BOOK ONE CHAPTER THREE

As we saw in the last chapter, the development of the consumer market, including both the supply side and demand sides of this market, influenced the development of England.

The standard benchmark for development is income per capita. This is a measure of the strength of the consumer market. If we were to put a standard currency as this measure, which is almost always dollars, it would show the power of an individual consumer in that country. The strength of the consumer market shows the health of the economy. multiplied by the number of inhabitants of the country

However putting world currencies in dollars also reflects on the “national brands” of the world. Trust in a particular nation's national brand to be a reliable store of value determines what people think the value of the currency should be worth, adjusting the present value to losses that they expect in the future value. There is a demand and supply curve for currency value that shows how much of an export country a particular nation is. If it has a strong export market, then people will find the currency useful. Thus, the value in dollars of income per capita does not reflect the true purchasing power of a person who lives in a particular country. Economists adjust by using purchase power parity, which reflects the strength of the consumer market more accurately.

Having high purchasing power, in terms of purchase power parity, implies that the infrastructure to supply the consumer market cheaply and efficiently has been developed. The entire commoditized world has been influenced by the Walmart Principle, and engineering solutions including the highway system that trucks travel on have been implemented effectively in order to provide maximum efficiency.

However, to have a thriving economy one must also have a system to be able to distribute income throughout society. I mentioned that cities do this automatically, as people settle into different trophic levels, and goods from the rich get recycled into goods for the poor. However, as the infrastructure is fully developed the economy may progress from an economy of limited resources to an economy of excess resources. In this type of economy there is a potential for new industries to develop, as I will mention in Chapter Five, because consumers have disposable income or income beyond that needed to survive.

GERMANY

One could simply give people a basic monthly income. However, money is traditionally exchanged for labor. Societies have always been able to distribute money throughout the economy based on the market economy, where money is exchanged for labor. This market economy has been regulated with a minimum hourly rate set for official labor. In the US anyone with a steady job who is paid less than the minimum wage can complain to the State or to National Agencies, such as the Labor Board??, so that compliance with the minimum wage is enforced. The worker can also get back wages by suing their employer in court.

For reasons of morale, respect and tradition; people are usually paid well above the minimum wage in the US. As a general rule, labor market wages do not follow the rules of demand and supply for most jobs. Outside of sports, it is only when specialists are in extra high demand, or have good name recognition, that they are able to negotiate their own contracts. Again, for reasons of morale, people doing the same job in the same company can be expect to be paid the same amount if they are not paid by commission. This is especially true in entry level jobs, where workers have no performance history to set a wage by.

Companies are willing to pay workers what the prevailing wage rate is for a professional working in their city if they can afford it. This is according to tradition, and also meets the expectation of professionals. They would never offer to only pay the minimum wage to a professional for fear of being laughed in the face. The gig economy is breaking down these barriers. Workers that accept a gig, like those that are available at fiver, finding themselves making less than minimum wage for their time and in some cases competing with people who know how to make automated computer scripts.

The best case is to have a cooperative system. Germany excels at having citizens who, idealistically, are socially cooperative, respect the social contract, and respect the dignity of workers. By understanding the economy in terms of a system where workers have an important role labor and management are both socially cooperative in terms of the enterprise that the management manages.

An impressive development is that Germany has been able to use robots in the workforce in a way that ensures that workers continue to make high wages working alongside robots.

SOCIAL PRIORITIES IN GERMANY

Like England, the most primary social priority of Germany is to make use out of every resource.

This is the driving force of capitalism, which leads to the commoditized world that we live in.

The example that I mentioned in the previous chapter was the English workhouse. However England has transitioned away from forced work for the poor as their economy has transitioned into a manufacturing economy of excess, an economy where there is an excess of goods available. Nevertheless, England has continued to equate dignity of life and dignity of sense of purpose with employment to a point where they have created jobs, in the workhouse spirit, for people who are partially disabled. One Torie politician even admitted that he was for 100 percent employment, because he found “free” handouts with no work requirements untenable.

This spirit of living to work seems to pervade Europe. I even knew a writer in Austria who was fully paraplegic but used his time to dictate books.

In northern Europe there were occasionally harsh winters and times when farmers faced the problem of having their livestock starve over the winter. They had to make good use of every resource that they had in order to prevent their livestock from starving. Facing several constraints that could have life or death consequences, scrounging and saving things like firewood became necessary.

Knowing the history of farm communities in the northern countries of Europe, and how children in those communities are raised, I can tell you that a high social priority is that children be considered smart or “klug”. This word has the additional connotations being responsible and diligent. You would not want to have an irresponsible kid who wasted firewood.

The social priority of being smart (to maximize the use of limited resources) is reflected in several Grimm’s Fairy Tales. In one of these tales a person travels in different countries and sees people who are progressively more stupid. Finally he encounters someone who tries to bring the sun in with a wheelbarrow to nurse some plants, instead of bringing the plants outside in the wheelbarrow where the sun obviously is. The takeaway from this Grimm’s Fairy Tale is that the “kluges kind”(smart kid) should realize that methods of doing things matter.

This society with the social value of being smart adapted itself well to the new primary education system where kids were put to good use. The same social priority was prevalent in England, where they made sure that the paupers who had to flee to the workhouse as a last resort were put to good use. A **social pattern** begins to emerge where Germans, like the English, are not wasteful.

Free primary education, once it became conceived and implemented, fit in well as part of an agricultural pattern that dominated the life of the countryside. Before the Columbian Exchange that brought new foods to Europe, Europeans subsisted on wheat, barley and rye. Germans planted winter wheat and summer wheat. The land was utilized all year, but maximum manpower was only required in the summer.

Because Germans do not like idleness, which is a vice, the opposite of the diligence I mentioned in the Seven Virtues for England, they do not like to see kids idle in the middle of the day. School solved this. This can be seen as another application of the virtue of diligence.

In addition the teachers who went to teach school believed that they were proselytizing knowledge to children, and were passionate about teaching them. Corporal punishment was accepted with the understanding that it was appropriate to the crime. There was a social priority to teach the next generation so that they would be “good”. Remember that Protestantism teaches that people have to take the burden to be good on themselves. Once they do, success will follow as a sign of God's grace.

Teachers in the old system have gotten a rap for being extremely strict and disciplinarian according to modern sensibilities. They often made fun of students who were slow or lazy. They often punished students who had failed to memorize a passage by hitting their hands with a ruler. However, in the protestant context, they were reforming natural sinners.

ORIGINS OF HUMAN CAPITAL

While England gets credit for developing fossil fuels for iron production and for performing mechanical work, Germany gets credit for starting the first modern primary education system a century before the industrial revolution. Eventually, England would adopt a similar system essentially as a way to warehouse kids. Remember that there was a population growth spurt during the Victorian Era, and figuring out what to do with the surplus population was of constant concern to the elite, who finally devised a system of sending all petty criminals abroad. There would have been a lot of kids around at that time, and idleness would have caused truancy in this population (which still is especially vulnerable to truancy even in the modern era).

and children are utilized in schools so that they are not sitting around during the day when it is not harvest season. (winter wheat is harvested in the summer) This was an action that points to German efficiency, because it was an action that was not recycling due to resource scarcity. Kids had excess time on their hands.

How was Germany able to support such a system of compulsory primary education while German farms were still relying on child labor? A German woman would have had an average birth rate of seven. All of these were mouths to feed, but child labor would have lessened the burden on the parents to do all the work on the farm themselves. The reason is the countries in Europe are extremely busy for short seasons of the year and not very busy the rest of the year. This is why schools originally gave the summers off, so that kids could help during the busiest time of the year for collecting grass for livestock, which in the summer is the most nutritious, that would be dried into straw in piles during the remaining months before the snowfall and then stored in barns once the snowfall started. This important work of cutting grass had to be done by scythes before the advent of tractors, and was one of the most labor intensive part of farming apart from chopping wood. Every person who could help would have been needed.

The social priority for primary education came from the social values reflected in the government-every person counts because they will be workers-and from families-every kid should have a chance to prove they are smart. The amazing thing is that primary education actually works, in that a study has been done to show that farmers in developing countries exposed to primary education farm more efficiently. But why did the government chose to take this major step?

**Human Capital or Professionalism**

Human Capital was already highly elevated to the level of professionalism in the trades. Often families on a farm would send one of their kids out so that they would do manual labor for another family, in hopes that they would learn a necessary skill. Sometimes this family would be the family of a butcher or other professional. The hosting family could evaluate if the kid was worth training during this period when the kid was “loaned” to them by the farm family. The farm family would be especially happy if the kid got accepted if their farm was a poor one.

Professionalism was part of the Prussian military. Bismarck at had extremely well drilled musketeers who were able to fire volleys of musket balls at the enemy more rapidly than any other musketeers in Europe, fitting in an extra round of volleys every minute. These highly trained musketeers were not enough to win at Austerlitz, where Napoleon was able to pull off a miraculous victory against Bismarck’s entrenched forces. However, if anything, this defeat made Germany determined to professionalize itself even further, applying standards for professionalism across society. Protestants have to take the burden of reform on themselves after all.

To ensure they were qualified, teachers had to pass an exam to teach students just like they do today in most countries. This was an exam that later frustrated Mendel, as it was difficult to pass.

Professionalism in primary education created the beginnings of a meritocracy where the smartest students could be promoted. They would find themselves in various Technical Universities where they further developed the source of coal into various different uses, adopting engineering solutions that England had already adopted which were new to the world, and the source of England’s increasing prosperity after the Napoleonic Wars.

One might be surprised to know that even English industrialists relied on the human capital coming out of German technical universities.

In fact German chemists were so renowned for their abilities that the English hired several German scientists to help them with their developing chemical industry around the turn of the Nineteenth Century. One of these people would be Hoffman, the father of Organic Chemistry, who went over to England to further develop the nascent fossil fuel industry.

As I will discuss in the next chapter, France, the fossil fuel industry is also the chemical industry, which is central in converting raw materials to all the commercialized products that we use in the modern world. In the modern era it often uses petroleum as a base, but it used to use coal before petroleum was widely available. The production of industrial chemicals in large quantities coincided with the beginnings of the Industrial Revolution, and was part of the transformation of the world economy into an economy that has the smarter use of materials through the use of intellectual capital to develop engineering solutions.

Germany was well positioned to take advantage of the intellectual capital of rail transport that was developing in England. Thus the progress of industrialization can be charted by the length of rail lines, and the amount of coal mined. These things happened quickly as knowledge of the obvious benefits of developing an rail system spread rapidly.

The German talent is for masters teaching the base. The apprentice system is still practiced with young people taking apprenticeships within certain companies. Companies have an initial cost but in principle, if the laborers are cooperative and stay with the company, they win a loyal labor force. The company wins utility from well trained workers and is able to afford to pay them a high wage.

This professionalism has increased the German “brand”. When companies train workers they are inserting positive externalities into the system. The whole system benefits from these positive externalities. Industries are well regulated and are compliant with the regulations; assets of wellbeing, such as clean air and water, increase; and people are generally happy to live in Germany despite the long winters.

The example of Germany shows that high wages do not necessarily lead to inflation as long as workers provide utility to the companies that they work for that justifies their high wages.

COUNTEREXAMPLE OF SPAIN

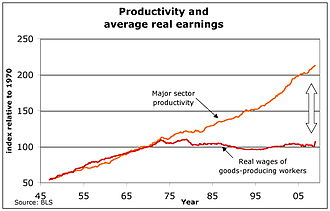
Spain would have been well positioned to take over all of Europe if the Industrial Revolution had happened around 1500. They were flush with silver from their overseas colonies. However the money was spent on the military and on buildings. In defense there was little else for countries in Europe to spend their money on in the 16th century. In that era, wealth was primarily measured in land owned. Nobles got a lions share of the income that their lands produced. In addition, spending money on armies was done as a defensive measure against threats on all sides; although the nobles in Europe at the time were a big family because they intermarried, they were jealous of each other's wealth.

Inflation within the country of Spain due to the silver glut arguably lead to an industry vacuum. Instead of using their money for industry, the reverse happened. The moneyed class bought their goods from abroad, because domestic goods were too expensive due to inflation. This led to an industry vacuum, an economic effect that has been well studied and is called the “curse of wealth”. The important thing to take away from this lesson from history is that gold and silver can be easily spent. One cannot blame the Spanish because there was no such thing as economic theory in the 16th Century. Economics is a modern invention, that has its origins in the musings of Adam Smith in his important book *The Wealth of Nations*.

The buildings still remain to this day as a relic to the Golden Age of Spain. However, the Spanish Armada and land armies that were a prominent force in Europe have barely a relic to their existence.

Unfortunately for Spain, productivity per capita is just as important to income to capita when it comes to the wealth of nations.

Modern economists have a key chart that is the productivity of labor. Productivity of labor is a key index.



The nobles in Spain would have gotten more productivity, or value for their buck, getting their goods from abroad where silver could buy more.

This is why Real wages are important, which take into account

Professionalism, which also increases the value of what silver can buy justifies inflated real wages. Real wages contribute to National Income which is all the income that is earned within or comes into a country minus the income that leaves a country. Countries with higher national incomes have a better consumer market which gives them a number of advantages, mainly due to the multiplier effect.

Naturally, as wages go up income per capita, a benchmark of development, goes up.

The utility of workers, human capital, justifies paying them higher wages. For example, tech companies often have a need to hire people who bring important human capital to their organization because they are able to use intellectual capital to develop engineering solutions that the company needs to be at the forefront of their industry. These people may be essential to the success of the future revenues of the business and justify their higher pay.

On a macroscopic level these kinds of decisions aggregate to measure the productivity of a country vs the real wages of goods producing workers.

In the end we have a high income per capita that justifies itself. Money is distributed efficiently into the consumer market not only by the multiplier effect, but by the utility of labor. Germans get more value out of a Euro, which justifies paying more Euros for a service.

from these highly educated specialists, human capital, in the most basic sense, is developed in primary school where students learn to read, write and do basic math. While we take these skills for granted in the modern age, rural societies rarely had a need for these skills. Strangely, it has been found that primary education increases the productivity of farmers ???, despite the fact that there is generally no need for these skills when planting crops and caring for animals.

Germany has always excelled in thinking long term, putting down infrastructure investments as a matter of course and birthing a socioeconomic system that exists to develop human capital. Primary education is important to any country, because what a country does with surplus labor streaming into cities is important once efficiencies in the farm sector take hold. Germany, (or more specifically Prussia) was the frist to give everyone a free education and equal chance to prove their intellectual merit. Later all industrial countries in Europe followed by making primary education compulsory.(In addition, child labor laws came into effect and kids could no longer legally work for pay in full time jobs) This compulsory educational system is good for the long term developmental prospects of a society that depends on human capital.

Governments in countries with high National Incomes have a larger tax base and can afford to offer their citizens a better lifestyle. Munich, the world headquarters of BMW, has used tax revenue to build an extensive citywide underground rail network. Professionalism in government has reduced the amount of time it takes to get across town. This means that specialty businesses can flourish even more.

It is no accident that all countries in the world have followed the European example as they have developed of free and compulsory primary education as good government policy.