**MOURET Marine** - **Economic complexity** - Théorie de la firme - LADE505T

The economy has always played a major role within the complex world in which we are living. It enables the population to produce, distribute and consume as much goods as services. Whether it is at the country level or at the market level in general, it is obvious to see that some countries/companies dominate the economy more than others. Indeed, if we analyse the smartphone market today, we notice that the American brand Apple or even the South Korean one Samsung are at the top of the ranking, leaving behind the other competing companies such as Sony or Nokia. As a result, they became the « winners » in their field. This situation is an ongoing one for all the sectors of the different world markets but also for countries. Nevertheless, can we assert that we are living in a winner takes all economy ? Firstly, we will see through the inequalities that these « winners » take everything. But secondly, with specialisation and the fact that winners can lose this position, that they are not.

All kinds of inequalities are the most striking proof of a world in which the winner takes all economy. At the global level, it is noticeable that commercially some countries have been able to differentiate themselves by developing a comparative advantage, that is to say an advantage they had but the others did not have at the outset. By developing this advantage, they have ensured a significant growth of their GDP and a place as a world leader, at the expense of the other countries which suffer from this leadership and especially in terms of their growth. Indeed, this is exactly what happened with the example of South Korea and Ghana. Until the mid-1960s, the growth of these two countries was almost similar, they evolved at the same rhythm. However, over the years, South Korea's growth increased while that of Ghana declined. The different reasons ? South Korea had and has a bigger human capital and invested/invests more in the knowledge economy. Indeed, this country has registered a lot of patents and is now home of the world's largest companies such as LG or Samsung, which alone accounts for 1/5 of its GDP. It is thanks to this that it was able to develop a diversified economy by exporting manufactured goods such as smartphones, electronic integrated circuits, etc, that are then sold at a higher price than Ghana's exports which are based on non-manufactured goods and more accurately agricultural products or mining resources. In fact, in this country the economy is not very diversified. The Economic Complexity Index (ECI) created in 2009 by the Chilean Hidalgo and the Venezuelan Haussman illustrates this idea. In fact, the higher it is the more diversified the economy of the country is, and in 2018 it was about 2.11 for South Korea (3rd in the world) while for Ghana it was only -0.80 (103rd in the world). So, economically there is a major inequality between these two countries, with a GDP gap. In 2020, Ghana's GDP was 72.35 billion USD and South Korea's GDP was 1.631 billion USD.

These inequalities in terms of growth also have an impact on inequalities in development between countries. In fact, without sufficient economic resources, it is difficult for poor countries to develop themselves so that the population can live in a proper way. Development refers to several factors as: the creation of infrastructure (roads, waterways), access to education, health, a diversified economy, etc and is measured with the Human Development Index (HDI). In fact, the closer the HDI is to 1 the more developed the country is and conversely. The HDI shows that the poorest countries, with a low GDP growth, such as those in Africa, are the countries with the lowest HDI. For example, in 2018, France's HDI was about 0.9 compared to 0.4 for Mali. As a result, the world is stricken by an unequal repartition of wealth among countries, with an average standard of living completely different between poor and developed countries. An unequal repartition that can also be found within a country itself, even those developed, with people for example who can not afford housing.

However, in this second part, it will be studied that the example of inequalities is not sufficient to ensure the idea that we are living in a winner takes all economy.

Regarding trade, the economist David Ricardo created what is nowadays known as the absolute advantage theory. This theory highlights the fact that a country should specialise in the output that is the most favourable for it, in terms of costs but also of production time. Indeed, all countries are different and do not have the same knowledge, production methods, labour cost, or the same raw materials. This specialisation enables countries to make profits by importing what is the least favourable to produce and, conversely, by exporting the products for which they have an absolute advantage. It is explained by the fact that by specialising, the countries can optimise their costs and time, by allocating them to other activities/ products that will bring them more profit. For example, France and Bangladesh are two countries with opposite production methods. In France, the labour force is certainly more expensive but also more skilled, so it is in France's interest to import textile products from Bangladesh and to focus its production in the automobile sector and conversely for Bangladesh. This fact, shows that a country, winner in its field also benefits others, which strengthens the notion of interdependence among countries symbolised by the notion of globalisation. As a result, this idea emphasises the fact that we are not living in a winner takes all economy.

On top of that, it is possible that at some point, those we know as « the winners » no longer hold this position and so become « outsiders ». As seen previously, the winners, whether in the market or in the world, have been able to differentiate themselves from the others, by developing their strengths. Suggesting we are on the market side, we notice that it is from this point onwards that the company started to have an added value, which attracted more and more consumers, so it earned more and more money and developed other products, which enabled it to keep its leadership over the others. This is what is called the systemic effect. Nevertheless, this effect can break down, as it is not always easy to hold this leader position in the face of failures, unforeseen events or the threat of competitors. As soon as a company is overtaken by one or more competitors, it gives up its position to another one that has not entered the market as a winner, but has become one. For example, in the 2000s, Nokia, a Finnish company specialised in telecommunications became the leader on the smartphone market. However, at the beginning of the 2010s, it was overtaken by its competitors Apple or even Google. In 2012, it recognised it had failed to anticipate market developments. This example shows that the status of winner is unstable as it can evolve negatively in a short time. In addition to this, it is exactly because the winners of today are not the winners of tomorrow that we can not assert living in a winner takes all economy.

To conclude, the countries known as the « winners » of the economy are those with the highest Economic Complexity Index, which means a lot. In fact, it is the economic complexity of a country that enables it to increase the cost of its exports in the future (that become more and more numerous) and thus to have a higher growth/ GDP. These winners have been able to diversify their economy because at the origin, they had a comparative advantage as different production capacities, better knowledge, etc.

However, this economic complexity leads to economic inequalities but also to inequalities in terms of development. All of this, plunges countries with a non-diversified economy into poverty, that do not have the capacity to catch up their delay. Nevertheless, specialisation and globalisation make countries interdependent. In fact, they mostly need each other to satisfy their domestic demand. This is exactly what happened with France, which at the beginning of the Covid-19 pandemic had a shortage of masks and therefore had to import masks from China to satisfy its demand. It can be seen that even though France is a country with a diversified economy and therefore considered as one of the world leaders, it needed help from another country in this crisis. On top of that, the winners of the economy through their potential weaknesses, bad risk management, etc « leave » the opportunity to their competitors to take their place.