

notes to summarize:

[Niall Ferguson: The 6 killer apps of prosperity](http://www.ted.com/talks/niall_ferguson_the_6_killer_apps_of_prosperity.html)

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195,000 billion dollars of wealth in the world today

Most of that wealth was made after 1800

The West is 19 percent of the world's population today, Westerners own 2/3 of its wealth

Economic historians call this "The Great Divergence"

This slide here (seen in the video):

Two ratios of per capita GDP

Red line - British to Indian per capita income

Blue line - the ratio of American to Chinese per capita income

Y axis: GDP income ratio, X axis: time - 1500 to 1970

In 1500, the average Chinese was richer than the average North American

In the 1970s the average Briton is more than 10 times richer than the average Indian

And that's allowing for differences in the cost of living

It's based on purchasing power parity

The average American was nearly 20 times richer than the average Chinese by the 1970s

The 10 countries that became the Western empires were small in 1500:

- 5% of the world's land surface
- 16% of its population
- 20% percent of its income

By 1913, these 10 countries, plus the United States, controlled vast global empires:

- 58 percent of the world's territory
- 58% of its population
- 75% of global economic output

You can't just blame this on imperialism – saying that the West just had more will to be violent and dominant - though many people have tried to do so - for two reasons:

1. Empire was the least original thing that the West did after 1500, everybody did empire (Egyptian, Greek, Roman, Chinese, Mogul, Ottoman, Aztec, Mayan, Incan...)
2. Great Divergence reached its peak in the 1970s, some considerable time after decolonization

Why did Europe succeed at this? This is not a new question.

Samuel Johnson, the great lexicographer, asked it through a fictional character

Ibrahim Muteferrika, an Ottoman official (1731) asked:

"Why do Christian nations which were so weak in the past compared with Muslim nations begin to dominate so many lands in modern times and even defeat the once victorious Ottoman armies?"

Answer: "because they have laws and rules invented by reason."

It's not geography

Natural experiments:

- Germany: we divided in two, and we gave the ones in the East communism, and you see the result: Trabants vs. Mercedes Benz
- Korean Peninsula: same geographical place with the same culture, and we divided them in two, and we gave the Northerners communism

Neither geography nor national character is the cause, popular explanations for this kind of thing, are really significant
It's the ideas, the institutions

Adam Smith, in the "Wealth of Nations," published in 1776:

"China seems to have been long stationary, and probably long ago acquired that full complement of riches which is consistent with the nature of its laws and institutions. But this complement may be much inferior to what, with other laws and institutions, the nature of its soil, climate, and situation might admit of."

As a modern metaphor, let's call these institutions "killer apps"

But behind the icon, there's complex code

It's the same with institutions

There are six that explain the Great Divergence:

1. Competition
2. Scientific Revolution
3. Property rights
4. Modern medicine
5. Consumer society
6. Work ethic

1.

Competition means there were not only a hundred different political units in Europe in 1500

Within each of these units, there was competition between corporations as well as between sovereigns

The ancestor of the modern corporation, the City of London Corporation, existed in the 12th century

Nothing like this existed in China, where there was one monolithic state covering a fifth of humanity

People with ambition had to pass one standardized examination - three days, very difficult and involved mostly memorization

2.

The scientific revolution – different from science elsewhere: it used the experimental method

No scientific revolution anywhere else.

Ottoman Empire's - no scientific revolution there.

They demolished Taqi al-Din's observatory, because it's considered blasphemous to inquire into the mind of God.

3.

Property rights: difference between North America and South America

North America: deed of indentured labor - at the end of it, you've got a hundred acres of land

Not possible in Latin America - land is held onto by a tiny elite descended from the conquistadors

Result: huge divergence that happens in property ownership between North and South

Most people in rural North America owned some land by 1900

4.

Modern medicine in the late 19th century - major breakthroughs against the infectious diseases, surgery, sewage treatment...

5.

The consumer society: the necessary purpose of the Industrial Revolution.

You need people to want to buy things, and to be able to buy things

This causes economic growth more than even technological change itself

Japan was the first non-Western society to embrace it

Alternative: proposed by Mahatma Gandhi, was to institutionalize and make poverty permanent

Very few Indians today agree with Gandhi

6.

Work ethic

Any culture can get the work ethic if the institutions are there to create the incentive to work

Not only a protestant, Western phenomenon

West has lost its work ethic

Average Korean works a thousand hours more a year than the average German

This is the end of the Great Divergence

Who's got the work ethic now?

Mathematical attainment by 15 year-olds – top rank is Shanghai, China.

iPhone was designed in California but Japan, Korea and China lead in terms of technological innovation

Any society can adopt these institutions

This is the Great Re-convergence - biggest story of your lifetime

Now is the end of Western predominance

The average American used to be more than 20 times richer than the average Chinese

- **Now: 5 times as rich**
- **Soon: 2.5 times as rich**

Three questions:

1. Can you delete these apps, and are we in the process of doing so in the Western world?
2. Does the sequence of getting these apps matter? And could Africa get that sequencing wrong? It's quite hard to transition to democracy before you've established secure private property rights
3. Can China do without killer app number three? Private property rights and the protection of law are necessary

Winston Churchill:

"Violence, the rule of warriors and despotic chiefs, the conditions of camps and warfare, of riot and tyranny, give place to parliaments where laws are made, and independent courts of justice in which over long periods those laws are maintained. That is civilization."

Decline of Western civilization is not inevitable

History does not have to repeat in cycles

The West may collapse very suddenly - the historical study of complex institutions like civilizations shows this to be true

Regardless of what happens in the future, we know that now the Great Divergence is over