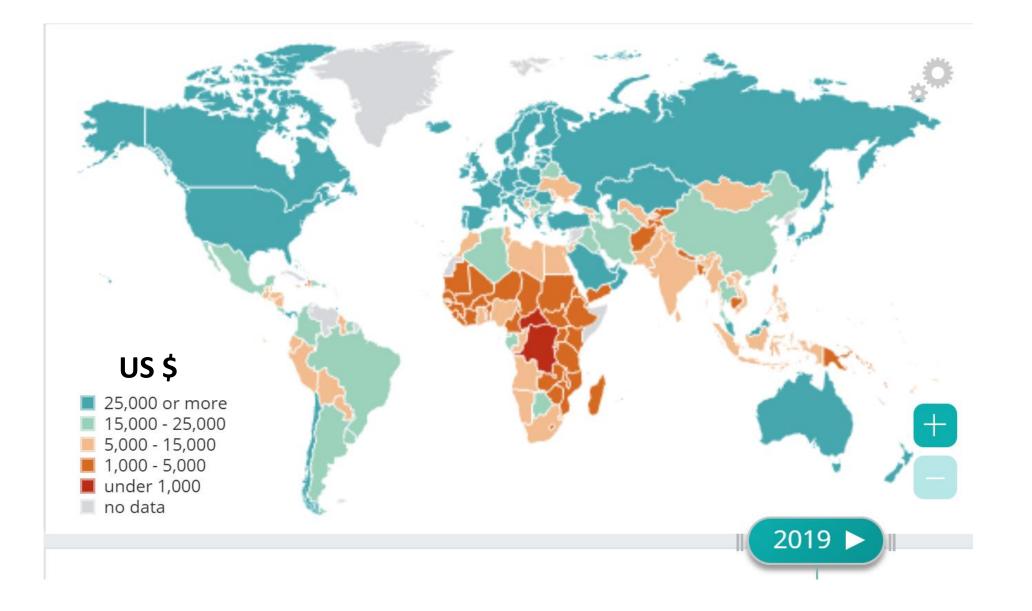
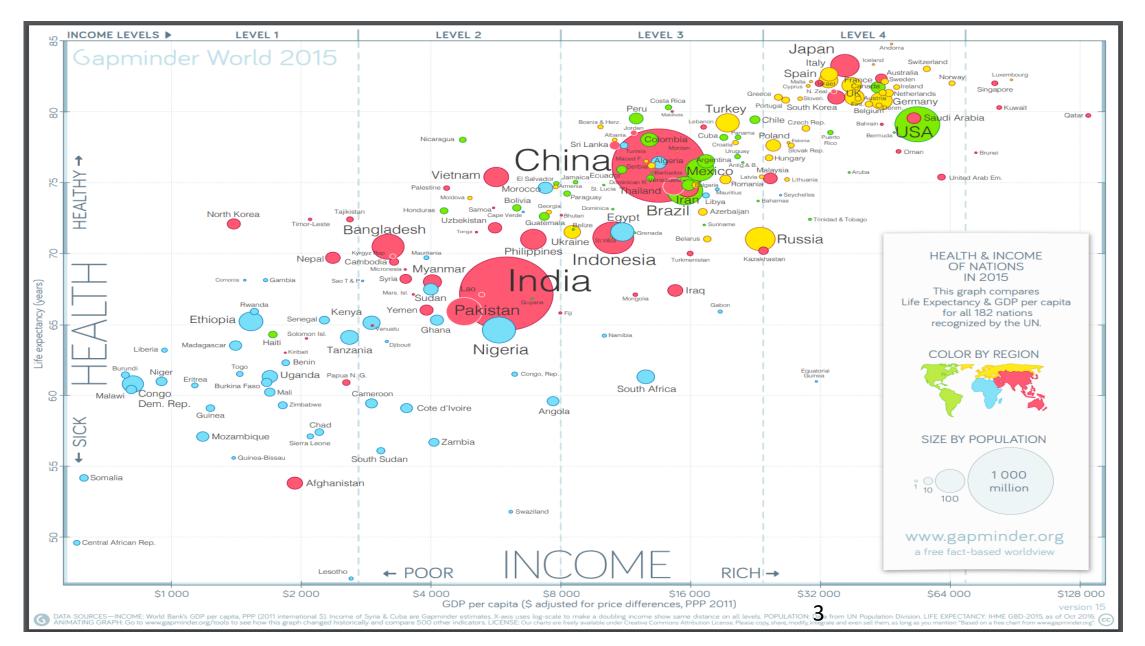
Economics for Elias Shaw

Lesson 2: Economic Growth – more on How to Save Time and get RICHER

Remember – Some RICH Countries some very POOR



Remember too – Richer Countries have Better Health



Machines of all types save time

- Grandma's new WACHINE MACHINE saved her a lot of time
 - So she had more time to read BOOKS
 - More time to learn new things
 - So she became more PRODUCTIVE

•	Inventing new machines like the STEAM ENGINE in 1780 saved time by	.?
	Opening RAILWAYS (1830-1850) saved time by	
	Inventing the LIGHT BULB (1880 Eddison) saved time by	
•	Inventing simple COMPUTERS (1950) did this by	?
•	Inventing the INTERNET (1970) did this by	?
	Inventing ZOOM in 2020 did this by	

All these NEW MACHINES helped to make people RICHER by saving lots of TIME

Can you think of important inventions of OTHER NEW MACHINES?

SPECIALISATION – is another way to save TIME

An idea from a famous Economist Adam Smith in 1776

EXAMPLE 1: In the HOME

Making a meal and tidying the Garden (in minutes)				
	NO specialisation	Mum	Dad	
Cooking		10	40	
Gardening		20	30	
TOTAL Time Needed		30	70	
	NOW let's SPECIALISE	Mum	Dad	
Cooking		20	0	
Gardening		0	60	
TOTAL Time Needed		20	60	
Time saved		10 minutes	10 minutes	

EXAMPLE 2: In the FACTORY

Making FRUIT JUICE in a Factory (minutes needed)				
	NO specialisation	Fred	Sidney	
Mixing the Juice for				
10 bottles		40	100	
Doing the Bottling		60	80	
TOTAL Time Needed		100	180	
	NOW let's SPECIALISE	Fred	Sidney	
Mixing the Juice for 10 bottles		80	O	
Doing the Bottling		0	160	
TOTAL Time Need	d	20	100	
TOTAL Time Needed		80	160	
Time saved		20 minutes	20 minutes	

Why should SIDNEY specialise in doing the BOTTLING?

EXAMPLE 3: TRADE between Two COUNTRIES

Making TEA and making CARS (hours of work)				
	NO specialisation	INDIA	ENGLAND	
Produce 100 kilo TEA				
		10	90	
Make One CAR		80	50	
TOTAL Time Needed		90	140	
	NOW let's SPECIALISE	INDIA	ENGLAND	
Produce 100 kilo TEA				
		20	0	
Make One CAR		0	100	
TOTAL Time Needed		20	100	

Why should INDIA Specialise in GROWING TEA?

Conclusion on SPECIALISATION

- In Example ONE, DAD was a bit less good than Mum on both jobs
- In Example TWO, SIDNEY was much less good than FRED on both jobs
- In Example THREE, ENGLAND was quite a lot better than INDIA in making CARS but much worse than INDIA in growing RICE

BUT in all three cases SPECIALISATION was a means to SAVE TIME

CONCLUSION:

It always saves time if each person/country specialises in the thing in which they are LEAST BAD

- So DAD does the gardening
- SIDNEY does the bottling
- INDIA grows the Tea

This is called the LAW OF COMPARATIVE ADVANTAGE

Another look at getting RICHER and Healthier 1810 to 2010 (partly explained by better machines and more time saved)

Go to:

https://www.bbc.co.uk/programmes/p00cgkfk

EUROPE	
AFRICA	
ASIA	
AMERICA	
MIDDLE EAST	

Look out for what happened in 1918