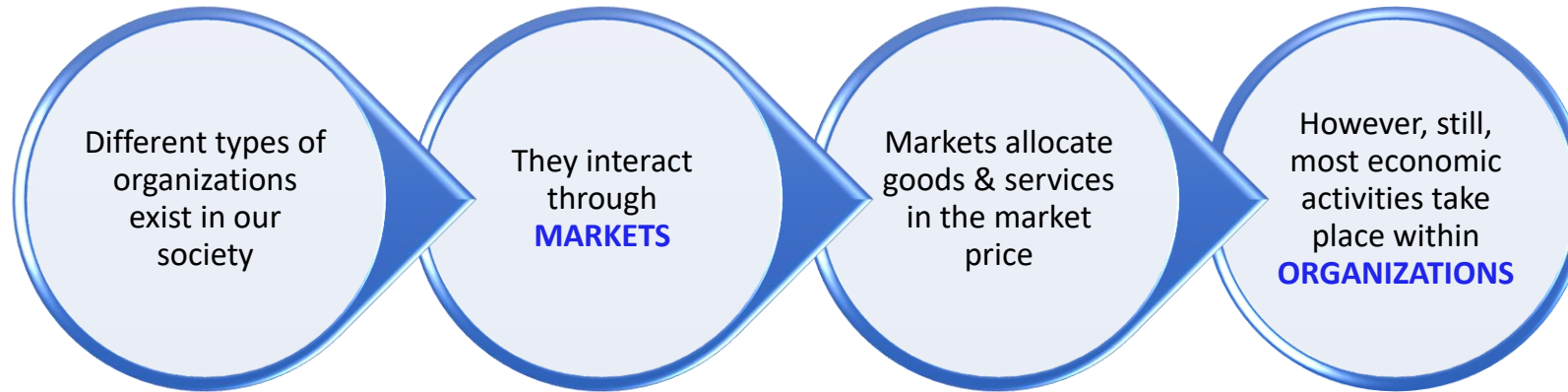
Principle 5: Trade Can Make Everyone Better Off.



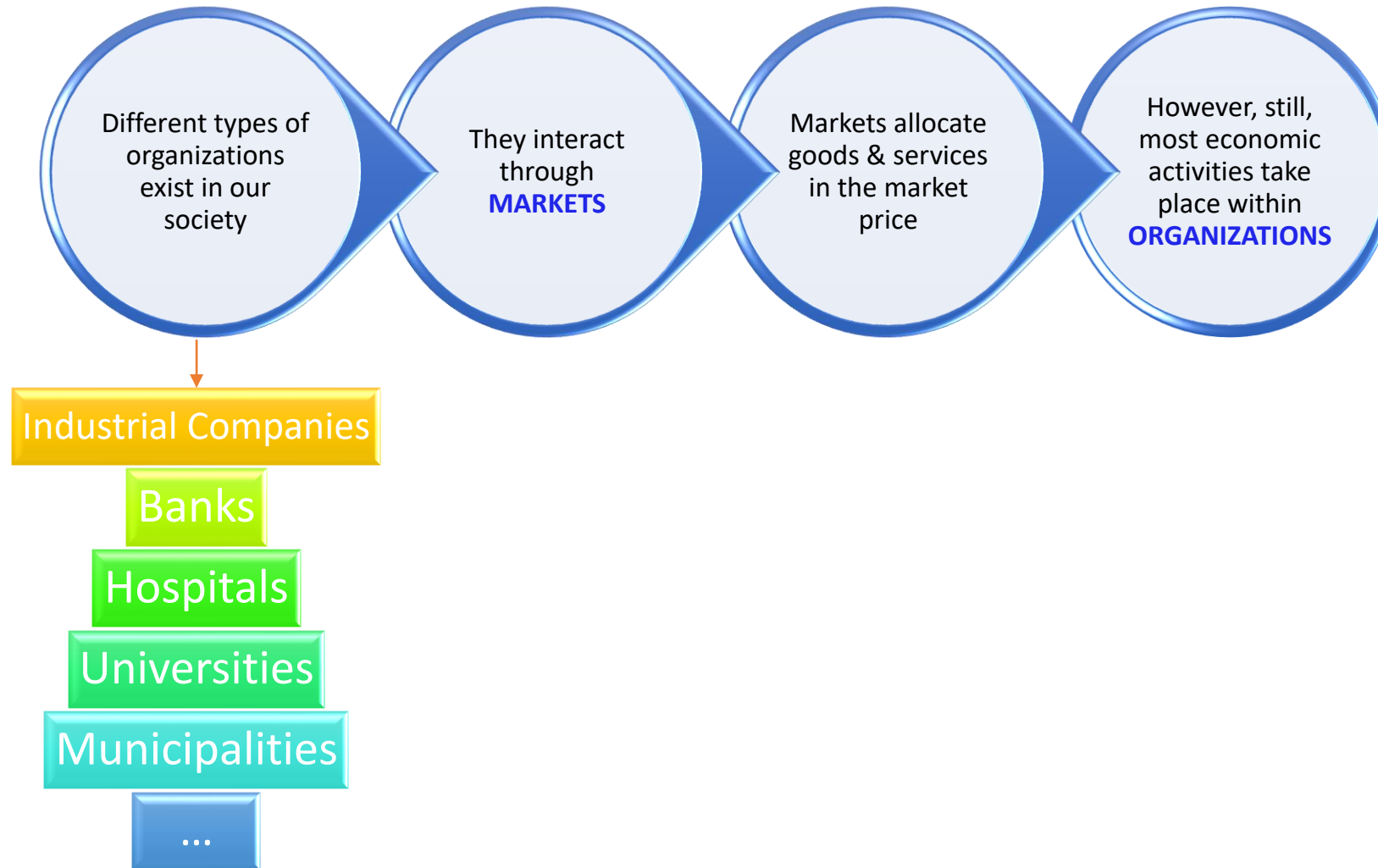
Principle 5: Trade Can Make Everyone Better Off

- Countries as well as families benefit from the ability to trade with one another. Trade allows countries to **specialize** in *what they do best* and to enjoy a *greater variety of goods and services*. The Japanese, as well as the French and the Egyptians and the Brazilians, are as much our partners in the world economy as they are our competitors.

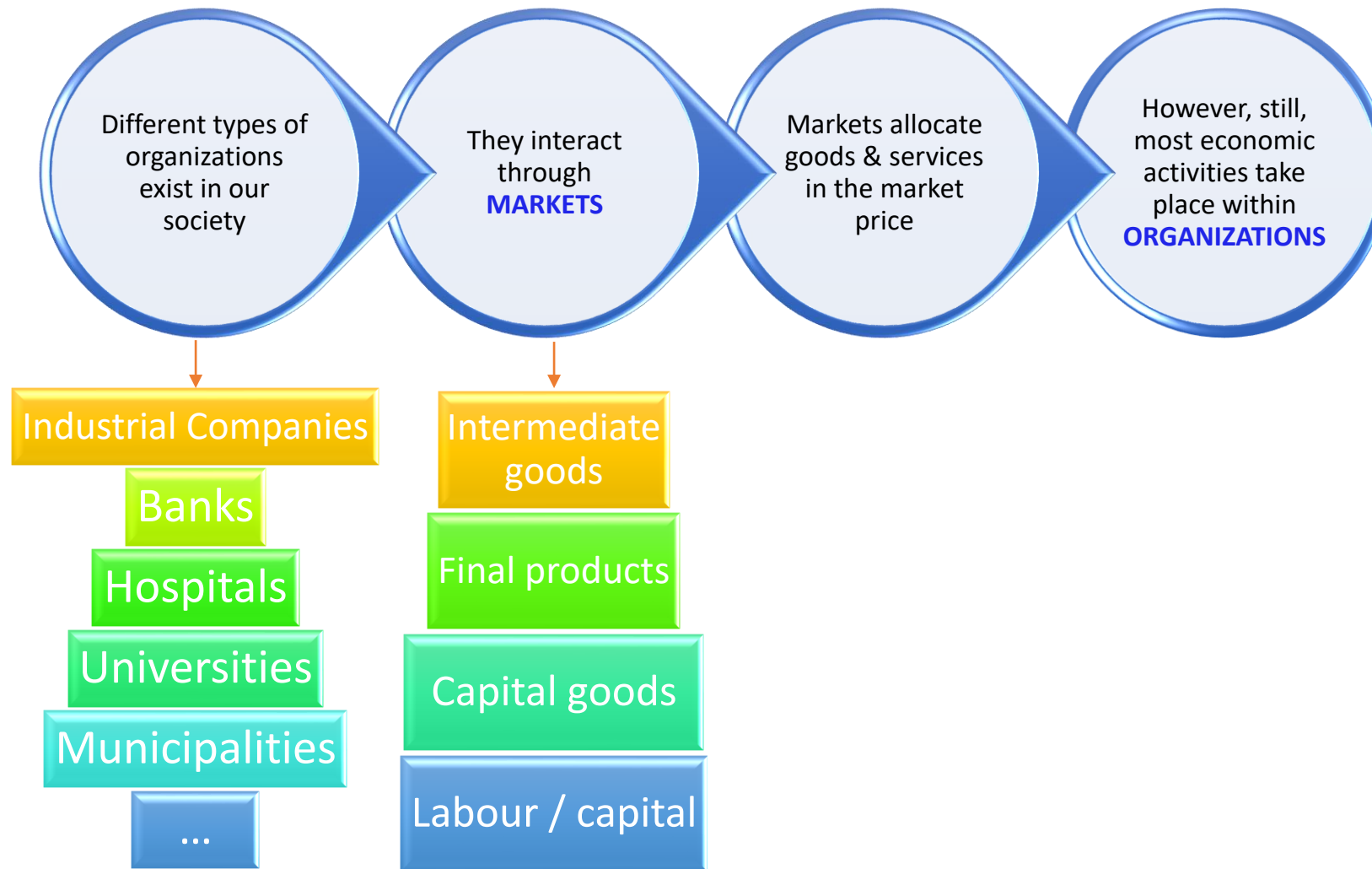
Positioning “We start with the bone and then add meat to it.”



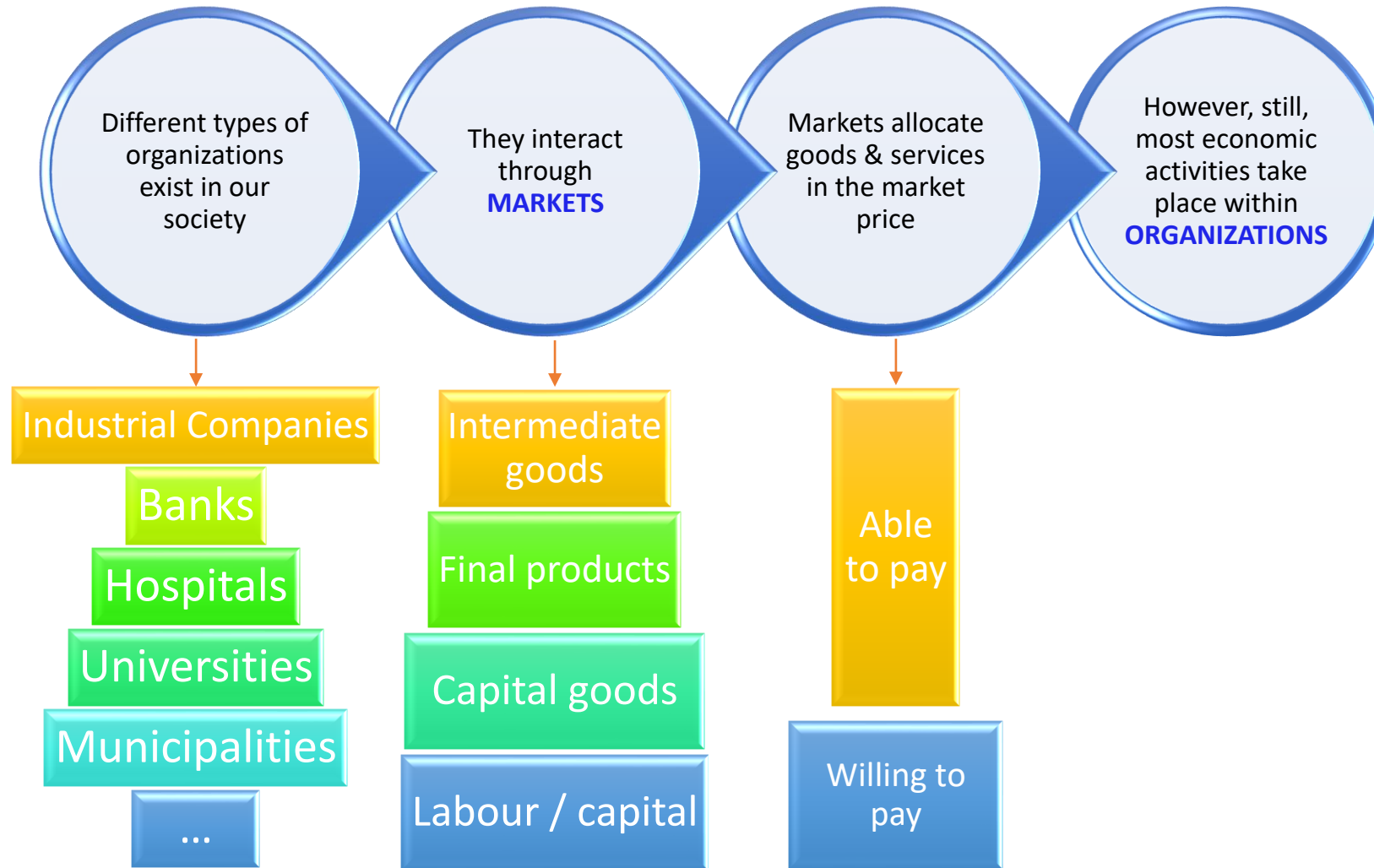
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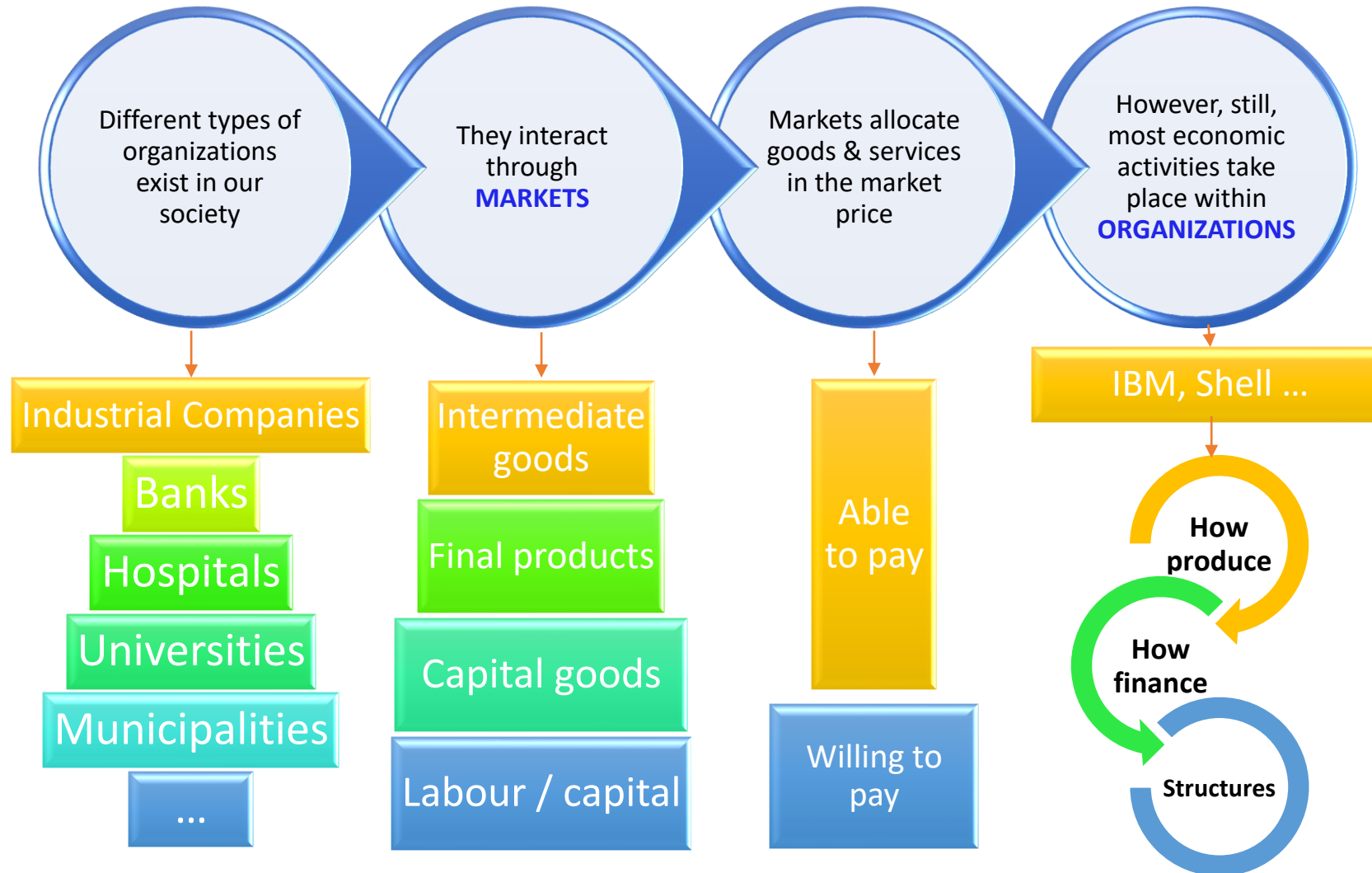
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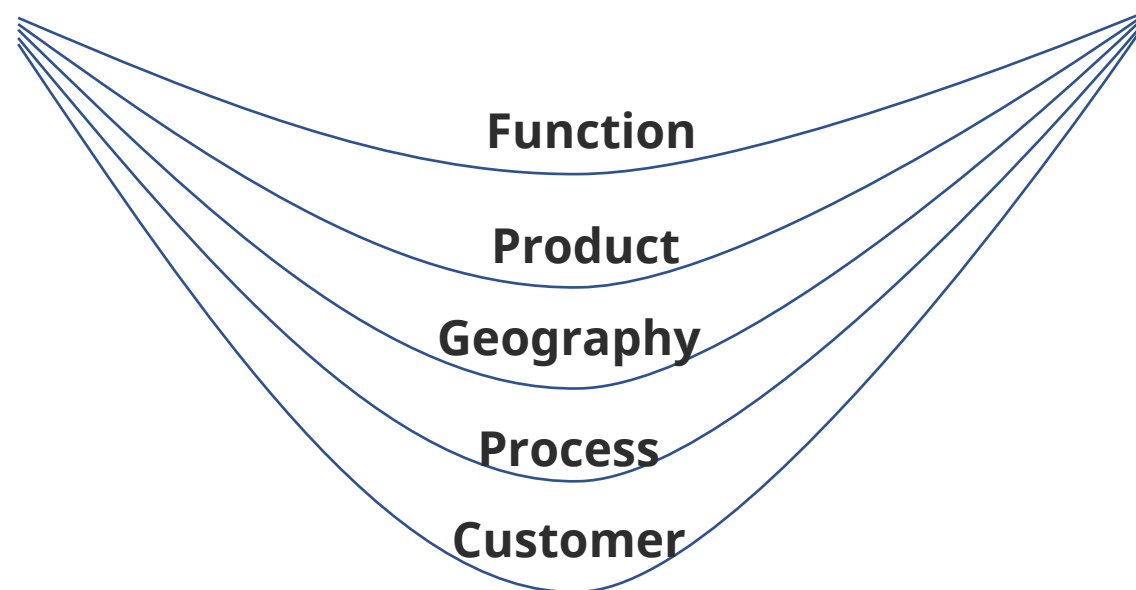
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Specialization is one of the main parts of **organizations**



Outputs could be increased by specialization and exchanges (**How?**)

Specialization & Exchange

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- ✓ Increased level of skill

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- ✓ Increased level of skill
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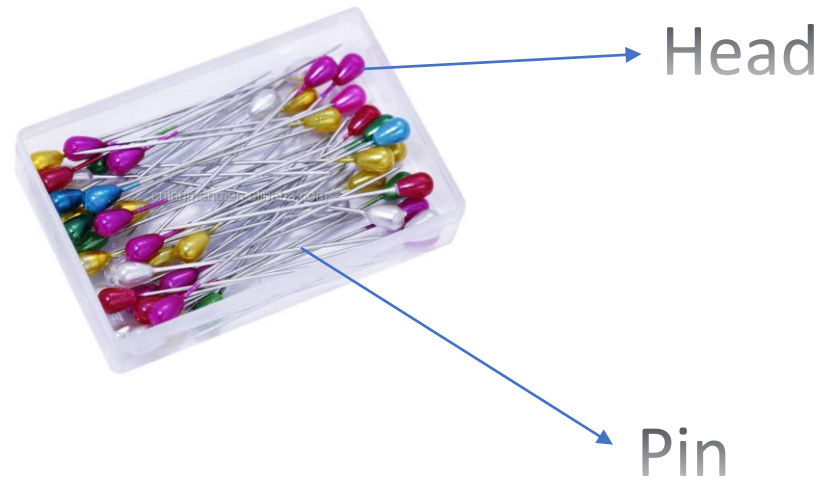
Specialization & Exchange

Outputs could be increased by specialization and exchanges (**How?**)

- ✓ Increased level of skill
- ✓ The greater possibilities of mechanization
- ✓ The shorter time wasted in switching from one task to the next (**Adam Smith**)

The law of comparative/absolute advantages (probability of advantages in any circumstances)

An old-fashioned example



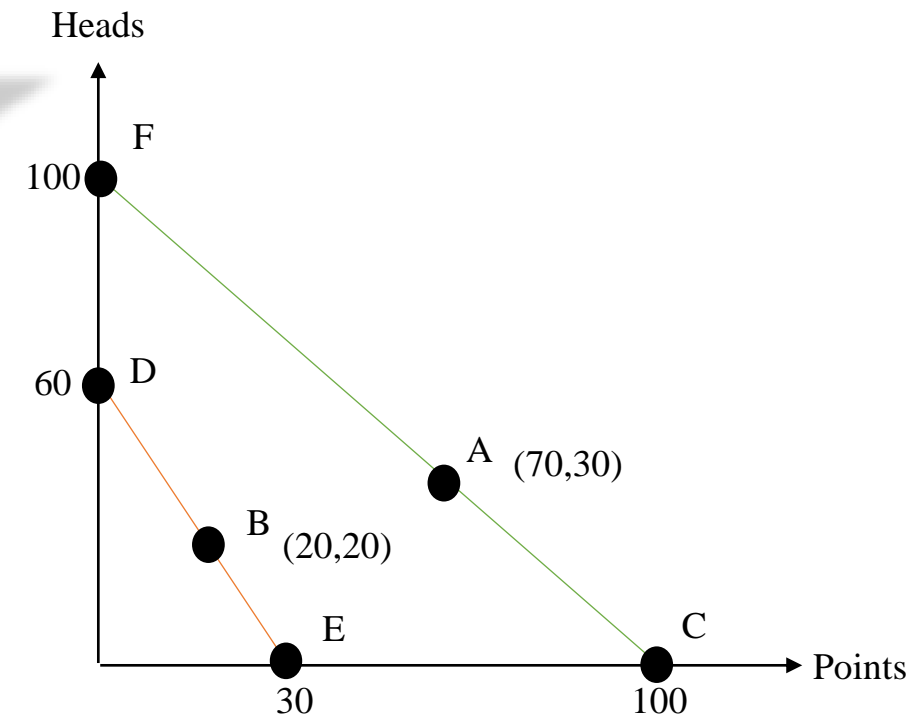
Specialization & Exchange

(P & H)

	Only Point	Only Head	Both
Jones	(100 & 0)	(0 & 100)	(70 & 30)
Williams	(30 & 0)	(0 & 60)	(20 & 20)

Specialization & Exchange

	Only Point	Only Head	Both
Jones	(100 & 0) C	(0 & 100) F	(70 & 30) A
Williams	(30 & 0) E	(0 & 60) D	(20 & 20) B



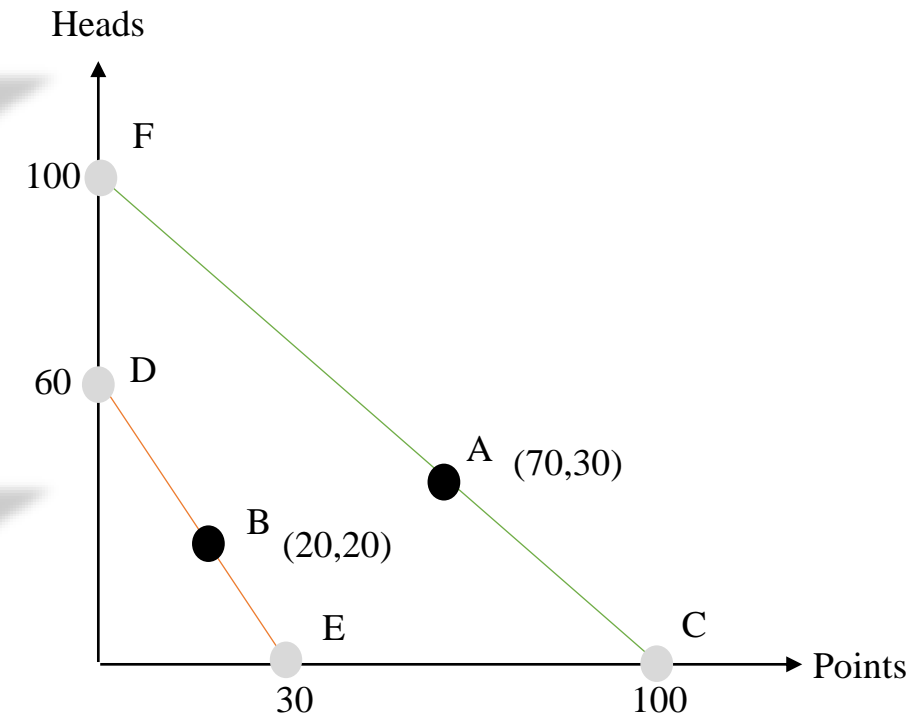
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No exchange / Specialization

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Jones	100	100	(70 & 30)
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	Jones		Williams		Society	
Point	70	+	20	=	90	A
Head	30	+	20	=	50	B



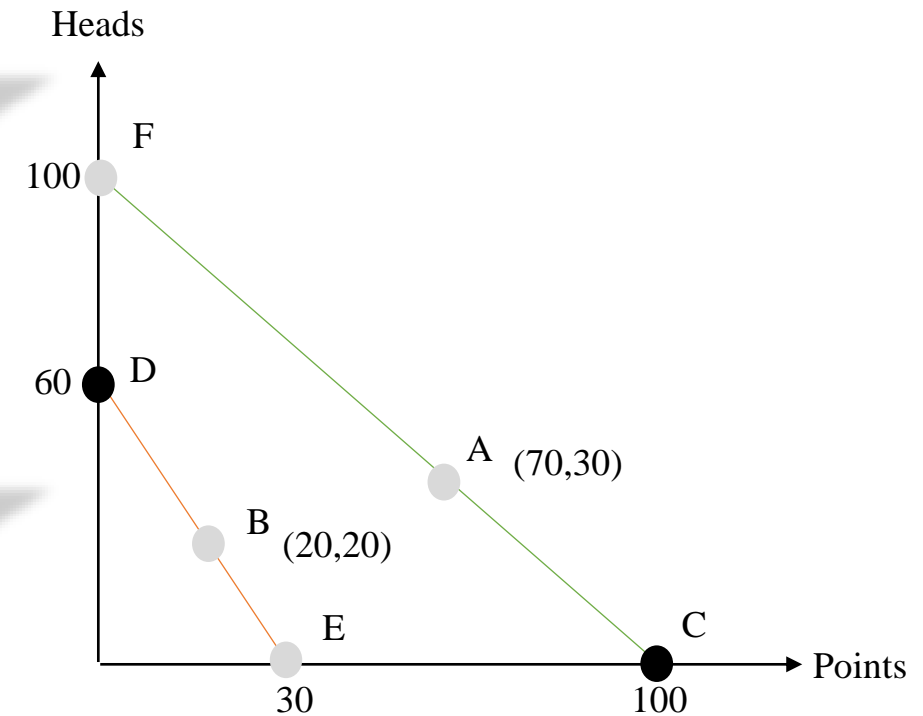
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In case of exchange / Specialization

	Only Point	Only Head	Both
Jones	100	0	(100 & 0)
Williams	0	60	(0 & 60)

	Jones		Williams		Society	
Point	100	+	0	=	100	C
Head	0	+	60	=	60	D



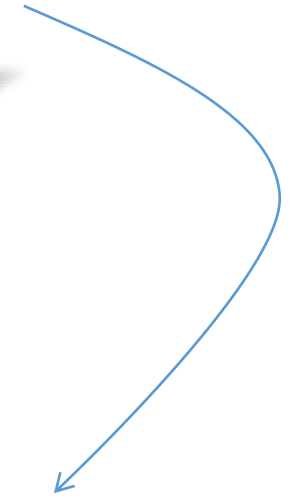
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Why?

Specialization & Exchange

Facts:

- Jones has an **absolute advantage** in producing both goods and their combination in comparison with Williams.

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Specialization & Exchange

Facts:

- Jones has an **absolute advantage** in producing both goods and their combination in comparison with Williams.
- In the case of exchange Jones has a **comparative advantage** in producing points Williams has a **comparative advantage** in producing the heads. ([Role of opportunity cost](#))

	Jones		Williams
Opportunity cost of Point	$30 \div 70 = 0.42$	<	$20 \div 20 = 1$
Opportunity cost of Head	$70 \div 30 = 2.33$	>	$20 \div 20 = 1$

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- Jones has an **absolute advantage** in producing both goods and their combination in comparison with Williams.
- In the case of exchange Jones has a **comparative advantage** in producing points Williams has a **comparative advantage** in producing the Heads. (Role of opportunity cost)
- The optimal strategy is following the least opportunity cost bundles.

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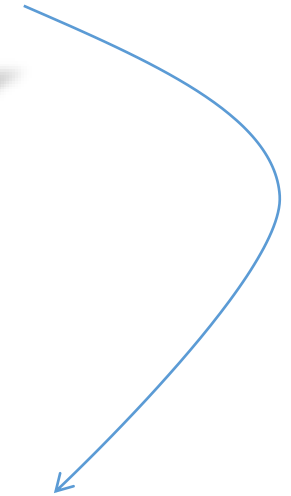
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Co-ordination & motivation

Based on the law of comparative advantages, **specialization can be beneficial**, but:

- Interdependencies
- Payrise chains and probability of firing
- Co-ordination & motivation problems (conflict of interests)

Co-ordination as well as motivation problem, are both addressed by “**lack/ asymmetric information**”

- The best approach to these problems is “*marginal analysis*” (diamond-water paradox)
 - Use-value /market price

The paradox of Value (By Adam Smith)

- In a normal situation, we think about the exchange value of products.
- Exchange value of water is very low.
- We could consider the use-value of products.
- Use-value is based on the opportunity cost of using the product.
- Opportunity cost of consuming a unit of diamond in the desert is very high in comparison with water since a dead body can't enjoy the diamond.
- So, marginally, water is worth more than diamonds.

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- Opportunity cost of consuming a unit of diamond in the desert is very high in comparison with water since a dead body can't enjoy the diamond.
- So, marginally, water is worth more than diamonds.
- One may consider it as the marginal utility.

Setting the Co-ordination & motivation problem

(Becker & Murphy, 1992):

Co-ordination as well as motivation problems, limit the degree of *specialization*

Assume: *Revenues of specialization* = $B(K,N)$

Costs of specialization = $C(N)$

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N = *number of tasks or specializations* then:

Positive relationship between $B(K,N)$ & N = advantages of specialization

If $C(N)$ rises with N = disadvantages associated with additional specialization

If $C(N)$ does not vary with N = no Co-ordination / motivation problems

Solution for the Co-ordination & motivation problem

(Becker & Murphy, 1992):

The optimal degree of specialization could calculate with FOD. Then:

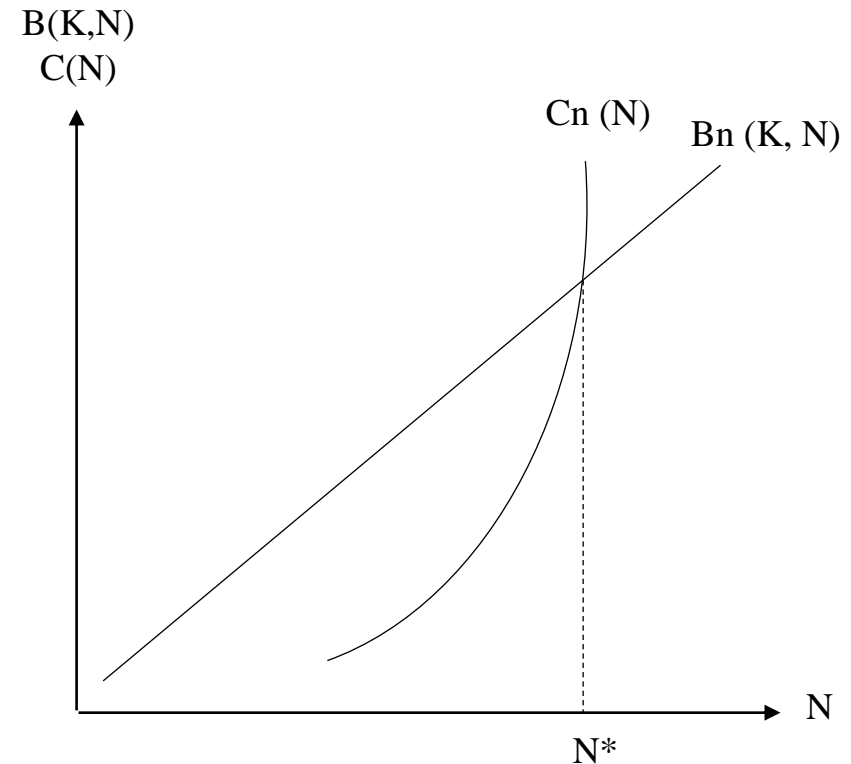
- The optimal value of $N = 1$, if $C(N)$ is a rising function of N and $B(K, N)$, doesn't vary with N (which means there are NO advantages of specialization)
- Such a situation is called “**autarky**”, which means everyone is completely self-supporting
- Adam Smith's extreme: A situation in which, $B(K, N)$ has a positive relationship with N & $C(N)$ doesn't depend on N . (The degree of specialization is limited only by the market size)

Solution for the Co-ordination & motivation problem

(Becker & Murphy, 1992):

However, in most cases, $B(K, N)$ & $C(N)$ are both positively related to N . There is **specialization**, but it is **less** than the **market size**.

The optimal level of specialization also could vary with the level of **knowledge** as well.



The importance of organizations compared with markets

(Williamson, 1994):

Economic analyses have been concerned mainly with **firms competing in markets**, while the **internal functioning of companies** has received relatively **little attention**. This emphasis on markets is curious because most economic activities occur within organizations. The efficiency of an economic system depends therefore the large part of the organization of activities **outside markets**. An **efficient organization** is **at least as important** as a **well-functioning system of markets**.

Principle 6: Markets Are Usually a Good Way to Organize Economic Activity



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- **Market economy:** an economy that allocates resources through the **decentralized** decisions of many firms and households as they interact in markets for goods and services.
- **In a market economy,** the decisions of a central planner are replaced by the decisions of millions of firms and households. Firms decide whom to hire and what to make. Households decide which firms to work for and what to buy with their incomes.

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Principle 7: Governments Can Sometimes Improve Market Outcomes



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- **Property rights:** the ability of an individual to own and exercise **control** over scarce resources.
- One reason we need government is that the invisible hand can work its magic only if the government enforces the rules and maintains the institutions that are key to a market economy. Most importantly, market economies need institutions to enforce property rights so individuals can own and control scarce resources. A farmer won't grow food if he expects his crop to be stolen; a restaurant won't serve meals unless it is assured that customers will pay before they leave; and an entertainment company won't produce DVDs if too many potential customers avoid paying by making illegal copies.

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Principle 7: Governments Can Sometimes Improve Market Outcomes

- **Market failure:** a situation in which a market left on its own fails to allocate resources efficiently.
- Although the **invisible hand** usually leads markets to allocate resources to maximize the size of the economic pie, this is not always the case. Economists use the term market failure to refer to a situation in which the market on its own fails to produce an efficient allocation of resources.

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- **Externality:** the impact of one person's actions on the well-being of a bystander.
- One possible cause of market failure is an externality, which is the impact of one person's actions on the well-being of a bystander. The classic example of an externality is pollution.

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- **Market power:** the ability of a single economic actor (or small group of actors) to have a substantial influence on market prices.
- Another possible cause of market failure is **market power**, which refers to the ability of a single person (or small group) to unduly influence market prices. For example, if everyone in town needs water but there is only one well, the owner of the well is not subject to the rigorous competition with which the invisible hand normally keeps self-interest in check. In the presence of externalities or market power, well-designed public policy can enhance economic efficiency.

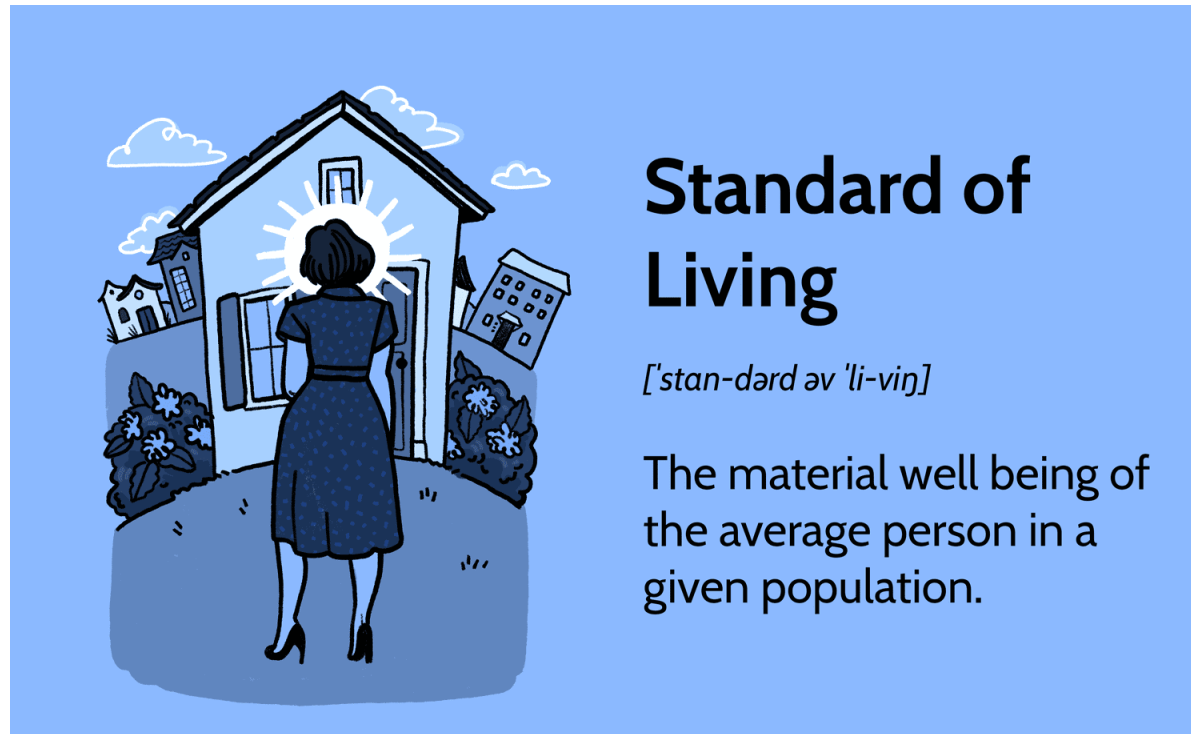
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Quick Quiz *Why is a country better off not isolating itself from all other countries?*

- *Why do we have markets, and, according to economists, what roles should government play in them?*

Principle 8: A Country's Standard of Living Depends on Its Ability to Produce Goods and Services



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- Almost all variation in living standards is attributable to differences in countries' **productivity**, that is, the amount of goods and services produced from each unit of labor input. In nations where workers can produce a large quantity of goods and services per unit of time, most people enjoy a high standard of living; in nations where workers are less productive, most people endure a more meager existence.
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Principle 9: Prices Rise When the Government Prints Too Much Money



"Well it may have been 68 cents when you got in line, but it's 74 cents now!"

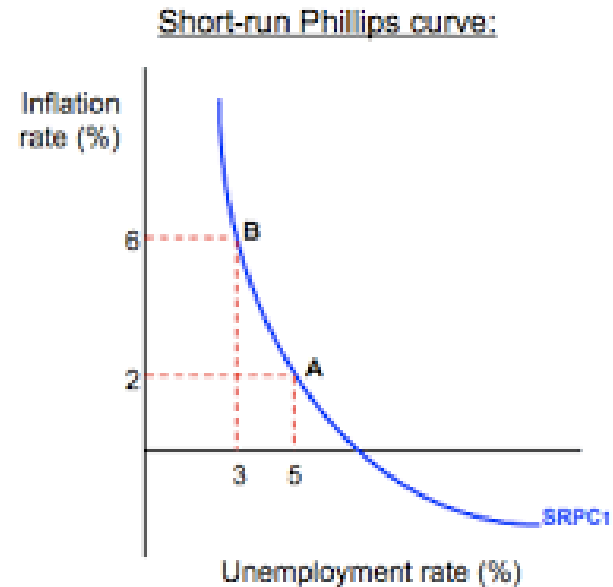
Principle 8: A Country's Standard of Living Depends on Its Ability to Produce Goods and Services

- In January 1921, a daily newspaper in Germany cost 0.30 marks. Less than two years later, in November 1922, the same newspaper cost 70,000,000 marks!
- **What causes inflation?** In almost all cases of large or persistent inflation, the culprit is growth in the **quantity of money**. When a government creates large quantities of the nation's money, the value of the money falls. In Germany in the early 1920s, when prices were on average tripling every month, the quantity of money was also tripling every month.

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Principle 10: Society Faces a Short-Run Trade-off between Inflation and Unemployment



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The Short-Run Trade-off between Inflation and Unemployment

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