

Comparative Advantage

Basic Economic principle that explains how free trade can make everyone better-off. It is based on the fact that opportunity costs of producing goods vary by individual and geographically. Some people & places are better suited for doing some things and not others.

LAW of Comparative Advantage

Individuals, firms, regions, nations can gain by specializing in the production of goods that they produce at a low opportunity cost and trading for goods for which they are high (opportunity) cost producers.

This principle is Both
universal and ~~obvious~~ Not obvious.
 (PAUL Samuelson)

Consider the following case:

Andrea - ATTORNEY - AF-LAW
 earns \$100/HR doing legal
 services. She needs to have some
 documents typed AND Thinking
 of hiring a word processing tech.
 for \$15/hr.

Andrea is an excellent typist
 and types much faster than the
 tech she hires.

She could type the docs in 20HRS.
 The Tech types " " in 40HRS.

Andrea is twice AS FAST.

For 40 HRS of typing she pays

$$40 \times \$15 = \$600$$

If she does the typing herself
she saves \$600, but has to

use 20 HRS of legal time to do it.

That costs her \$2,000.

So, what should she do?

She is \$1,400 better off if she
outsources the typing.

Typing is a high cost
item for Andrea because
each HR of it costs her \$100
of lawyering.

US & Korea.

		output/DAY	
		Vaccine	TV sets
US		6	3
Korea		1	2

U.S. can produce 6 vials of vaccine or 3 TVs in a day.

Korea can produce 1 vial of vac or 2 TVs in a day.

U.S. is ABSOLUTELY BETTER AT BOTH goods. In 1 DAY U.S. produces more vaccine and more TVs

ABSOLUTE ADVANTAGE - A country is more efficient than another AT producing a good.

⇒ (same # resources to produce more)
(fewer " to produce equal amt)

→ Comparative Advantage is about opportunity costs. So, first thing to do is to figure out what is the opp cost of producing each good.

US

1 DAY: 6 Vaccines or 3 TVs.

$6/6 = 1$ Vaccine costs $3/6 = \frac{1}{2}$ TV's

opp cost of 1 Vacc = $\frac{1}{2}$ TV.

Korea

1 DAY: 1 Vaccine or 2 TV's

$1/1$ Vaccine costs $2/1 = 2$ TV's.

Since the opp. cost of producing Vaccines in U.S. is less than that in Korea, the U.S. has a Comparative Advantage in Vaccines.

What is cost of producing TV's?

US

1 DAY: 3 TV's or 6 Vaccines.

$\frac{3}{3} = 1$ TV costs $\frac{6}{3} = 2$ Vaccines

Korea

1 DAY: 2 TV's or 1 Vaccine.

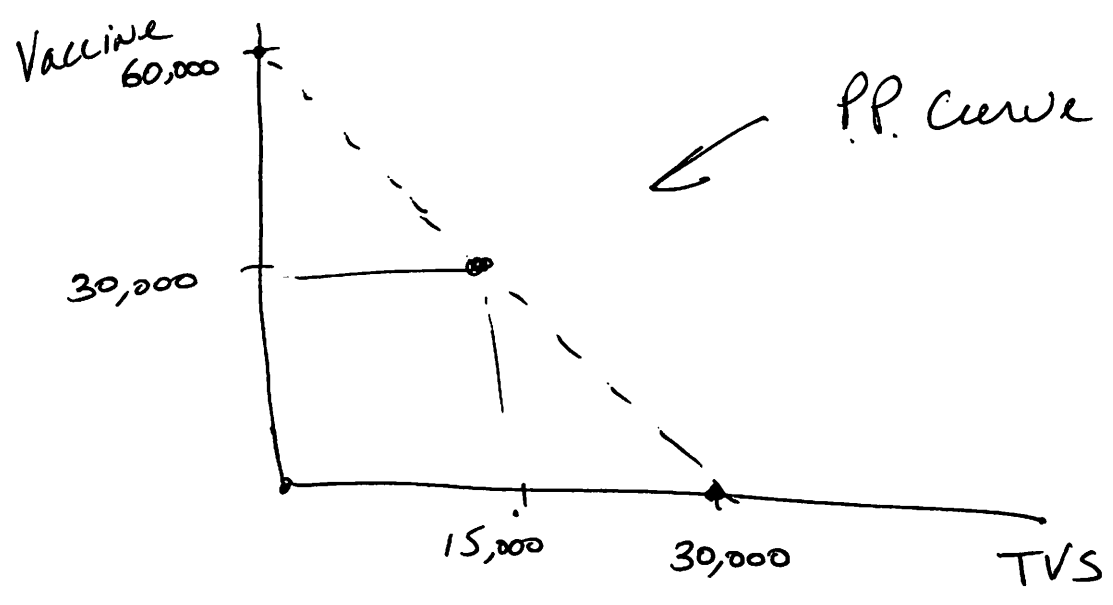
$\frac{2}{2} = 1$ TV costs $\frac{1}{2}$ Vaccines.

Korea HAS comparative Advantage
in producing TV's.

Production Possibilities (PP)

Various combinations of goods that can be produced using all of a country's resources.

US 10,000 workers

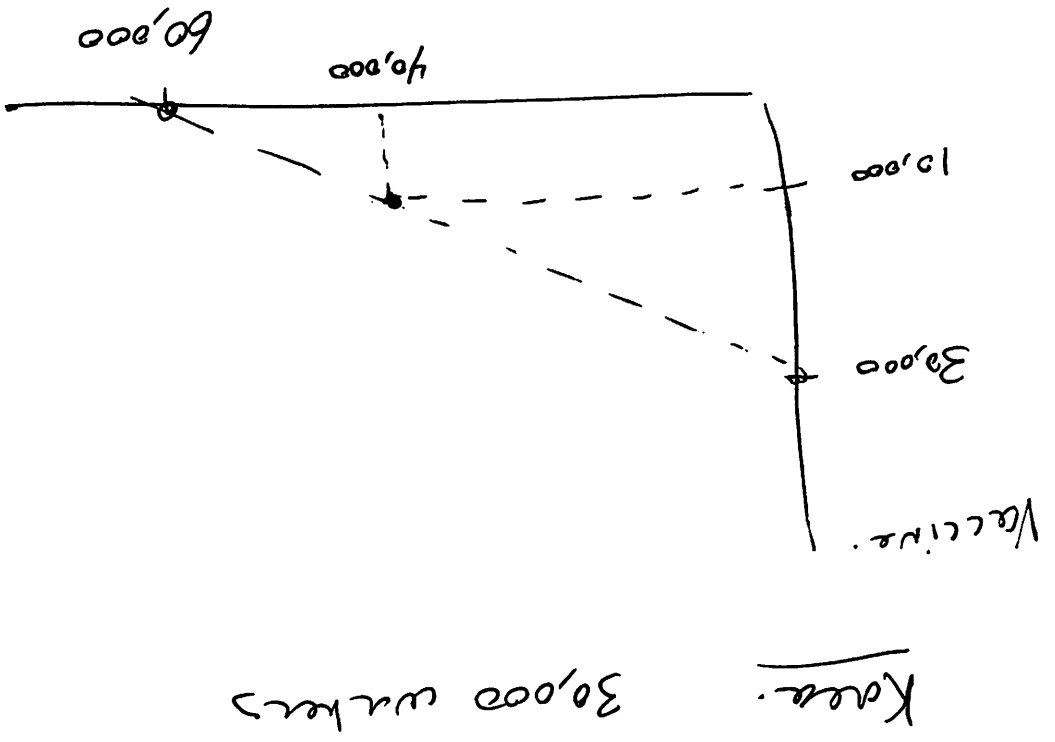


All 10,000 in Vaccine = $10,000 \times 6/d = 60,000/d$
 All 10,000 in TV = $10,000 \times 3/d = 30,000/d$
 5,000 in TV, 5,000 in Vacc.
 $= 5,000 \times 6 = 30,000$ Vacc
 $5,000 \times 3 = 15,000$ TV

Self-Sufficient (TV & Vaccine "independent")
 US: 5,000 in each; Korea: 20,000 TV 10,000 Vaccine

With NO Trade, you can only consume ~~at~~ along your PPF

	US	Korea
Vaccine	30,000	10,000
TV	15,000	40,000
	<u>40,000</u>	<u>55,000</u>

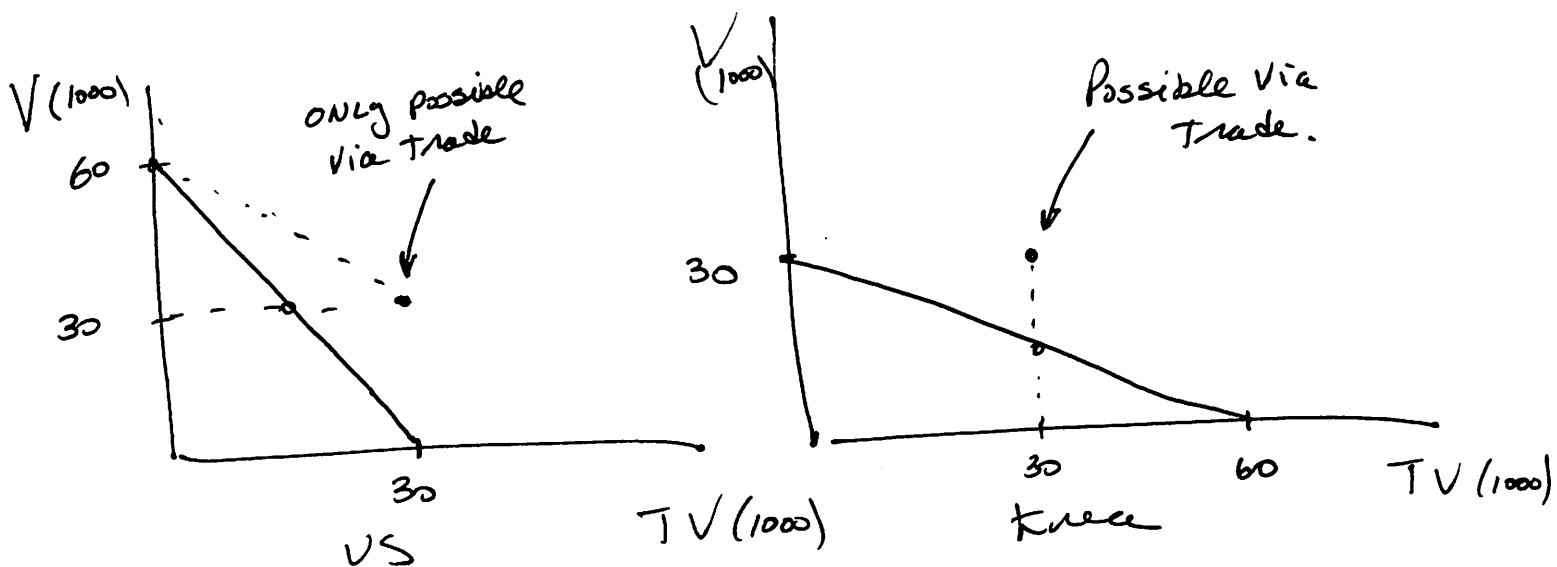


Now, Suppose U.S. specializes in Vaccine
AND Korea in TV

Specialization

	Vaccine	TV
US	60,000	0
Korea	0	60,000
	<u>60,000</u>	<u>60,000</u>

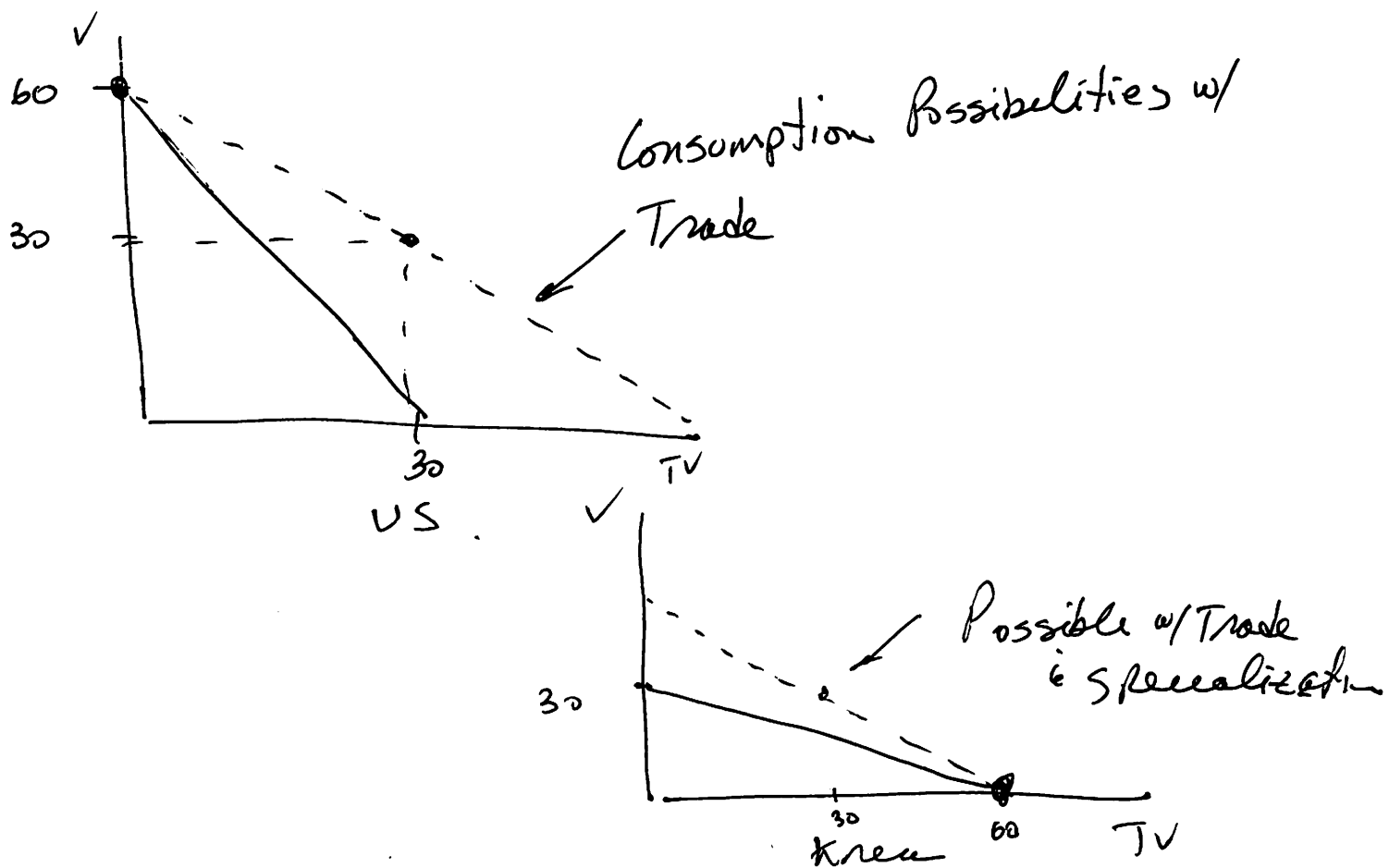
Max of both goods. This
makes Trade ~~for~~ potentially
Beneficial for Both countries.



Suppose U.S. & Korea Decide to specialize &
 Trade 1 vac for 1 TV, ~~devoting 1/2 of~~
~~workers to each~~ Sell 30,000 V. for 30,000 TV

With specialization & Trade you can
 actually consume AT points beyond
 your own country's PPC.
 Both Countries Better off!

Maximum available through Trade.



Terms of Trade are negotiated

But will fall between
The opp costs of producing

US. 1 TV costs 1/2 Vaccine

Korea 1 TV costs 2 Vaccine.

So, Acceptable Terms
would be between

1/2 & 2 vacc for 1 TV.