

THE GREAT GLOBAL CHALLENGES OF THE 21ST CENTURY: FROM THE CHINESE HEGEMONY TO STRUCTURAL STAGFLATION



JULIÁN PAVÓN MOROTE

CEPADE (Business School of the Universidad Politécnica de Madrid). Spain

PhD in Industrial Engineering from the Polytechnic University of Madrid.

Degree in Economic Sciences from the Complutense University of Madrid.

Degree in Social Sciences from the Pontificia University of Salamanca.

Postdoctoral Scholar in Management of Technological Innovation (UCLA-USA).

He was deputy Director-General of the Centre for Industrial Technological Development (CDTI) of the Ministry of Industry and Energy.

Full Professor of Business Organisation. Polytechnic University of Madrid.

Director of the Centre of Postgraduate Studies in Business Administration (CEPADE) and Industrial Business School (IEN) of the Polytechnic University of Madrid.

Consultant of the World Bank in Industrial and Innovation Policy.

ABSTRACT OR SYNOPSIS

The 21st century is facing the emergence of the hegemonic power of China, which means a shift of Western economic power towards Asia and a "suction" of raw materials, productive and financial energy resources by China that is leading the economies of Western countries towards a state of "structural stagflation". Europe finds itself institutionally defenceless in the face of the enormous global challenges that lie ahead.

"It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change" (Charles Darwin).

1. MANAGING THE ENVIRONMENT

Paraphrasing the words of the Philosopher Ortega y Gasset "I am I plus my circumstances", we can say that "a company is the company and its environment", in other words the environment constitutes the company's circumstances.

In one of the business "bestsellers" of the 1980s, "In Search of Excellence", it was said that one of the key elements in business management in the decades ahead would be precisely "management of the environment", given that, rather than the stable and reasonably predictable environment that typified most of the second half of the 20th century, at the beginning of the 21st century we find ourselves having to cope, above all, with an environment that is increasingly turbulent and difficult to predict.

This demands an effort on the part of companies to identify "alternative scenarios" in which they can develop their future economic activity with the aim, as far as possible, of reducing uncertainties and adapting their strategies, as these scenarios unfold.

We need to remember that environmental analysis includes three basic components:

- a) The institutional component
- b) The economic component
- c) The technological component

The economic and technological components are the most obvious ones and they have been profusely analyzed, there being different "prospective and technological and economic surveillance" tools and methodologies at our disposal.

The extremely rapid evolution of technology makes it increasingly necessary for companies to use these prediction instruments in order to anticipate techno-

logical development, which will affect the corresponding products and processes accordingly.

Historically, there have been attempts to stop technological development, for instance when textile sector workers in England burnt the automatic looms that were replacing their manual versions. They were led by a revolutionary called Ludd, which is why people who try in vain to oppose the inexorable advance of technological change are called "luddites".

So our strategy cannot be to oppose technological change. Instead we must anticipate and adapt to it, be aware of its inexorability and recognize that technological change is permanent and accelerates over time.

With regard to the economic component, we will have the opportunity to explore this aspect at the end of this presentation, so I am going to try to illustrate the least known but nevertheless extremely important factor in the business environment, the institutional component. And I am going to do this by referring to an example that was part of my own experience when I was General Deputy Manager of the CDTI (Centre for the Development of Industrial Technology) in the Ministry of Industry at the beginning of the 1980s.

Spain was due to join the European Union on the 1st January 1986 and, during the negotiation process, the European multinational pharma lobby demanded a change in Spanish legislation which would include the recognition of "product patents", given that up until then only "process patents" had been recognized. To put it simply, this meant that in Spain the manufacturing process for aspirin could be patented, but not aspirin, in other words Bayer could not patent acetylsalicylic acid, the active ingredient of aspirin.

Everyone understands that it is much easier to find a way round the problem of a patent for a process than for a product, so the Spanish pharmaceutical sector applied the Unamunian maxim "Let others invent things", to which we would have to add "and we'll copy them". In this way, Spanish pharmaceutical laboratories were saving themselves the 6 to 8 years it takes to launch a new medicinal product and the enormous outlay on laboratories, research, clinical trials, etc. this entails.

The downside to this strategy of simply copying the medicinal products developed by other European multinational pharmaceutical companies was their absolute technological dependence on them and the absence of a research culture and tradition so when, as a result of pressure by these multinational companies, product patents were legalized in 1992 (the Spanish negotiators managed to secure 6 years of exemption to enable Spanish pharmaceutical companies to adapt), the sector was virtually wiped out, as most Spanish companies had to close or were sold to European multinational companies seeking not so much their productive or research capabilities but, as in many other sectors, their distribution networks.

Similarly, and at the institutional level, in 2001 China was admitted as a member of the World Trade Organization (WTO) and this event, which is also institutio-

nal, not technological or economic, is going to have an enormous impact, as we will see later, on the economic future of the world because it puts limits on tariff protection against competitive Chinese products worldwide, as a result of “social dumping” strategies and artificially devalued exchange rates.

So my first reflection in this presentation, which we will later be able to debate at greater length during the discussion, is the extraordinary importance proper management of the institutional, economic and technological environment is already having in good business management and, as part of this effective management, the importance of conducting institutional, economic and technological prospection tests, which are usually lacking in the good management practices of small and medium-sized businesses and which, nevertheless, constitute a key aspect of the management of multinational companies. They involve using economic, technological and institutional surveillance instruments and methods, which are also known as “competitive intelligence” tools.

2. THE CHINESE HEGEMONIC STRATEGY

Given the impossibility of developing the different components of the evolution of the international business environment within the scope of this presentation, I am going to concentrate on what I consider to be the key element in the institutional, economic and technological evolution of the 21st century, China.

At the end of the 1980s the political scientist and professor at Johns Hopkins University in Washington, Francis Fukuyama, wrote an article, which later became a book with the same title, called “The End of History”.

His thesis was that, as a result of the progressive disintegration of the USSR, which was to culminate in the fall of the Berlin Wall and the development of Glasnost and Perestroika, and the breakup of the Soviet Empire, the market economy and political democracy had definitively won the battle over central planning and communist regimes, and the 21st century would be the century in which liberal democracy and the free market would extend all over the world so, in his opinion, we would have reached the end of history.

The fall of the Berlin Wall referred to above remarkably increased awareness of Fukuyama’s ideas and he was fêted as the prophet who had definitively predicted what would happen in the 21st century.

Another American political scientist and university lecturer, Samuel Huntington, a Professor at Harvard University, responded to Fukuyama’s views by writing another essay and another book entitled “The Clash of Civilizations”. He argued that we were very far from the end of history and that the 21st century would be marked by a clash between the Judeo-Christian civilization of Western countries with a culture dating back to the French Revolution, when there was a separation of powers between the Church and State and between legislative, executive and judicial powers, inherent features of Democracy, and the Islamic civilization, which

had not been influenced by the French Revolution and in which there was still no separation between the Church and the State. This meant there was no distinction between what constituted a "crime" and a "sin" and sharia or Islamic Law applied.

As an example to clarify the above, in Western civilization adultery may be regarded as a "sin" but not a "crime". In Islamic Law there is no distinction between "sin" and "crime" and stoning is used as a form of punishment.

What strikes us about such eminent and intellectually prophetic thinkers in academic circles is the absence of China in both of their reflections. The emergence of China as a potential economic and technological, and who knows whether institutional leader, in the 21st century refutes Fukuyama's ideas and reveals a resounding error of judgement on the part of Huntington, since neither has Liberal Democracy defeated the Capitalism of the Chinese Communist State nor will the clash of civilizations between the West and Islam be the factor that will determine the economic and institutional relations of the 21st century. Rather, the latter will be between the West and China and Islam will also play an important but probably not decisive role.

In this respect, we need to remember that in Europe we have experienced state capitalism in Hitler's Germany and that the efficacy the Chinese economy is currently demonstrating in comparison with Western countries reminds us of the extraordinary technological and economic development in the 1930s during that period.

The superiority in efficiency demonstrated by democratic capitalism vis-à-vis Soviet economic planning, which has been proposed as the key factor behind the triumph of the Western market model, contradicts the interests of the West if we use the same argument to claim the superiority in terms of economic and technological efficiency of the Chinese state capitalism model. It will lead to the triumph of this model over the most inefficient of Western market economies.

This is the institutional battle the current economic and technological competition between China and Western countries will culminate in.

Because most political and academic analysts coincide in the view that in the 21st century China will not be content to play a secondary role, but will aspire to a hegemonic role, as is clearly expounded in the extraordinary and lucid book, "La visée Hégémonique de la Chine: L'impérialisme économique" by the French Professors Antoine Brunet and Jean-Paul Guichard from the Sophia Antipolis University in Nice.

The Chinese hegemonic strategy is perfectly defined on the basis of the sequential achievement of three leadership phases:

- a) Productive leadership (China as the factory of the world).
- b) Financial leadership (China as world banker).

c) Technological leadership.

In turn, the last has three components:

- 1) Industrial or productive and services leadership.
- 2) Military leadership.
- 3) Leadership of space.

So far, productive and financial leadership have been achieved and in the next ten years, coinciding with the establishment of a permanent base on the moon and the development of four state-of-the-art aircraft carriers, it will have attained military and space leadership, and, following the United States policy of developing strategic technologies in its multinational companies on the basis of contracts with NASA and the Pentagon, they will also achieve leadership in technology, industry and high added value services.

The attainment of these objectives, which are absolutely legitimate in principle, would not be possible without the collaboration of multinational companies in the West, which are transferring their technology to Chinese companies on an unprecedented scale.

These multinational companies are emerging as an extremely powerful "pro-Chinese lobby", given that since the hesitant opening up of the Chinese economy after it joined the World Trade Organization, they are making huge short-term profits in exchange for the transfer of the technology that the Chinese government demands.

In fact, Clinton's government began to demand certain human rights concessions from China as a requirement for its inclusion in the WTO. These conditions disappeared as a result of pressure exerted by multinational companies in the United States that manufacture their products in China and wanted to sell them in the rest of the world without any kind of tariff protection.

In practice, from 2001, when China became a member of the World Trade Organization, to 2011 China's trade with the rest of the world has multiplied by six, going from 500,000 million dollars in 2001 to 3 billion dollars in 2010.

Chinese exports have grown in the period from 2000 to 2007 at an annual rate of 25% so they have managed to replace Germany as the world's leading exporter two years after overtaking the German economy, which ranked as the third most important world economy. In 2009 Chinese exports reached 1.5 billion dollars.

So we cannot blame China's success in meeting its hegemonic goals on the Chinese, who have a right to obtain the best possible economic advantages for their citizens. Instead the culprit is the complicity of short-term interests and the politicians who serve these very same interests.

The scale of the problem becomes obvious when we take into account the fact that China is a country with a population of 1,300 million and that its model for growth is making it a formidable "suction machine" for productive, financial and employment resources, which are having a very serious effect on the economies of Western countries. The intensity and rate of this "suction of resources" accentuate the severity of the process.

Given that, as we all know, resources are limited, it is evident that the movement of productive resources to China is causing the "deindustrialization" of many productive sectors in the West and that the displacement of financial resources towards China is prompting the "decapitalization of Western financial and public systems".

The three hundred thousand million dollars plus in foreign currency reserves held by China, amounting to 30 to 40% of the world's total reserves, is being used, amongst other things, to create a financial and reversible dependency of countries like the United States and to ensure the control of strategic raw materials that the Chinese productive system will need to maintain its hegemony in the years to come. We will discuss this issue in more detail in the next few minutes.

To illustrate the technological leadership in the military sphere and in space that China pursues, we need only point out that China is currently the only country in the world that, together with the United States, has managed to blow up a satellite in orbit using a land-to-air missile and that, while Obama has abandoned the Space Programme designed to send another man to the moon in 2020, in the same year the Chinese plan to have a permanent space station from which they can prepare a hypothetical manned mission to Mars.

All of this must not lead us to forget that China is a totalitarian state, which, to cite an example, mobilizes about 30,000 police officers just to control the internet.

The hegemonic strategy of China, from a tactical point of view, demands maximum discretion. If we follow the teachings of the "Art of War" by Sun Tzu - he concludes that "the supreme art of war is to overcome the enemy without combat" -, which are taken further 2,500 years later in the speech on the 24 character strategy by Deng Xiaopin in which he declares: "Observe calmly, secure your position, settle matters with tranquillity, hide your talents and await the right moment, keep a low profile and never lay claim to leadership", it is obvious that it is in China's best interest to keep Western countries demobilized without Chinese economic and technological advances alarming public opinion. For instance, the launch of the first Chinese space station module last September merited no more than two minutes' coverage on Spanish TV news bulletins.

To quote the latest figures illustrating the above, Chinese economic growth from 1979 to 1999 was 8% on average versus 3% in Western countries and from 1999 to 2009 GDP increases in China were 10% on average compared to 1% in

Western countries. With these figures the transfer of productive, financial and technological resources is evidently virtually unstoppable.

This inordinate and spiralling process of absorption of productive and financial resources on the part of China has as its strategic basis, in the short and long term, not only the transfer of productive capabilities to China, but also the control of the distribution of its products.

For example, every time a Spanish boutique closes its doors and a Chinese boutique takes its place, the Spanish employees are replaced by Chinese ones who sell Chinese products made by Chinese workers in China. Instead of working with Spanish Banks, as normally happens in the case of the Spanish boutique that closed, the new Chinese boutique operates using Chinese Banks that transfer part of the resources garnered by the Chinese community in Spain to China, which sees its foreign currency reserves continually and ever more rapidly increase. So China not only controls world production but also the distribution of many of its products.

In addition, China's competitive edge with respect to other Western countries is based on so-called "social dumping". The average salary of Chinese workers is, depending on the sector concerned, 40% to 80% of the average wage in the United States and Europe. This is not only due to direct salary costs, but also to the fact that China has virtually no costs in terms of social welfare, whereas in Europe this represents a very substantial percentage of the total wage bill of companies.

Moreover, the duration of the working week in China is practically double that of the United States. With these working conditions deindustrialization is not only affecting the most developed Western countries. It is also affecting countries like Mexico, the salary-timetable cost of which is 9 times lower than in the United States, China's being 9 times lower than Mexico's. This is why much of what is known as the "maquila mexicana", Mexican companies subcontracted by American multinationals, are moving to China.

The other mainstay of traditional Chinese competitiveness is what is known as "monetary dumping", which enables China to keep its currency artificially devalued. Here we need to stress that "monetary protectionism" and "custom tariff protectionism" are equivalent and we can perfectly easily substitute one for the other. When China imposes an exchange rate of 6.80 yuan per dollar on the world instead of 3.40, which is regarded as reasonable in the current state of international economic relations, it is as if it reduced its imports as a result of custom duties 100% of the value of its products and as if it stimulated its exports by subsidising the price of its products by 50%.

When in 2001, as a result of pressure from, amongst other sectors, American and European multinationals that manufacture products in China and sell them in the rest of the world, the Chinese were admitted as members of the World Trade Organization and tariff barriers affecting China worldwide were removed, while its "privilege to control exchange rates" went untouched, it was like letting

an “elephant into a china shop”. Obviously China did not mind removing the tariff barriers it imposed on the rest of the world because it could avail itself of the protectionism which conferred it the privilege of controlling its exchange rate and barriers to imports based on “intangibles”, but it has, however, learnt how to make the most of the world’s removal of tariff barriers with respect to China, in fact spectacularly so and with impunity.

More recently, the North American Senate voted on Tuesday, 11th October in favour of a Law which imposes strict economic sanctions on China if it fails to revalue its currency, the Yuan. This Law must be put to the vote in the Chamber of Representatives, whose President, the Republican John Boehner, has said he will do whatever he can to ensure it is rejected. The Republicans in the Chamber of Representatives have a majority. In practice, the Law would mean higher taxes on purchases of Chinese products by American citizens and companies. The people who are opposed to this Law are the same people who, in defence of the interests of American multinationals, promoted China’s inclusion in the World Trade Organization in 2001.

And the third mainstay on which China’s export power is based is “ecological dumping”. According to the International Energy Agency, forecasts for 2020 predict that 80% of the world’s total energy will come from coal, gas and oil and only 20% from renewable energy sources so that the volume of CO2 emitted worldwide into the atmosphere will be 42,000 million tons compared to 30,000 million tons in 2010. 40% of the expected increase in CO2 will come from China. We need to bear in mind the fact that 70% of China’s energy comes from coal and this is why it has not signed the Kyoto protocol, which, of course, the United States has also failed to do. So European countries are at a strategic disadvantage, owing to their greater sense of responsibility towards the environment in comparison with these two world economic giants.

Finally, Chinese diplomacy is marked by a strategy of “amoral pragmatism” based on the “principle of non-interference”, which means that it shows no hesitation in making the most of any vacuum created by Western embargos of certain countries, such as Sudan, Cuba or Equatorial Guinea, because of their despotic political regimes or others like Iran with its nuclearization plan, owing to the threat they pose to world safety, and becoming a privileged business partner of such countries.

China is also beginning to sell the institutional superiority of its model because of its economic efficacy, which is particularly dangerous in the medium and long term for Western democracies.

3. THE CRISIS OF RAW MATERIALS

If there is a sector that perfectly illustrates the problems derived from the enormous suction of resources from a country with over 1,300 million people, accounting for 20% of the world's population, distributed over a territory of nearly 10 million square kilometres, and which has been growing continuously for two decades, expectations being that in coming years it will increase at a yearly rate of 10%, it is the raw material sector in its three dimensions: agricultural raw materials, and energy and mineral raw materials.

In this respect, it is sufficient to point out, as a way of initiating this section, that China is the world leader in the consumption of energy, including 1,200 million tons of coal, which is why China refuses to sign the Kyoto Treaty and has embarked on a nuclear programme that includes the construction of up to a hundred nuclear reactors by 2030. Currently, China has 13 operational nuclear reactors and before 2020 another 60 additional reactors are expected to be built. This Programme has been temporarily suspended following the accident at Fukushima, with the aim of adding safety controls in reactors which are currently operational and in the ones that are being built.

China consumes 46% of the steel sold worldwide versus 6% in the United States, 41% of the world's aluminium compared to 11% in the United States and 39% of the world's copper as opposed to 9% in the United States.

The real importance of these figures is seen when we put them in perspective by looking at the results of the "Futureagenda. The world in 2020" Programme financed by Vodafone, which identifies the four uncertainties facing the world economy in the next decade as follows:

- a) The unequal growth of the world's population.
- b) The progressive and accelerated depletion of raw materials.
- c) The deviation of the centres of economic power towards Asia.
- d) The problems linked to universal access to information via information and internet technologies.

To these uncertainties I would add a fifth one, which I believe to be essential and which is linked to the first part of my presentation, where I refer to Huntington and his "clash of civilizations". This is the evolution of the Islamic countries and the definitive resolution of the balance of power in the so-called "Arab springs" - the final outcome of which is by no means a *fait accompli* - by choosing between the alternatives of the Iranian radical Islamic model and the moderate Turkish Islamic model.

Anyway, this report calculates the number of years mineral reserves will exist in the world if current consumption trends continue.

To cite a few examples, copper is calculated to last 61 years, nickel 90 years and zinc 46 years. There would be gold reserves for 45 years and silver for 29 years. In relation to energy, the most widely accepted studies indicate that world oil reserves will be depleted within 40 years and within 8 in Europe. World gas reserves will be exhausted in 63 years and within 12 in Europe, uranium reserves in 80 years worldwide and within 50 in Europe, while coal will last a further 150 years.

The situation is especially difficult for Spain, as its dependence in terms of energy on fossil fuels is 75% in comparison with the European average of 50%.

These figures are sufficiently illustrative to explain the struggle going on behind the scenes, which we hope will not become an explicit battle for the mineral resources of our planet.

For those who think the solution will involve renewable energy sources, we need to remember that, given the current state of the technology, the production of electricity by means of solar power costs about 400 euros per megawatt/hour, while for wind turbines the cost is 85 euros, gas costs 60 euros, coal 50 euros and nuclear energy 45 euros. At this moment in time the idea of a model 100% based on alternative energy sources or forgoing nuclear energy is practically unthinkable from the point of view of economic efficiency, especially when China is essentially committed to maintaining coal and nuclear energy, which are precisely the cheapest sources in terms of production costs, as its basic energy sources.

The Chinese strategy entails gradual, discrete but inexorable control of the mineral and energy resources of Africa and Latin America, relying on the huge economic and financial power conferred by its more than 3 billion dollar reserves in foreign currencies and building the transport infrastructures, both road and rail, required to transport raw materials from their point of origin to ports in the Pacific, which enable them to take these mineral raw materials to China.

In Africa, for example, there are now over 5,000 Chinese companies with a million technicians and workers and 2,000 projects in which these companies are involved, especially in mining, oil, refineries, roads and ports. It is the third most important trade and investment partner in Africa, already close behind the United States and Europe, a position it has reached in the last 8 years alone, when Westerners have been in Africa from 200 to 300 years. At this rate before the end of this decade it will be the leading trade and investment entity in Africa.

With respect to Latin America, bilateral trading between Latin America and China has gone from 5,000 million dollars in 1995 to 160,000 million in 2009, China outstripping the United States as Latin America's top trade partner. In Peru, for example, they already control 30% of mining production and China buys 50% of Chilean copper.

The chapter on the so-called "rare earths" containing minerals with metallic components, such as cerium, lanthanum, dysprosium, europium, neodymium, ter-

bium, thulium, niobium or scandium, which are indispensable for high-level computer and electronic industries, which produce, for example, radars, satellites, lasers, optic fibres or touch screens deserves special mention.

China has the biggest reserves in the world, from 95 to 97%, of rare earths and, for their exploitation in the Indian Ocean, it has obtained a licence to exploit 10,000 square kilometres in order to extract polymetallic sulphides rich in gold, silver and copper and rare earths some 1,500 metres beneath the sea, as well as 150,000 square kilometres to exploit polymetallic nodules enriched with cobalt, nickel or copper at a depth of 3,500 metres.

For their exploitation they are developing prototypes of submarines that have descended up to 3,700 metres plus in the Sea of China with a crew of 3 people. In 2012 they hope to reach a depth of 7,000 metres, which has so far never been achieved by mankind.

The foreseeable economic consequences of the progressive depletion of mineral resources will be an unstoppable tendency for the prices of raw materials to rise, which will drive what we later identify as "structural stagflation".

Given this state of affairs, before ending this section, we need to remember that the spectacular expansion in relations between China and, for instance, Latin America, is not without its problems.

Allow me, in this respect, to reproduce part of an article by the winner of the Rey de España Prize in 2001, the Argentinean journalist Andrés Oppenheimer, which was published on 8th September 2011 in the Miami New Herald and which illustrates perfectly the "modus operandi" of Chinese companies in Latin America.

"After several years of record Latin American exports to China – which helped the region to grow significantly despite the global recession – there are signs that this honeymoon could be about to come to an end.

More and more businessmen and experts in Latin American trade are complaining that China buys raw materials, almost exclusively, from the region and refuses to buy more sophisticated – and expensive – Latin American products, preventing the countries in the region from developing more diversified economies. Chinese companies are also introducing dubious trade practices into the region, exploiting workers and destroying the environment.

A recent column written by the former Brazilian diplomat Rubens Barbosa and published in the newspaper O Estado de Sao Paulo says that, as well as an increase in trade and investment, Chinese businesses are bringing "an anything goes culture, which even includes physical violence, into work relations" to developing countries.

Quoting an article from the journal The Economist on Chinese investments in Africa, Barbosa says that China "is destroying nature reserves and forests in search of mineral and agricultural resources and violates the most basic rules of

occupational safety. The roads and hospitals built by the Chinese are poorly finished, amongst other reasons because their construction companies bribe local officials”.

Almost simultaneously, a new study by the United Nations Economic Commission for Latin America and the Caribbean (CEPAL), entitled “Panorama of International Investment”, reveals that 87% of Latin American exports to Asia –mainly to China- are raw materials and only 13% are manufactured products. In comparison, the study indicates that 60% of Latin American exports to the United States are manufactured products and the remaining 40% consists of raw materials. One of the main challenges for Latin America is to diversify its exports to China so that it will not be vulnerable if there is a sudden fall in prices, the report adds.”

And it concludes: “Unfortunately, various South American governments are deceiving their citizens, assuring them that their recent growth was due to a supposedly original economic model rather than to an avalanche of Chinese purchases that might not last for ever. Let’s hope a more realistic vision helps these countries to procure more mature commercial exchanges with China which will benefit the region even more.”

To close the chapter on the key factors underlying what I identify as structural stagflation, we need to refer briefly to the chapter on food raw materials.

According to the World Bank’s annual report on food prices in 2011, between June 2010 and January 2011 there has been a 73% increase in the price of corn, an 80% increase in the price of sugar and edible oils and an increase of about 70% in the price of wheat.

In India, food price inflation reached 18.3% and the increase in inflation in China is believed to be largely caused by the increase in the price of vegetables and rice.

With this panorama, massive acquisition of agricultural land by countries with substantial financial clout is occurring and so Japan has acquired triple the amount of farmland available in its own country abroad. South Korea has the same amount of land within and outside its borders, while Saudi Arabia, Kuwait, Bahrain, the Arab Emirates and, in particular, China, after doing the same thing in Brazil and Argentina, are buying up fertile land in Pakistan, the Philippines, Burma, Zambia, Tanzania and Uganda, giving rise to a phenomenon the President of the FAO has defined as “agricultural neo-colonialism”.

According to the company Global Land Project, in Africa alone in the last three years 63 million hectares, an area roughly half the size of France, has changed hands. The most worrying thing about this is that many of these Hectares are given over to the production of biofuels or cut flowers rather than basic food crops. For example, according to the newspaper The Guardian, in Mozambique, out of approximately 400,000 hectares approved for agricultural investment from 2007 to 2009, only 32,000 (less than 10%) were used to produce food.

In these circumstances the unstoppable tendency for food prices to rise in the future means that on the Chicago Stock Exchange, the largest raw material stock market in the world, wheat, soya or maize are priced as 'dot-com' businesses were in their day and they are serving as a growing stock market refuge for large banking corporations offering financial bids on investment funds in agricultural products and agricultural land purchases for speculative purposes.

So that this section does not become too long, let me point out that, in the case of energy, the predicted evolution in the price of oil according to the International Energy Agency is that, owing to the rapid decrease in reserves and the higher cost of exploitation of new oil fields, there will be an irreversible increase from the current price of approximately 100€/barrel to 150 in 2020 and about 200 in 2030.

Consequently, all the forecasts indicate a tendency for food and energy prices, and the price of mineral raw materials, to rise in the decades ahead. The scene is set for "structural stagflation".

4. STRUCTURAL STAGFLATION

Since Keynes defined the total demand of a country as the basic variable that determines the evolution of its economy and which can be summarized by the equation:

$$\text{Total Demand} = \text{Consumption} + \text{Investment} + \text{Public Spending} + \text{Exports}$$

it was estimated, from just after the end of the Second World War until the oil crisis in 1973, that with this succinctly described Keynesian model the two major problems of the economy, namely unemployment and inflation, could be tackled.

To fight unemployment it would be enough to increase total demand by increasing the consumption capacity of families as a result of reducing direct taxes, increasing the investment capability of businesses by means of a low interest rate policy, increasing public spending, especially public investment, and encouraging exports by means of a devalued exchange rate.

To fight inflation the measures would be exactly the opposite, in other words increasing total demand by means of an increase in direct taxes, which would reduce the "disposable income of families" and therefore consumption, an increase in interest rates, which would discourage investment, a reduction in public spending and a revaluation of exchange rates, which would make exports more expensive.

The keys to this simplified model lie in the fact that Keynes considered it impossible for unemployment and inflation to coexist, since unemployment is a consequence of a lack of total demand, which would lower prices, and inflation would be the consequence of an excess of total demand, which would lead to high levels of employment.

Following the oil crisis of 1973, for the first time the keynesian model had to cope with a highly unusual phenomenon in the developed economies after the end of the Second World War: the coexistence of unemployment and inflation. The phenomenon was so new that economists had to invent a new concept to define it: stagflation.

The key question is how is it that unemployment and inflation can coexist, since this is a phenomenon which is impossible to explain using the keynesian model. The answer is that after 1973 the nature of inflation changed. We have gone from "demand inflation" in which prices rise as a result of an increase in overall demand to "cost inflation", in which prices rise in a scenario of shrinking demand, owing to the increase in production costs caused by the radical increase in the price of energy and raw materials transferred to the entire business value chain. Entrepreneurs are obliged to raise prices to make profits in a scenario characterized by an extraordinary increase in production costs.

The battle against inflation is displaced from the macroeconomic to the microeconomic environment, as it is at the company level, especially through the re-design of industrial processes and innovation in products and processes, that this new type of inflation can be combated.

The scenario described in the sections above, in which we analyzed the suction of productive resources away from Western countries towards China, generating processes of "en masse deindustrialization" with its colossal impact on employment and the "decapitalization of the Western financial system" through China's impressive accumulation of currency reserves (about 40% of the world's total reserves) are going to lead to a situation of mass unemployment in coming years combined with a considerable increase in the cost of energy, raw materials and food (the latter seriously affecting the consumption capacity of families), which is what we have defined as "structural stagflation".

5. THE INDISPENSABLE INSTITUTIONAL REACTION OF EUROPE

I would go over the time I have been allotted for this presentation analyzing in depth possible institutional, political and economic solutions which are indispensable at the global level in order to address the new economic scenario humanity is facing in the 21st century. This is why I am going to focus my analysis on the geographical space of Europe and on just one of the aspects referred to above, namely the institutional aspect, which drastically affects all the rest.

The problem faced by Europe in future decades is that of competing with the major global players in the world economy, particularly the now traditional players, the United States and Japan, and its new counterparts, Brazil, Russia, India and China (BRIC).

In this struggle for limited raw material, environmental and market energy resources, etc. Europe is saddled with an extremely serious institutional deficit: the enormous complexity of its decision-making process as a result of a faulty institutional design.

We are witness to a highly paradoxical situation. Although there is a President of the European Union, elected by consensus by the 27 EU member states, called Van Rompuy, he has become a caricature, like the person responsible for EU Foreign Affairs, Margaret Aston, who appears to have been nominated by the most adamant eurosceptics in the United Kingdom, and the leadership of Europe has been assumed without any democratic legitimization by the power-sharing 'couple' Angela Merkel and Nicolas Sarkozy.

This is simply a reflection of the tremendous institutional imbalance underlying the European Union and its decision-making process for dealing with the extremely important challenges discernible on the immediate horizon of the 21st century.

In this respect, let us remember that what defines the major players in the economy of the 21st century, with the exception of Japan, which for obvious reasons is confined to a very small territory in relation to its population, making it one of the most densely populated countries in the world, what sets apart the other key players, I repeat, is the enormous size of their territory with its millions of square kilometres and hundreds of millions of people. This implies they have an ability to supply themselves with a large amount of raw materials and energy which are indispensable for their development and an internal market on which to base or increase their power to export. Decision-making is made solely through the mediation of presidential or authoritarian regimes, which impose their economic, financial, industrial, agricultural or environmental policies throughout their entire territory.

On the other hand, Europe is a fragmented mosaic of States with governments which are often impregnated with extremely nationalist ideologies and disintegrative tensions in some of its countries, such as Spain, which could lead to an even greater fragmentation in an already severely fragmented Europe. This makes any decision extremely difficult, especially economic decisions, given the enormous difficulty of conciliating the opposing interests of no less than 27 countries, which often have to endorse major decisions in 27 Parliaments. In this context there is nothing more reactionary than the separatisms in 21st-century Europe.

In the case of the eurozone, the number of countries is reduced to 17 but the reasoning followed above is still perfectly valid for the euro economies. The fact that, in these conditions, the euro continues to exist 10 years after its creation is far beyond a miracle.

Unamuno said that "nationalism is cured by travel". Of course, I subscribe to this thesis and this is why I put so much trust in the experiences afforded by the ERASMUS Exchange Programme, which should be extended to the last year

of secondary education, and I also second the view held by Heribert Barrera, the Catalanian pro-independence political figure who died recently, when he said, logically with a different meaning to the one expressed here, "the more European we are, the less Spanish we will be". This is precisely the root of the matter, the issue of being less Spanish, less Catalanian, less Basque, less Valencian, less French or less German and so much more European. Nationalisms should be confined to the sphere of personal feelings and should not have implications in aspects of the economy, politics or Institutions.

I reiterate that there is nothing more reactionary in the current context of 21st century Europe than the different kinds of secessionisms teeming within the European Union.

In these circumstances, if it knows how to ensure it is valued in the world of the 21st century, Europe, with its enormous cultural, economic and technological potential, only has one option: the dismantling and dilution of German, French, Spanish, Basque, Catalanian nationalisms, amongst others, as part of a profound cultural and social Europeanism in which what I identify as the "Erasmus generation" should play a leading role, in order to create a single nation. This would be a Europe with a European Federal Government and a strong Presidency with robust Ministries of Economy and Finance, Industry, Agriculture and Foreign Affairs, which are strong as a result of an urgent transfer of sovereignty from the current European national states. A new European Union Treaty which is truly and definitively a European Constitution, which juridically and institutionally supports the definitive rebuilding of Europe, is the only possible way for Europeans to be in a position to meet the exceptional global challenges facing us in the 21st century.

Similarly, we cannot build Europe from the perspective of the Economy alone. Europe must also be forged, from a Political and Institutional perspective, through symbols. Therefore hundreds of flags should be lowered and dozens of national hymns that abound in the European Union should be silenced, so that we can all shelter under the beautiful blue flag with its circle of stars listening to Beethoven's marvellous "Ode to Joy".

Many thanks.