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Theories reconsidered. To what extent are European development theories on industrialization valid from a world point of view?

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THEORIES RECONSIDERED

To what extent are European development theories on industrialization valid from a world point of view?

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Introduction

THEORIES

RECONSIDERED

To what extent are european development theories on industrialization valid from a world point of view?

Dominique Barjot

Emeritus Professor Sorbonne University
Professor Renmin University of China

1/ INTRODUCTION

Our world became really global.¹ Today, the impressive growth of China and, more generally, of the BRICS (Brazil, Russia, India, China, and South Africa) and MIST (Mexico, Indonesia, South Korea, and Turkey) constitutes a good illustration of the profound change of this globalizing world. Global challengers are coming from late-industrialized countries such as China (Huawei, Xiaomi, Oppo, Lenovo, China Communication Construction, etc.), Brazil (Petrobras, Vale, Votorantim, Natura), India (Mittal, Tata Group), Russia (Gazprom, Rusal, Severstal) or South Africa (Bidvest, Sappi, Sasol), but, more and more also from other countries like Mexico (Cemex or Bimbo), Egypt (El Seweby Electric) or Nigeria (Dangote Cement). Because the emergence of new economic powers has been a fundamental motor of the human development, the importance of these phenomena is constituting today a very exciting question for economic historians. This constituted a major reason of our world project.

1 – Dominique Barjot, Harm G. Schroeter (eds), «La circulation de l'information et des connaissances», *Entreprises et Histoire*, juin 2014, n° 75.

ABSTRACT

To what extent can the traditional theories be meaningfully applied to non-European countries? Traditional theories on the World's development, especially industrialization, have a Western Europe-biased design. Consequently, it is valuable to mobilize the recent achievements in business history and of microeconomic research on companies, the state and consumers. The purpose is evaluating the role of business, both large and small, in the growth dynamic of both industrialized and emerging nations, by exploring their performance, strategies and types of organization, together with the social, cultural and environmental implications of their behaviour as actors. The issue of the emergence of globalization bears upon many fundamental questions: the growth of mass consumption and Americanization; public policy, both cyclical and structural; firms' investment policies and, more broadly, operational and strategic decisions, taking into account transaction costs; the interaction of social networks and/or techniques, spatial dynamics (industrial districts, local productive systems and clusters); path dependency.

From the actual collective work come three main conclusions:

1/ It has been possible to make a useful comparative review and a no less useful inventory of the research carried out on the subject.

2 / In general, theoretical models of Western origin, whether macro- or microeconomic, are useful and even indispensable, because they are the basis of possible typologies, but also likely to provide explanatory models. Such were the case of the Rostow, Kuznets and Gerschenkron's analyzes in the macroeconomic field, or, in terms of technology, the Schumpeterian or Neo-Schumpeterian approaches. As far as regional economic development is concerned, Michael Porter's cluster vision offers the advantage of providing the better explanatory elements.

3 / Under a number of conditions, Western theoretical models can be applied in a relevant way to the interpretation of the development of today's emerging countries.

JEL Classification: B0, D22, F5, F6, N1, N6, N8

Key words: globalization, internationalization, multinationalization, industrialized countries, emerging countries, global players, path dependency, performances, strategies, structures, state intervention

Mots clés: globalisation, internationalisation, multinationalisation, nations industrialisées, pays émergents, acteurs globaux, dépendance de sentier, performances, stratégies, structures, intervention de l'État

RÉSUMÉ

Dans quelle mesure les théories traditionnelles peuvent-elles être appliquées de manière significative aux pays non européens? Les théories traditionnelles de l'industrialisation mondiale témoignent d'un tropisme ouest-européen. Il est donc intéressant de mobiliser les réalisations récentes de l'histoire des entreprises et de la recherche microéconomique sur les entreprises, l'État et les consommateurs. L'objectif est d'évaluer le rôle des entreprises, grandes et petites, dans la dynamique de croissance des pays industrialisés et des pays émergents, en examinant leurs performances, leurs stratégies et leurs types d'organisation, ainsi que les implications sociales, culturelles et environnementales de leur comportement en tant qu'acteurs. La question de l'émergence de la mondialisation soulève de nombreuses questions fondamentales: croissance de la consommation de masse et l'américanisation; politiques publiques, tant cycliques que structurelles; politiques d'investissement des entreprises et, plus largement, décisions opérationnelles et stratégiques, en tenant compte des coûts de transaction; l'interaction des réseaux et / ou des techniques sociales, les dynamiques spatiales (districts industriels, systèmes de production locaux et clusters); dépendance de sentier.

Du travail collectif proprement dit, trois conclusions principales se dégagent :

1 / Il a été possible de faire un bilan comparatif utile et un inventaire non moins utile des recherches menées sur le sujet.

2 / En général, les modèles théoriques d'origine occidentale, qu'ils soient macro ou microéconomiques, sont utiles et même indispensables, car ils constituent la base de typologies possibles, mais sont également susceptibles de fournir des modèles explicatifs. C'est le cas des analyses de Rostow, Kuznets et Gerschenkron dans le domaine macroéconomique, ou, en termes de technologie, des approches schumpétérienne ou néo-schumpétérienne. En ce qui concerne le développement économique régional, la vision du groupe de Michael Porter offre l'avantage de fournir les meilleurs éléments explicatifs.

3 / Dans un certain nombre de conditions, les modèles théoriques occidentaux peuvent être appliqués de manière pertinente à l'interprétation du développement des pays émergents d'aujourd'hui.

1-1/ Scientific issues: Questioning traditional theories

The project combined the macroeconomic with the microeconomic dimension. The main question was: to what extent can traditional theories be meaningfully applied to non-European countries? One of the major issues of economic history was to verify theories of industrialization and development. Most of them were suggested during the 1950s and 1960s by authors as K. Polanyi (1944), A. Gerschenkron (1952), W.W. Rostow (1960) and R. Aron (1963), all, with the claim of a world-wide read. Also, later theories such as by Dieter Senghaas, dependency theory (Eduardo Galeano and others), structuralists (R. Prebisch) and of the uneven development (S. Amin, P. Bairoch and F. Perroux) placed Europe and its institutions into the center of their analysis and explication. Second issue, these theories have in common their European origin; Europe is defined as Europe plus its Anglo-Saxon offshoots, such as the USA, etc.

There existed four reasons for revisit traditional theories on the World's development:

1/ It seemed valuable to mobilize the recent achievements in business history and of microeconomic research on firms, state and consumers;

2/ The project amounted to a study of decision marketing. It comprehended from a macroeconomic standpoint (that of institutional agents of national accounting), but also microeconomic action (to evaluate individual agents' behavior in the neoclassical sense);

3/ The issue of emergence of globalization led to many fundamental questions: the growth of mass consumption and Americanization; public policy, both cyclical and structural; firm's investment policies; operational and strategic decisions (Ansoff), taking into account transaction costs (Coase, O. Williamson), the interaction of social and/or technical networks; spatial dynamics (industrial districts, clusters); path dependency (Arrows, Nelson and Winter).

4/ The specific contribution of historians could also be made fruitful, such as the approaches of proto-industrialization (Mendels, Kriedtke, Medick and Schlumbohm). Many authors tried to promote a non-European biased view (Iriye and Osterhammel).

1-2/ Scientific and organizational goals

These questions led to the definition of both scientific and organizational objectives.

1-2-1/ Scientific goals

In this context, two issues were important in our approach. Our focus was on the side of success; the approach was mainly one of business history; now

single enterprises developed their specific path of growth under the special conditions and environment of their countries. The idea of the session was to test the traditional point of view: Are European biased theories sufficient to reflect industrial success in Asia, South America or other continents? Indeed, the basic question was whether economic paradigm corresponded with success or failure. There were three main types of cases:

1/ Case 1. Adam Smith and open competition (Anglo-Saxon world, Denmark, Norway, Latin American states);

2/ Case 2. Friedrich List and the idea of temporary protection of “infant industry”: Germany, Sweden, Finland, China, Italy, Hungary;

3/ Case 3. State-backed path (France, Japan, South Korea, Russia, Spain, South Africa, Turkey and Gulf states, Latin American states).

From an actor’s point of view, the contributions combined both a microeconomic and macroeconomic approaches: change cannot be explained without actors, while actors’ movements cannot be explained without their environment. Such approaches needed to consider microeconomic point of views: the purpose was to better understand the role of the firms and other actors, such as state authorities, in the emergence of the modern economy. No approaches, which deal with business history, were to be excluded: microeconomics of the firm; economics and history of innovation; sociology of organizations; social psychology; history of labor; anthropology of entrepreneurs, workers and consumers.

1-2-2/ Organizational goals

In order to carry out the project, it was decided to put in place an organizational scheme involving the holding of four preparatory conferences for a final session to be held in Boston, in the framework of the WEHC 2018. These four pre-conferences were the following:

1/ **Rio de Janeiro**, Brazil, August 17th and 18th, 2017 at Federal University of Rio de Janeiro. Local organizer: Luiz Carlo Delorme Prado, Professor, IE-UFRJ, Institute of Economics, Federal University of Rio de Janeiro

2/ **Beijing**, China, October 21st & 22nd, 2017 at Renmin University of China. Local organizer: Dominique Barjot, Huang Chun and Wang Jue, of Renmin University of China

3/ **Tokyo**, Japan, November 15th & 16th, 2017 at Waseda University. Local organizer: Yago Kazuhiko, Waseda University.

4/ **Paris**, France, March 23-24th, 2018 at Académie des Sciences d’Outre-Mer (French Academy of Overseas Sciences) with the support of the Sorbonne University and the CNRS (French National Center for Scientific Research). Local organizer: Dominique Barjot, Sorbonne University and French Academy of Overseas Sciences.

From these four preparatory conferences, it was possible to distinguish three sets of nations; Western Industrialized Nations; Eastern and South Eastern Asia; other Emerging Nations

2/ WESTERN INDUSTRIALIZED COUNTRIES

One of the major purposes of the Paris conference was to highlight the specificity of the development patterns of the major industrialized nations of North America and Western Europe.

2-1/ North America: the American Way

With regards to the American Way, three approaches were retained: the link between entrepreneurship and technological innovation at the origins of the industrial development of the United States; the role of the political vision of American leaders; the paths adopted by large multi-divisional and managerial corporations to adapt to the economic and technological changes of the second half of the 20th century. Finally, it might be interesting to question the specificities of the Canadian case.

2-1-1/ USA: The Entrepreneurial Culture and the Mysteries of Economic Development

Louis Galambos showed that many of US entrepreneurial start-ups involved only a small degree of novelty.² This vision broke up with the well-known analysis of Joseph Schumpeter.³ According to him, heroic entrepreneurs first introduced the new consumer goods, the new methods of production or transport, the new markets and the new forms of industrial organization created by the capitalist enterprise. It was the entrepreneurial culture that encouraged people to take the risk of exploring opportunities for innovation: most would fail in the long run and many would fail in the short term.

This culture existed from the foundation of United States around 1800. Neither the entrepreneurial culture, not the search for new opportunities for innovation were unique to primitive America. Main factors, including immigration and change in the public sector, shaped performance and entrepreneurship culture of the young American nation, facilitated the transition

2 – Louis Galambos, “The Entrepreneurial Culture and the Mysteries of Economic Development”, paper presented to the Boston session, 31 p.

3 – Joseph A. Schumpeter, *The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle*, New Brunswick, New Jersey, Transaction Books, 1934, translated from the 1911 original German, *Theorie der wirtschaftlichen Entwicklung*.

to industrialization and accelerated growth. Nevertheless, two factors were essential to foster development: the existence of a vigorous and locally oriented commercial sector was necessary to provide capital; in return, this capital opened the way to a large-scale innovation process supported by a strong entrepreneurial culture.

2-1-2/USA: A Primacy of Politics on Economics?

According to François David, politics took precedence on economics in the American policy towards Europe after 1945.⁴ In the reorganization of the world demanded by the United States since W. Wilson, economy was a mean, but policy, an absolute goal. In the years 1945-1963, the major economic projects conceived by the USA for the benefit of Western Europe had a strategic aim (Marshall Plan, European Coal and Steel Community, Common Market). The United States took away the essential: a peaceful Germany into a stable Western Europe. The definitive exit of isolationism by the USA was inherent in the integration of Germany into a peaceful game of nations. But, finally, American conceptions of the European process espoused three principals: they tolerated the emergence of European commercial competition; the USA let Europeans decide for themselves the pace of their institutional progress; but, the United States of Europe remained the ultima objective.

2-1-3/USA: the biggest multi-divisional and managerial firms, a diversity of strategic choices

As Miyata Kenichi clearly showed, the model of the large multi-divisional and managerial enterprise never had a monolithic character.⁵ Indeed, after World War Two, General Electric (GE) Company and Westinghouse (WH) Electric Corporation changed their respective business structures, because a divergence in top management behaviors. From the two examples of GE and WH, Miyata K. analyzed the process of divergence in corporate growth for large US enterprise in the second half of the 20th century. In the process of change of technologies and markets, the top management of industrial enterprises adopted a managerial visaction (vision+action). Between the two firms, the most importance differences were: GE found the way to re-growth through managing unrelated diversification; WH chose to get back to pursuit a vertical integration broadcasting service from its traditional manufacturing bases. Consequently, two conclusions resulted of the comparative study: conceptions were constrained by perceptions and result of part actions; according to the

4 – François David, « L'Économie européenne au prisme du projet politique des États-Unis. Du Plan Marshall au Grand Dessein de Kennedy », paper presented at the Paris Preconference, 12 p.

5 – Miyata Kenichi, "Corporate growth and managerial perception: A comparative study of General Electric (GE) and Westinghouse (WH), 1946-2000", Paper presented to the Tokyo Preconference, 34 p.

GE's case, an unrelated diversification can bring a long term high growth that related diversification cannot provide (as for Apple, Google and Amazon).⁶

2-1-4/ Specificity of the Canadian Case (P. Lanthier)

After 1840, Canada experienced significant economic development.⁷ It owed its success to its own companies, but also to American and British Multinational Firms (MNF). Various theories were advanced to explain Canadian success. According to Harold Mc Innis and William A. Mackintosh, the role in Canadian economy. In particular, a succession of staple foods contributed to the building of the colony, then the nation, but it made Canada a dependent economy, first, to the British Empire, then to the USA. On the other hand, Canadian entrepreneurs launched their own MNCs, particularly in the mining industry.⁸ Following the example of the Mauricie Valley (Quebec), their businesses managed to create niche markets for semi-finished goods. In fact, the invisible hand of the market was too often and too resolutely replaced by the visible hand of public institutions, at the same time as legislators, investors and clients. If there was a succession of vertical and horizontal concentration processes or diversification, Canadian companies struggled to reach and maintain the finished products (Nortel, Blackberry, Bombardier). At the same time, Canada's industrialization depended largely on foreign investment, but it also depended on Canada's ability to absorb the investments.

2-2/ Western Europe: British paradigm or path dependency processes?

Although the United States is today a model of industrialization, until the 1880s, it was the UK that seemed to be the model to follow. Consequently, the question becomes: was the British way of industrialization a paradigm or the result of a path dependency process?

2-2-1/ The United Kingdom: British industrialization, paradigmatic model or exception?

According to Peter Mathias and Sydney Pollard, Great Britain was a pioneer in industrial production and technical organization.⁹ Starting from this observation, J.-P. Dormois identified four major issues:

6 – Alfred D. Chandler, Jr., *Scale and Scope. The Dynamics of Industrial Capitalism*, Cambridge (Mass.) and London, Harvard University Press, 2004.

7 – Pierre Lanthier, "The Canadian experience in business: the case of the St. Maurice Valley from 1890 to 1975", paper presented at the Paris Preconference.

8 – MNCs : MultiNational Companies.

9 – Jean-Pierre Dormois, "British industrialization: model or exception (1760-1979)?", communication presented at the Paris Preconference; Sydney Pollard, *Peaceful conquest: The industrialization of Europe, 1760-1970*. Oxford: Oxford University Press, 1981; *The Development of the British Economy 1914-1957*, Edwin Arnold, 1999.

1/ How crucial was capital formation? If, according to Rostow, capital formation was a determining factor in the British industrial revolution, C. Feinstein showed that the capital accumulation was modest.

2/ The new institutionalism. According to Douglas North, after 1699, there was a new constitutional compromise. Because the risk on Sovereign debt had been reduced, it became possible to realize on indirect investment and of contractual rights.

3/ Labor and structural change. From 1600, Great Britain was a high wage economy. Consequently, there was a powerful incentive to mechanize production.

4/ Hysteresis. Today, recent works taken the British industrialization from paradigmatic to idiosyncratic. Indeed, this industrialization, because earlier, was less capital intensive than followed by latecomers, as were Belgium, the Netherlands, Italy or, of course, Germany.

2-2-2/ Belgium and the Netherlands: Towards a revision of the Rostowian model of industrialization?

In contrast to the linear, national rapid take-off of industrialization presented by Rostow, Robin C.M. Philips evidenced that industrialization built on previous phases of proto-industrialization and did have an enduring path-dependent effect in the recent period.¹⁰ Applying the Midelfarth-Kvarnik model, he defended the idea of a regional and sectoral varied dynamical process of industrialization. As A. Marshall pointed out, several factors played a crucial role in the location of industry, as manufacturing sectors and firms tended to cluster within regional or localities over time. During the 19th century, high transportation costs caused manufactories to cluster around poles of labor and natural resources (Mokyr). Increasingly more commercial-oriented sectors started industrializing, with factories setting up business close to urban centers (higher educated work force, higher purchasing power). Due to the fall of transports costs and energy prices during the second and, third phases of industrialization, many labor-intensive sectors relocated. After the 1960s-1970s, a phase of deindustrialization took place, in which many manufacturing firms moved to other regions (to the Netherlands, then other countries of Europe and Southern Asia). In many former industrial-dominated regions (Charleroi-Liège axis), the local labor market was unable to absorb this sudden-increased supply of labor, increasing regional divergent patterns of unemployment and income levels. Consequently, Rostow's view needs revision.

10 – Robin C. M. Philips, "Regional Industrial Development in Belgium and the Netherlands (1820 - 2010)", communication presented at the Paris Preconference.

2-2-3/ *The Italian Way of industrialization*

As specialist of agri-food industries, Silvia Conca revisited classic approaches to Italian industrialization.¹¹ Gerschenkron, then Fenoaltea analyzed the latecomers' catch-up process, based on their specific advantages, but also the formation of alternative economic agents (state, big banks on the Belgian and German models).¹² Consequently, it was possible to identify marked phases of development:

1	1861-1895	Slow growth phase
2	1896-1913	First boom
3	1913-1950	Prolonged slowdown
4	1950-1973	Economic miracle
5	1974-1992	Continued sustained growth
6	1992-2012	Slowdown and relative decline

The factors of growth differed from a period to another. From 1861 to 1914, liberalism combined with protectionism, but at the cost of increasing the North-South gap. Between 1945 and 1992, the decisive factor led in the opening of the European Market. While the role of the state shareholder (IRI) was decisive, the development of big business and industrial districts was out of at least equal importance. What was the specific place of the agri-food industry? Between 1861 and 1914, it benefited from International Trade Agreements. Indeed, Foreign demand played a key role. It was based on the importance of emigration (USA and Canada, Argentina and Brazil, Europe particularly France). The expansion of the Italian food industry made the success of industrialists as Francesco Cirio, a major exporter.

2-2-4/ *The German economic model: path dependency and continuity or creative destruction and discontinuity?*

Harm G. Schroeter questioned the use of economic history theories (Gerschenkron, Rostow) to explain German economic growth from 1949 to 1990.¹³ Consequently, H. G. Schroeter was led to ask three main questions:

1/ Which theory fit best? Path dependency (Douglass North)? Or qualitative change, creative destruction and discontinuity (Joseph A. Schumpeter)?

11 – Silvia Conca, "The Italian Way of Industrialization . Suggestions from the Agri-Food Industry at the Turn of the 19th Century?", communication presented at the Paris Preconference.

12 – Stefano Fenoaltea, *The Reinterpretation of Italian Economic History: From Unification to the Great War*, Cambridge: Cambridge University Press, 2011.

13 – Harm G. Schroeter, "German Economic Growth from 1949 to 1990", communication presented at the Paris Preconference; Giersch / Paqué / Schmieding, *The Fading Miracle. Four Decades of Market Economy in Germany*, CUP1992.

2/ What sort of change needs explanation? In this way, it is necessary to choose between quantitative (path dependency) and qualitative (creative destruction) changes.

3/ Where is explanation needed? One of the essential points is to analyze the structural changes that occurred in the structure of GDP and in the labor force between 1950s and 1990s.

About these years 1945-1990, three essential remarks could be made:

1/ The main stages of the restart German economic growth were as follows: "1945: how zero?". The elements of continuity seemed to prevail. In particular, how to explain overnight fully equipped shops the very day after the introduction of the Deutschmark (DM) 1948? Then intervention of the European Recovery Reconstruction (ERP). In 1948, the introduction of a new currency (the Deutsche Mark) caused a boost. But another decisive factor was the Berlin Blockade. Indeed, it entailed the perception: US no longer enemy, but friend. It opened the way to the Reconstruction with the help of ERP 1949-1952.

2/ Two examples of industries illustrated this restart. In the automotive industry, Volkswagen (VW) reconstructed not on German principles, but on American ones, with ERP-Money, advices of US-consultancies and US Machinery. In this case, the key to world-success was adapting to Americanization. In the case of the chemical industry, the restart process differed a little; reconstruction on German principles, but change to US ones during the 1950s; passage from coal to oil as basic energy and as raw materials; adopting of totally different proceedings. Ultimately, the followed path was the same to achieve a global success: adapt to Americanization.

3/ The shock of oil crisis of 1973-1974 was perceived as a great challenge. German Government made clear by political means. The reaction during 1970s was to use of Keynes' remedy. It became during 1980s: to adopt the Chicago school-monetarism. There were some differences in development before and after Oil-crisis: deregulation and privatization for to inject competition. The most important aims were to obtain higher rates of growth of labor-productivity and growth of standard of living. The consequence was a rapid development of labor-productivity.

In conclusion, who should be used, Schumpeter or North? There were many elements in direction of change and discontinuity: structural change from agriculture to service; change in economic policy. *A contrario*, one can also find arguments in favor of path dependency and continuity: no change in the industrial profile of the country (always the same branches).

2-3/ Western Europe: the case of France

When talking about comparing European business models, it is natural to compare the United Kingdom and Germany with France. Such was the case for the French miracle of the “Thirty glorious” with that, contemporary, of Germany. Like Germany, France had a system of “ententes” and cartels, as in the cement industry. Nevertheless, there have been and still exist French specificities: thus the specialization in the realization and the management of the public utilities or its place apart within the European Union.

2-3-1/ *Realities and limits of the “French Miracle” of the “Thirty glorious”* (D. Barjot)

In the long run, France experienced a contrasting economic development.¹⁴ In 1945, the French economy was very weak. This reinforced the impression of a rapid recovery during the 1950s, followed by sustained economic growth in the 1960s. Indeed, before 1945, the French growth was very contrasted. Historiography often emphasized the slowness of French economic growth during the 19th century, by comparison with the new industrialized nations such as United States or Germany. It was true, but must be nuanced: the per capita performance of the French economy was parallel (that of the United Kingdom; the French growth strongly accelerated from 1840 to 1857 and between 1906 to 1914; in 1914, France benefited from its financial strength (second largest exporter of capital).

But impact of the World War One was disastrous for the French economy. Indeed, the growth of the 1920s masked profound fragilities despite the recovery made by Poincaré, from 1926 to 1928, and the revival of the automobile industry. The crisis of the 1930s continued until 1938, because acceleration of aging, decline of industrial production, reinforced protectionism, failure of deflationary policies, but also of the revival of demand and structural reforms of the Popular Front. The World War Two further weakened the French economy. Three factors concurred: extension of the state intervention, explosion of inflation since 1936 and, above all, from 1940 to 1944, enormous German levies on France. Consequently, in 1945, France came out very diminished of the conflict, because gigantic material losses concerning almost the entire country. Nevertheless, the French external indebtedness was not heavy and the monetary reserves remained not negligible.

Under these conditions, the economic recovery of the years 1945 to 1969 could be considered as a miracle. After the World War II, French production

14 – Dominique Barjot, “A “French Miracle”? The Economic Growth of France 1949-1969”, paper presented at the Paris Preconference, 11 p.

increased greatly in France (5.1% per year in average from 1949 to 1969). In this way, the use of a Cobb-Douglas function led to interesting results. According to Jean-Jacques Carré, Paul Dubois and Edmond Malinvaud, the growth in production resulted of a number of factors: increased labor efficiency (renewal of the birth rate, high level of employment, strong growth of the duration of work, higher level of education); increase in the stock of productive capital, due to a growing investment effort; importance of the residue (economics of scale, progress in management methods, rapid technical progress) measured by total factor productivity gains.¹⁵

Five other causes conditioned the evolution of physical factors:

1/ The French economic growth benefited of a global demand effect, due to urgent needs. In return, demand catalyzed growth by creating an intense call for work, thus a high level of immigration, a sustained rate of activity of the French population, a strong reduction of unemployment and the maintenance of a long duration of work. A high demand favored innovation, optimized the use of productive equipment and stimulated professional migrations.

2/ The rapid development of French foreign trade reinforced the specialization of the productive system, created economics of scale, catalyzed technical progress.

3/ The needs for physical capital led to abundant savings, a positive factor. If the demand for capital increased, the saving supply progressed since the war. In particular, French peoples devoted a growing share of their income to financing construction. But changes in the financing of investments were not an explanatory factor for post-war investments. Indeed, the role of self-financing of investments was reduced and external financing increased sharply.

4/ Total factor productivity improved through the development of a competitive market. From 1949 to 1968, the labor market evolved in the direction of a better allocation of resources. From 1955 to 1965, the enlargement of the capital market gradually transformed the conditions affecting the distribution of financial resources. The creation of a Comité Technique des Cartels et Positions Dominantes (Committee on Cartels and Dominant Positions) in 1953, then, from 1960, the opening of the borders restored a more competitive market. Probably, regional policy accelerated growth.

5/ State action unevenly was effective: cyclical regulation was generally beneficial for growth, in spite of a constant growth/external equilibrium dilemma; planning helped to create a climate of expansion, but played only a minor role in economic policy.

In conclusion, the French growth resulted from favorable factors. It was: catching-up the birth rate; shock of the 1939-1945; institutional reforms;

15 – Jean-Jacques Carré, Paul Dubois, Edmond Malinvaud, *La croissance française. Un essai d'analyse économique causale de l'après-guerre*, Paris, Seuil, 1972.

human capital investment; reconversion of the industry; release of the demand; favorable environment. Some factors were decisive: the French gave priority to work; during the 1960s, France benefited from a modernized productive apparatus and a dynamic, coherent and efficient economic policy.

2-3-2/ *An industry predisposed to cartels: the cement sector*

Cécile Jaff-Coursi ras showed how cartels played a major role towards the cement market building.¹⁶ During the interwar period, most European cement producers began considering the advantages of building national and international agreements. On the contrary of English producers, the French ones only had local and periodic price-fixing organizations. Indeed, the French cement industry did not organize its national cartel during the 1920s. But, in spite of the oligopolistic structure of the French cement market, during the 1930's, the producers created strong centralized cartels, at national, then international levels. The reasons for this change are to be found in the effects of the economic crisis. Indeed, because an acceleration of the concentration process, the cement market constituted an oligopolistic structure before the World War II. At the same time, the cement cartel succeeded in fighting the crisis. The sharing process between producers through cartels was crucial to understand this concentration process. The link between growth and investment highlighted to understand the race between producers to increase their production capacity. But, probably, the French state contributed to this concentration, especially by its price limitation policy.

2-3-3/ *Public utilities: an international specialization of France?*

In France, the economic influence of the state was and remains strong (D. Barjot).¹⁷ Over the long-term, public-private partnerships constituted a means of conciliating the social function of public services and public works, whilst limiting their costs for citizens. It was the case with the use of the concession system in the utilities, even after the massive waves of nationalizations in France in 1944-1946, then 1981-1982. Indeed, from the end of the 1980s, there was a return to the concession system, which was combined with Anglo-Saxon practices, including Build Operate Transfers (BOT) and Public-Private partnerships (PPP). The French model of concession contributed significantly towards the international development of the French Colonial Empire, it was

16 – C cile Coursi ras-Jaff, "The cement market during the 20th century: between cartels and regulation", paper presented at the Rio de Janeiro Preconference, 23 p.

17 – Dominique Barjot, "The model of French Concession: Public Utilities as an International Specialization of France?", paper presented to the Rio de Janeiro Preconference, 20 p. See also: Dominique Barjot, "Public utilities and private initiative: The French concession model in historical perspective" in *Business History*, vol. 53, No. 5, August 2011, p. 782-800; "Public utilities and private initiative: the French concession model in historical perspective", in Cardoso de Matos (Anna), Pinheiro (Magda), *Hist ria, Patrim nio e Infraestruturas do Caminho de Ferro : Vos es do Passado e Perspevitvas do Futuro*, Lisboa, CEHC IUL, Cidehus, 2014, p. 17-44.

an excellent instrument for French capitalism around the world (Compagnie du Canal de Suez).

After World War Two, the concession remained a competitive system: indeed, France produced four important private groups (GDF-Suez, Veolia Environnement, Vinci and Bouygues). The world competitiveness of these French groups resulted of a long-term tradition of interest on the part of engineers in networks systems (École Nationale des Ponts et Chaussées, Ecole Centrale de Paris) and questions relating to energy (Écoles Nationales des Mines), but also due to the intervention of French banks as Suez or Paribas in major international ventures. Building Suez (today Engie) constituted a quasi-perfect example of the French experience: take-over of the Société Générale de Belgique (1988), merger Lyonnaise des Eaux-Dumez (1990), then Suez-Lyonnaise des Eaux (1997), finally merger GDF-Suez (2008).

2-3-4/ The European Union and the French specificity since the 1960s (M. Hau)

In 1957, the Treaty of Rome brought together six countries, but especially two opposed economic models: Germany and France.¹⁸ Indeed, the end of the World War II considerably amplified the opposition between the two models, France opting in 1945 for a firmly statist system. The choice to create a customs union rather than free trade area and the acceptance of common policies could have changed the European construction towards a geographical extension of the French economic system. But France failed to create an European Union in its image. Indeed, the French economic system, based on the expansion of the domestic demand, exposed France to the increasing pressure of its partners. Consequently, France adopted many elements of the liberal Rhine model. Indeed, the temporality of cultural facts obeys at slower rates than economic facts.¹⁹

3/ EASTERN AND SOUTH EASTERN ASIA: ASIAN MODEL OR NATIONAL PATH DEPENDENCY?

The considerable economic weight achieved today by China and India reflects the rise of Asia in the global economy. Indeed, if one thinks in terms of gross domestic product and purchasing power parity, the hierarchy of economic power becomes very much modified to the profit of Asia. Four Asian nations are in the top ten: China (1), India (3), Japan (4), Indonesia (7); Then come South Korea (14), Thailand (19) and Taiwan (20). Indeed, the rise of Asia appears general. Nevertheless, in the medium and long term, it is possible to identify three main

18 – Michel Hau, «L'Union Européenne. L'évolution économique des pays d'Europe occidentale et la spécificité française depuis les années 1960», paper presented at the Paris Preconference, 14 p.

19 – Michel-Pierre Chelini, «Comments» at the Paris Preconference.

groups of countries, whose originality of the development model has been well highlighted by economists (W.W. Rostow, S. Kuznets, A. Gerschenkron, R. Prebisch, P.A. Krugman, D. Senghaas, etc.):²⁰

1/ Three economically dominant powers: one of which could be considered as a model by its precocity and the exemplary nature of its economic growth, Japan (hence, among others, the success of the famous theory of development “in wild goose flight”, formulated by Kaname Akamatsu in the 1930s);²¹ and the other two, China and India, identify with the rise of the BRICS (Brazil, Russia, India, China and South Africa) in the global economy;

2/The “Four Dragons”: There are four countries in the Far East that have experienced strong industrial growth since the 1960s, namely South Korea, Hong Kong, Singapore and Taiwan;

3/ New Asian Tigers (or New Exporting Countries or “Tiger Babies”, according to Goldman Sachs: These are Indonesia, Malaysia, the Philippines, Thailand and Vietnam.

3-1/ Japan: pioneer, but in a specific way?

As with Great Britain, today’s historiography, without calling into question the pioneering nature of Japanese industrialization, tends more and more to emphasize the original character of the path followed by this country. The specificity of the Japanese way is clear from the works presented at the Tokyo preconference. These focused on three major themes:

- the role of entrepreneurship in the take-off of the Meiji era (and today);
- the respective role of technological change in the industrialization of the same Meiji period, both in the railways–technology transfers and in the textile industry (between technological change and organizational change);
- the role of economic policies and their designers as an explanatory factor of the Japanese miracle from the 1950s to the 1990s.

3-1-1/ At the origin of modern Japanese entrepreneurship

Shibusawa Eiichi was one the most representative figures of the Japanese capitalism of the Meiji era.²² Called the “founder of Japanese capitalism, he was a Confucian equivalent of the Max Weber’s model.²³ However, Shibusawa’s

20 – Paul R. Krugman with Masahisa Fujita and Anthony Venables, *The Spatial Economy – Cities, Regions and International Trade*, Cambridge (Mass.), MIT Press, 1999.

21 – Kiyoshi Kojima, “The “flying geese” model of Asian economic development: origin, theoretical extensions, and regional policy implications”, *Journal of Asian Economics*, 11 (2000), p. 375–401.

22 – Franck Michelin, “Shibusawa Eiichi and the Rise of the Capitalist Economy in Northern Japan. A Research Project”, paper presented to the Tokyo Preconference, 14 p.

23 – Harm G. Schroeter, “Economic paradigm and performance in the long run. Theories reloaded : To what extent are European Industrialization-theories valid from a world point of view?”, Introduction to the Tokyo Preconference, 14 p.

career was at first a pragmatic driven action, as a result of the Franck Michelin's study about relations between Akita Prefecture and Shibusawa Eiichi. The Shibusawa's impact on the development of the capitalist economy in Japan in general and in Tohoku region in particular remains difficult to assess. Shibusawa did not have a huge investment power, but he had unique expertise in financial techniques: he was instrumental in launching and developing the banking systems across Japan. But with the intensification of military intervention on the continent and the transition to protectionism in many countries, Japan began to abandon free trade and to give a growing role to the state in economic development. Consequently, Shibusawa agreed that the state should play the leading role and became a supporter of the economic colonization of Taiwan and Korea. According to the renewed competitiveness of its industry, Japan remains today the third (or the fourth, in terms of purchasing power parity) world economic power. It was demonstrated by a comparison between Kodak and Fuji film (Yuzawa Takeshi).²⁴ In the 1960s and early 1970s, Kodak was the world's largest film maker. But Kodak failed to adapt to "the digital revolution". On the contrary, Fuji film was again a very profitable business.

3-1-2/Technology transfers, technical change and organizational change in Meiji Japan

While the role of entrepreneur was essential, the decisive importance of technology transfers must be stressed. As shown by Nakamura Naofumi's research, railway constituted an excellent field of observation.²⁵ Indeed, he emphasized the role of railway engineers and of their technical imitation. The process of developing railway technology in Japan was divided into four stages: 1/ transfer of railway systems from the UK by the Japanese government during the period 1870-1880; 2/ acquisition of railway materials, from the USA and Germany and diversification of technology, during the 1890s; 3/ standardization and convergence of technology through the merging and nationalization of rail networks in the 1900s; 4/ development of an original technology by the state railways during the 1910s. As a result, it becomes possible to analyze the specificity of the process of the Japan technological catching up. In the first stage, rail technology was transferred to Japan in two ways: hiring foreigners (British engineers) or general contracts (with US contractors). In stage 2, locomotive supply countries diversified very rapidly. In a third stage, the lack of uniform standards between the different companies appeared as a growing problem due to the need to standardize facilities. Following the promulgation of the Railway Operation Law (1900), the movement towards standardization was

24 – Yuzawa Takeshi, "The Digital Revolution and Business Behavior. The case of Kodak versus Fuji film", in Dominique Barjot (ed.), « L'ascension économique de l'Asie », *Entreprises & Histoire*, n° 90, 2018/1, p. 37-50.

25 – Nakamura Naofumi, "Diversification and convergence: development of the locomotive technology in Meiji Japan", ISS Discussion Paper Series F - 180, June 2016, paper presented to the Tokyo Preconference, 33 p.

accelerated thanks to the nationalization of 1906-1907. Consequently, by 1914, Japan had developed an independent locomotive mass production.

As a second example, Okazaki Tetsuji attempted to contribute to the “factory debate” by disentangling the effects of the technical and organizational changes in the rise of the factory using a unique dataset from Japan in the early 20th century.²⁶ The rise of the factory, from a long time, was a topic of discussion in economic history. There is widespread consensus that the characteristics of the modern factory were “labor discipline within the shop combined with technical specialization and co-ordination and the application of “non-human power” (Max Weber).²⁷ Oliver Williamson interpreted supervision and discipline as devices for reducing transaction costs.²⁸ If most economic historians are critical (Landes, Berg, Mokyr), there is little quantitative research.²⁹ Within the Japanese economic history literature, there are a number of studies concerning fabric industry and its form of production, but non research comparing systematically the different production organizations. According to Okazaki T. in the early 20th century, the fabric industry in Japan experienced significant technological and organizational changes involving the diffusion of the power loom and the spread of the factory system. Because the two changes were not completely synchronized, a variety of production organizations coexisted. Okazaki founded that the productivity of the factory worker was 2.46 times larger than of an outworker under the putting-out system. The impact of the factory system was almost as large as that of the power loom in the case where the hand looms were replaced by power looms.

3-1-3/ *The sources of “the Japanese economic miracle” revisited*

Much has been written about the Japanese economic miracle, but still not enough about its intellectual origins and especially about the origins of economic policies. As well analyzed by Yago Kazuhiko, the World Bank loans to Japan

26 – Tetsuji Okazaki, « Disentangling the Effects of Technical and Organizational Changes in the Rise of the Factory: The Case of the Japanese Fabric Industry 1905-1914 », CRJE Discussion Papers, July 2017, paper presented to the Tokyo Preconference, 25 p.

27 – Max Weber, *General Economic History*, Translated by F. H. Night, New York, Collier Books (1923), 1961.

28 – Oliver Williamson, *The Economic Institutions of Capitalism*, 1985; (co-edited with Sidney Winter), *The Nature of the Firm: Origins, Evolution, and Development*, 1991.

29 – David S. Landes, “What Do Bosses Really Do?”, *Journal of Economic History*, 46, 1986, p. 585-623; Maxim Berg, “Factories, Workshops and Industrial Organization”, in Robert Floud and David McCloskey (eds.), *The Economic History of Britain since 1700*, second edition, vol. 1, 1700-1860, Cambridge, Cambridge University Press, 1994, p. 123-150; John Mokyr, *The Gifts of Athena: Historical Origins of the Knowledge Economy*, Princeton University Press, 2002; Patty Hudson, “Industrial Organization and Structure”, in Robert Floud and Patrick Johnson (eds.), *The Cambridge Economic History of Modern Britain*, vol. 1: *Industrialisation, 1700-1860*, *The Economic History of Britain since 1700*, second edition, vol. 1, 1700-1860, p. 28-56. On the contrary, there was a quantitative exception: K. L. Sokoloff, “Was the Transition from the Artisan Ship to the Nonmechanized Factory Associated with Gains in Efficiency? Evidence from the U. S. Manufacturing Censuses of 1820 and 1850”, *Explorations in Economic History*, 21, 1980, p. 351-382.

played an important role in Japan's postwar development.³⁰ The loans were possible after bitter and long negotiations between the Japanese government and the World Bank, between Japanese firms, between donor institutions and, even, within the World Bank itself. More, an interventionist policy of the Japanese government coexisted with competitive strategy of borrowing firms (Kawazaki Steel). At the same time, during the 1950s, the World Bank saw a drastic change in its economic outlook, from a pro-development point of view, to an austerity set by bankers in the USA.³¹ From a neo-classical thinking, several missions criticized the Japanese economy. But the Japanese government welcomed the criticism of the World Bank. In the 1950s, the Japanese economy was suffering from weak exports, lack of foreign reserves and rapid inflation. Under the fixed exchange rate system, the government put in place a severe, unpopular, but vital deflationary policy. Because it was the prerequisite for obtaining loans, the government strictly applied the recommendations of the World Bank. Japanese companies also resorted to the World Bank. In the case of Kawazaki Steel, the requirements of the World Bank led to repeated capital increases and a radical change of shareholders.

During the 1960s, Japan's economic performance was closely monitored by the Organization of Economic Cooperation and Development (OECD).³² Surprisingly, Japanese agents shared a similar point of view with the OECD working/group, noting the danger of inflation and the scarcity of currencies. Nevertheless, if the vision of growth was shared with the World Bank and the OECD, the was a major exception in the Japanese government. Indeed, Shimomura Osamu was the one who embodied an heretical vision.³³ He defended a very rapid growth accompanied by a certain degree of inflation and a lower level of foreign exchanges reserves. Shimomura also defended an active monetary policy to support growth. As a senior official in the Japanese Ministry of Finance, he experienced wartime controls, then post-war price control under the US occupation. As a member of the Bank of Japan's Board of Directors representing the Ministry of Finance from 1953 to 1959, he defended this policy favoring the growth. Influenced by J.M. Keynes and Roy Harrod in his youth, Shimomura ended his career as a board member of several government funded banks. More, after the WWII, Japan's economic growth was fueled by continuous plans, the most famous of which was the National

30 – Kazuhiko Yago, "External Conditions for National Pattern of Development: The World Bank Lending and the Postwar Japanese Growth (1952-1967)", in Dominique Barjot (ed), "Economic development, financing and business strategies (19th-21st century)". « Développement économique, financement et stratégies d'entreprises XIX^e-XXI^e siècle », *French Economic History Review - Revue française d'histoire économique*, n° 9-10, 2018 1-2, p. 60-77.

31 – Kazuhiko Yago, "Japanese economic growth after WWII: international aspects revisited", paper presented to the 22nd International Congress of Historical Sciences, 26 August 2015, Jinan, 10 p.

32 – Kazuhiko Yago, "Translated Economic Paradigms: World Bank Lending and the Japanese Growth in the 1950s and 1960s", paper presented to the 1st World Business History Congress, 27 August 2016, Bergen, 12 p.

33 – Kazuhiko Yago, "A Lonely Apostle of the Japanese Growth: Osamu Shimomura, his theory and practice", paper presented to the Beijing Preconference., 14 p.

Income Doubling Plan (1961-1970).³⁴ Thanks to this one, with a 50% growth in real gross national product, Japan, entering the OECD in 1964, could participate in this group target as a precursor to economic expansion.

3-2/ Awakening of Chinese power

With the reform introduced in China by Deng Xiaoping, starting in 1979, China made giant strides in the path of self-sustained economic growth. China caught up, then passed Japan, imposing itself as another Asian model. But the challenge of modernization is not fully addressed. How to reform the economy, politics and culture of a traditional Chinese society and how to change the relationship between the three aspects accordingly. These questions dictate the path that China is taking to become a modern nation.³⁵

3-2-1/ To the research of the specificity of the Chinese model of development

Chinese economic history is changing today. Researches are focusing on the demographic history and history of banking institutions as well as scientific and technological development or the role of commercial guilds. According to Wang Qing, before the creation of the People's Republic of China, there existed a correlation between the size of family and this one of the productive lands.³⁶ The demographic change was the direct consequence of the adoption of the socialism in PRC. Today banking and money also constitute an important field of research. According to Yi Dinghong and Huang Chun, the Chinese model differed from this European one, because the role of state was more decisive in the genesis of a modern industry in China and in spite of the learning of Western system.³⁷ He Fucai used an econometric model in order to verify the consequences of the opinion attitudes on the monetary reform of Yin yuan.³⁸ Concerning the "two motor drive" model of innovation and technology from 1978 to 2015, Wang Jue demonstrated that the top down model and planning policies were more efficient than a classic bottom up policy.³⁹

34 – Kazuhiko Yago, "Convergence And Divergence Over The Growth Paradigm: The OECD Working Group 2 And Japan's Doubling National Income Plan (1961-1970)", paper presented to the Tokyo Preconference, 23 p., to be publish in the *Revue économique* in 2020.

35 – Huang Chun and Wang Jue, "China's Path to Become a Modern Nation: Industrialization, Learning Strategy and System Choice" in Dominique Barjot (ed), "Economic development, financing and business strategies (19th-21st century)". « Développement économique, financement et stratégies d'entreprises XIX^e-XXI^e siècle », *French Economic History Review - Revue française d'histoire économique*, n° 9-10, 2018 1-2, p. 38-59.

36 – Wang Qing, "An Initial Study of the Changes of Family size in China: from the Mid-Qing Dynasty to the Present Time", paper presented to the Beijing Preconference.

37 – Huang Chun and Yi Din hong, « How are Business and Money changing China. A test for the Validity of Economic Theories », communication presented to the Beijing Preconference.

38 – He Fucai, "Does Man Learn by the Disappointment of Expectations? Evidence from the Reform of Yin yuan", *idem*.

39 – Chen Zhongnan, « The Role of National Policy in Discipline Development. Taking the Development of Chinese Traditional Mathematics (581 A.D.-1947 A.D.) as an Example », *idem*.

Sun Rui realized two studies on the traditional Chinese communal organization and the state transition. The first focused on clearing custom and old-style Chinese private bank in Modern Tianjin.⁴⁰ In Tianjin, the guild extended her function in setting up a financial transaction platform, maintaining the commercial customs and ensuring the functioning of a commercial jurisdiction. This guild knew a number of restraints on this power. These restraints both were internal (democratic election of top directors, disclosure system of financial management) and external (passive policy of market, intervention of the government). Because other industries also had guilds, a competitive marketing became necessary. More recently, the research is concerning a general view on the business guilds the 1500-1911 period in China.⁴¹ Indeed, Sun Rui is working about the settlements of 269 guilds, dating from the early Qing period. They provide a better understanding of a traditional system set up around 1500 and in place until 1945. These guilds benefited of an important management autonomy. They became more professional than a traditional local organization which just comforted the foreigners. In the Ming and Qing dynasties, the basic business orders came from the civil organizations. There existed a clear consensus between the private interest and the long term development in one industry. Instead of religions, the guilds became more rational in a sense of the whole guild interest. These guilds constituted a key element to understand the modern China, even the changing world of the 20th century.

3-2-2/ Two major themes: setting up the banking system, technology transfer and transport development

Huang Chun and Wang Jue analyzed the transformation of China's economic model from a planned economy to a market economy.⁴² From 1840 to 1949 (first stage), modernization efforts were in vain. Between 1949 to 1984, long term development objectives gave rise to the planned economy and long term investments (second stage). Thus opened, from 1984 to 2007, a third step to build, in China, a modern banking system. One of the most important transformation was the emergence, in 1984, of powerful commercial banks as Industrial and Commercial Bank of China (ICBC) (1), Bank of China (2), China Construction Bank (3) and Agricultural Bank of China (4). The history of the Chinese commercial bank between 1984 and 2007 illustrates how to manage the investment capacity of a government mobilized by the central problem of the economic transformation of China. Consequently, the government developed an ability to diffuse financial risks. Because Chinese commercial

40 – Sun Rui, “Marketing and industry: A Study on the Clearing Custom among Old-style Chinese Private Banks in Modern Tianjin”, *idem*.

41 – Sun Rui, “How to construct the marketing orders? A view on the business guilds during 1500-1911 period in China”, paper presented to the Tokyo Preconference.

42 – Chun Huang, Jue Wang, “The evolution of China's economic model and China's modern banking history (1840-2007). An analysis based on investment incentives and risk control”, in Dominique Barjot (ed.), «L'ascension économique de l'Asie», *Entreprises & Histoire*, n° 90, 2018/1, p. 25-36.

banks enjoyed considerable independence and the risks to government are more limited, the Chinese central government and local authorities can invest through other financial channels.

According to Wang Jue and Wang Qing, through a massive investment in high-speed trains, China passed from a phase of catching up to another based on innovation. In China, the state could be defined as an entrepreneur.⁴³ Indeed, the development of the high-speed train was led by the State Council. In this way, the former Ministry of Railways (MOR) both was strategist and executive. In the beginning, the development period of HSR was deeply rooted in the planned economy. The loosening of credit constraints and excessive debt, the inadequacy and wastage of resources, the lack of technical maturity existed in the old MOR. However, its effectiveness and implementation capacity should not be neglected.

3-2-3/ A recent, but impressive rise in power

From 1978 to 2008, China's gross domestic product grew at the annual average rate of 10%.⁴⁴ At constant prices, it was still around 7% between 2008 and 2017. But since 2012, the Beijing government has been seeking to internationalize its currency by liberalizing its use for foreign companies. The goal of XI Jinping is to rebuild thanks to liberal reforms, the fight against corruption and policy more concerned with preserving environment, but without giving up the control of opinion. A new economic policy is progressively adopting. While export remains essential, rising Chinese costs and weak demand in developed countries are pushing for rebalancing in favor of the domestic demand and a reduction in the Chinese trade surplus. It is the result of the massive recovery plan decided at the end of 2008 in order to get over the international financial crisis. At the international level, the consequences are considerable. If political liberalization is not a priority (Hong Kong, Taiwan), the new policy seems to want fight against pollution more effectively. At the same time, despite the slowdown in the economic growth of the BRICS, the call for foreign and the introduction of a competitive economy ensured a quick growth.

In the 2000s, China emerged as the only superpower capable of competing with the USA, thanks to the considerable number of its assets and its enormous accumulation of human capital. Her record economic expansion is based on a massive investment effort, a huge energy consumption, but also powerful giant state companies (oil industry, construction banking, telecommunication, steel and iron). These emerging companies are also in advanced technologies

43 – Wang Jue and Wang Qing, "China's High-speed Rail. From Technological catching-up to Innovation", paper presented to the Tokyo Preconference, 15 p.

44 – Dominique Barjot, Lu Yimin (eds.), « Chine-Europe. Perceptions croisées », *Géostratégiques*, n° 42, juillet 2014.

(Huawei, Xiaomi, Oppo, Lenovo, ZTE, etc.). But China is also facing to major challenges: pollution, inflation, domestic indebtedness. In these conditions, the pursuit of the Chinese model of development implies exporting more, but also to practice a selective import policy in order to promote progress in competitiveness. The economy is also becoming a major asset of Chinese soft power.

Indeed, between 1990 and 2000, China became the world's leading exporter, gaining a lot of market share. On the contrary USA and European Union declined. Entered to the United Nations in 1971, to the GATT in 1986, then into the WTO in 2001, now China seeks to impose the yuan, against the dollar, the euro and the yen, other currencies of reference. China is also taking an active role in the IMF, becoming its third largest contributor (behind USA and Japan), by playing the enormity of its foreign exchange reserves. In face of the Asia Pacific Economic Cooperation (APEC), China is putting through the Asian Free Trade Agreement (AFTA) on cooperation with China, Japan, South Korea, ASEAN and the USA, and, more recently, the Road and Silk Initiative plan.

3-2-4/ Chinafrica and Francafrigue: reality of power relations

The increase in Chinese investment in Africa since the early 2000s constitutes one of the most significant events of the new millennium: China is the third largest investor in Africa, behind USA and France; about 1 million Chinese workers are present in Sub-Saharan Africa; since 2010, two Chinese public banks developed in Africa, China Development Bank and Export-Import Bank of China. Olivier Feiertag shed light on this issue by comparing French and Chinese investments in Sub-Saharan Africa.⁴⁵ The inflow of Chinese capital into Sub-Saharan Africa increased significantly since the 2000s. that I part of a more general context of global expansion of Chinese investment abroad: if two thirds of this amount goes to Asia, the African continent has the last share (4% of the total). Faced with the Chinese advance, the French zone has been criticized since its beginning in 1945 in the extension of the so-called "Colonial Pact".

Because many countries in the Franc zone suffer from a relative lack of energy and mineral resources, Chinese investments prefer the Congo (offshore and gas) or Niger (uranium). The weakness of Chinese investment abroad in the Franc Zone could also be explained by the mechanisms of the monetary zone themselves. Since the 1960s, the French authorities have adopted a high level of protectionism. Opened by the three central banks of the zone to the French treasury, the operation accounts centralizes a significant part of the foreign assets to each African country through its foreign trade. The consequence is a

45 – Olivier Feiertag, "Francafrica and Chinafrica. French and Chinese investments in Africa since the 1960's: In quest of the best pattern for development", paper presented to the Beijing Preconference, 2 p.

strong opposition between two opposite patterns of development. The French model is characterized by economic and regional integration, neocolonial trade and monetary orthodoxy. On the contrary, the Chinese model is defined by a post-colonialism, a response to the demands of the national economy, the superiority of the nation-state, a priority given to industrialization and infrastructure and, finally, a financial overdraft economy.

3-3/ New industrializing nations in Asia

The paths of industrialization are not limited to Japanese and Chinese models. South Korea, the largest of the “Four Dragons”, and Vietnam, one of the “Asian Tigers” offer two interesting examples, with different trajectories. Above all, a new economic giant emerged, India, with her large companies, some of them multinational. In her development, India appealed to foreign capital, like Germany.

3-3-1/ South Korea

With Taiwan, South Korea is one of the best illustrations of the Rostow's theories, who carried out several consulting and assistance missions in the 1960s (Dominique Barjot and Park Rang-Ri).⁴⁶ After Japan, South Korea knew another “miracle”, in spite of a heavy inheritance (the “Hermit Kingdom” of the 19th century, the Japanese occupation and the Korean War). From 1960s, the country benefitted of a rapid economic development, based on the growth of exports and, with a certain delay, of the internal market of mass consumption. From the point of view of the dominant historiography, the two most important factors of success were the American aid and the chaebols (big conglomerates). That is not false, but not always exact. The various experiences of steel industry, shipbuilding and automobile industry clearly verified the model; on the contrary, the case of electronics brings to relativize this connection, as shows it the LG's and Samsung's examples.

The South Korean economic success firstly was a result of a remarkable mobilizing of human capital.⁴⁷ Indeed, from 1961, the Nation operated a strategic reorientation to a new model of industrialization, under the impulse of the President Park Chung-Hee. From a macroeconomic point of view, the success of this export-based model largely resulted of three factors: 1/ the existence

46 – Dominique Barjot and Park Rang-Ri, “The Korean “Miracle” between the State and the Chaebols”, paper presented to the Beijing Preconference, 21 p.; H.C. Moon, A.M. Rugman and A. Verbeke, “A Generalized Double Diamond Approach to the Global Competitiveness of Korea and Singapore”, *International Business Review* 7, 1998, p.135-150.

47 – Park-Barjot Rang-Ri & Parc Jimmyn, « Le capital humain : facteur clé du modèle coréen de développement », in *Outre-Terre*, n° 39, numéro spécial « Corée du Nord, Corée du Sud : la guerre sans la guerre », 2014, p. 74-90.

of powerful industrial and financial Korean groups; 2/ a remaining profitable strategy of exports; 3/ a voluntarist state economic policy. But probably, the most determining factor of this success was the mobilization of human capital. Indeed the neo-Confucianism constituted an accelerator of the progress. At the same time, even if it is today discussed, both the school and university systems seemed successful. Above all, South Korea supplied a massive effort of R&D.

Micro-economically speaking, South Korea benefitted of positive effects of international specialization. Shipbuilding offered a good example.⁴⁸ In 2011, shipbuilding industry was the four post of South Korea exports (10%), playing the role of a leading sector. From the early 2000s, the country became the world leader behind Japan. Since 2009, Korean shipbuilders must resist to the Chinese competition, thanks to a highly skilled workforce and an excellent strategic positioning. Nevertheless, nothing have been possible without the emergence of Posco, an Asian leader in steel industry.⁴⁹ If South Korea today remains the fifth world producer, the ascent of the Korean steel industry based mainly on Posco, the fifth company in the World. Founded by the Korean state in 1968, Posco was successfully privatized in 1998, became world number one in terms of labor productivity and founded Postech (Pohang University of Science and Technology). As a consequence, Posco constituted a key factor of the Korean economic recovery after the crisis of 1997 and, today, remains the most profitable company in the world.

At the same time, South Korea realized a successful breakthrough in the electronics, thanks to LG (Lucky Goldstar) and Samsung.⁵⁰ The LG Electronics success resulted of a growth pattern export-based, associating a vigorous innovation of products and an efficient strategy of globalization both on the mature (North America, Germany) and emergent (China, India, Turkey, Russia, Poland, Brazil) markets. Nevertheless, Samsung today remains the most important Korean group.⁵¹ Indeed, Samsung benefitted of the strong heritage of the founder Lee Byung-Chull, and the specific action of his son, and successor, Lee Kun-Hee. Lee B.C. developed an original philosophy, based on Confucian ethic, but pragmatically applied and adapted by Lee K.H. After the financial

48 – Dominique Barjot and Park Rang-Ri, « L'industrie des constructions navales : un secteur stratégique pour le take-off économique de la Corée du Sud (1945- environs de 2000 » in Dominique Barjot (ed.), « Les entreprises et entrepreneurs d'Asie », *Entreprises et Histoire*, n° 90, avril 2018, p. 51-75.

49 – Dominique Barjot and Park Rang-Ri, « L'émergence d'un leader asiatique de la sidérurgie : Posco (1968-2010) », in Barthel (Charles), Kharaba (Ivan) & Mioche (Philippe) (dir. /eds.), *Les mutations de la sidérurgie mondiale du xx^e siècle à nos jours. The Transformation of the World Steel Industry from the 20th Century to the Present*, Bruxelles, P.I.E. Peter Lang, 2014, p. 299-319.

50 – Park Rang-Ri, *Samsung. L'œuvre d'un entrepreneur hors pair, Byung Chull Lee (Samsung. The work of an extraordinary entrepreneur, ByungChull Lee)*, Paris, Economica, 2008, 266 p.

51 – Dominique Barjot and Park Rang-Ri, « Samsung. Le modèle de croissance entre exemplarité et originalité (1938-2007) », in Dominique Barjot (ed), "Economic development, financing and business strategies (19th-21st century)". « Développement économique, financement et stratégies d'entreprises XIX^e-XXI^e siècle », *French Economic History Review - Revue française d'histoire économique*, n° 9-10, 2018 1-2, p. 38-59.

crisis of 1997-98, this one relaunched the Samsung Group, thanks a striking opening in technology. Consequently, the Samsung's profitability increased.

Today, the Korean model seems both threatened and relaunched.⁵² The international economic crisis of 2008-2011 pulled a crisis of Chaebols, as in the LG's case. More, three major threats remains the complex relations with North Korea; the rise of international competition (declining competitiveness facing China, Japan, Taiwan and Indonesia); specific South Korean societal problems (accelerated ageing, highest rate of suicides). But South Korea always benefits of strong assets: a good quality of life; an absolute priority given to new technologies (Samsung, particularly in 5G, nuclear sector); a voluntarist choice in favor of the "green growth", the growing strength of the cultural Korean model (Hallyu).

3-3-2/ Vietnam

As one of the "Asian Tigers", Vietnam rapidly surmounted the financial crisis of 1997-98.⁵³ Densely populated and marked by history, Vietnam established his national integration both on a walk to the South and an assimilation of the highlands. In spite of an unachieved demographic transition, the population remained young and feminized. At the same time, the Vietnamese culture remains marked by the Confucian influence, around original language and writing. In Vietnam, the end of a centralized economy and a decisive influence of the Southern part opened the way to a premature transition toward a free market characterized, at the same time, by the call for foreign aid, the rise of informal activities, the progressive, but unfinished privatization of the state sector. Between 1954 and 1975, the Democratic Republic of Vietnam (in the North) knew a war economy supported by a growing Soviet aid. The reunification of 1975 changed the situation. In the South, the inheritance was heavy; in the North, the discovery of the South shook the spirits, in a context marked by the stop of the Chinese aid, a decreasing Soviet aid and an explosion of black market. It became a necessity to save the national economy.

Largely accelerated by the geopolitical context (entry in the Comecon, fall of the Red Khmer regime, conflict with the People's Republic of China), the consequence was a profound change. In December 1980, was adopted the strategy of *Dôï Moi* (change to make to the new), which recognized the market economy, encouraged the individual initiative, reinstated the business, without

52 – Dominique Barjot, « Corée du Sud : entre risques et opportunités d'investissement », *Sécurité et stratégie*, juin-septembre 2013, p. 66-76.

53 – Dominique Barjot, "Vietnam: The Rise of a New Industrialized Nation", paper presented to the Tokyo Preconference, 15 p. ; Dominique Barjot et Jean-François Klein (eds.), *De l'Indochine coloniale au Viet Nam actuel*, Paris, Académie des Sciences d'Outre-Mer, Éditions Magellan, 2017, 816 p. See particularly Dominique Barjot, « Introduction », p. 42-69.

abandoning the socialist frame. The success was undeniable, because a reinstatement into the circuits of the international trade (ASEAN), the construction of infrastructures, the liberalization of the land market, an agricultural, a state regulation of the foreign capital flows, a development of domestic private activities and a decline of the state economic role. In spite of the 1997-1998 financial crisis, Vietnam fully integrated into Asian Trade (APEC, WTO, border agreement) and engaged a depth reform of its business system: public limited companies, introduction of VAT,⁵⁴ insertion into outsourcing networks.

From 1986, Vietnam experienced a high growth rate of GDP (per capital GDP tripled from 2002 to 2010). Consequently Vietnam became one of the most open Asian economy to the international exchanges. Facing persisting macroeconomic imbalances (inflation, government indebtedness, unemployment), the Vietnam state imposed strict measures, as a reform of the banking system. Nevertheless, the Vietnamese economy remained highly dependent on agriculture (second world exporter for rice and coffee) and raw materials (petrol and natural gas, coal), because an insufficiently diversify industry (textiles, agri-food products, electronic components). But the Vietnamese economy became more and more attractive for foreign capitals, especially because the growth was derived by leading industrial sectors (textiles, oil industry, shipbuilding, automobile, electronic components), but also tourism and telecommunication. Consequently exports provided two thirds of GDP. Benefiting from the low relative cost of her workforce, Vietnam exported more and more. At the same time, foreign direct investment grew, mostly becoming from Japan, South Korea, Singapore, China and Russia.

If today, Vietnam is appearing as an emerging economy, remaining behind the other “Asian Tigers” in terms of GDP by capital, apart from Indonesia, Vietnam is the one which the highest growth potential, because a lot of decisive assets, an efficient labor market, a strong innovation capacity, a gradual economic opening, the generation of leading sectors favoring a spectacular take-off, a preferred subcontractor for Japanese and South Korean industries (Samsung). Consequently, Vietnam is verifying several Western theories: Rostow (take-off, leading sectors, Kuznets (large reallocation of factors of production from the sectors with weak productivity to the other ones with high productivity), Perroux (pole of development of Ho Chi Minh City), Porter (clusters of Hanoi, Haiphong, Da-Nang) and evolutionism (path dependency).

3-3-3/India: a rise in power of the leading multinational firms

The rise of the Indian economic power is one of the major events of the last thirty years. In South-East Asia, the Indian sub-continent, or even all around

54 – Value Added Tax.

the Indian Ocean, the growing economic power of Indian capitalism is striking in its magnitude. For example the Tata's multinationalization was not only the result of the 1991 reforms in India, but also of long-term strategies, which allowed the group to have access to the international markets (P. Lanthier).⁵⁵ The experience of four Indian energy companies shows that globalization means much more than acting as a multinational firm.⁵⁶ It results of the convergence of two processes: the first involves standardizing business practices around the world so that investors can feel comfortable everywhere; the second process comes from emerging (and developing) countries. Their middle classes are becoming large enough to stimulate a valuable market economy and exert pressure as consumers on local businesses. Indeed, the majority of investments in the Indian energy industry are still provided by domestic investors. There is a lot of room for international investment in India.

Indian electricity companies made good use of availability of foreign institutional investors, both as shareholders and as lenders. This was beneficial for businesses that had a financial safety. In this perspective, public enterprises, with the guarantee provided by the Indian government, benefited from globalization. In 1991, political instability, inflation and excessive public debt led the Indian government to launch a series of reforms aimed at stimulating economic growth. These reforms focused on four policies: reducing public oversight over the private sector; to stimulate international trade; to encourage foreign direct investment; to reduce public debt. They continue today, bearing fruit. Between the mid-1990s and 2010-13, the growth of GDP reached 7 to 8% by year. In 2013, India became the third largest producer of coal and electricity in the World. During these years, big Indian companies increased their production capacity and managed to establish themselves among the leading multinational firms (LMF), as Tata, Infosys or Mahindra.

According to P. Lanthier, about the case of the first 20 companies (in terms of turnover), the majority were in traditional sectors.⁵⁷ Indeed the 1991 and subsequent reforms did not eliminate SOEs (State Owned Enterprises): the SOEs are primarily in the energy sector. The majority were born before 1991. Tata Steel dates back to 1907, Mahindra & Mahindra in 1945. Many of these companies are older: groups such as Tata and Birla were there when India was still a British colony. The reforms of 1991 gave older firms (and groups) the opportunity to modernize and expand their assets. The 20 companies

55 – Pierre Lanthier, "Tata becoming multinational: a long-term process" in Dominique Barjot (ed), «L'ascension économique de l'Asie», *Entreprises & Histoire*, 2018, n° 90.

56 – Pierre Lanthier, "Multinationalization during the Globalization Period: The Case of Indian Power Companies after 2007", in Dominique Barjot (ed), "Economic development, financing and business strategies (19th-21st century)". «Développement économique, financement et stratégies d'entreprises XIX^e-XXI^e siècle», *French Economic History Review - Revue française d'histoire économique*, n° 9-10, 2018 1-2, p. 112-128.

57 – Pierre Lanthier, "From Alexander Gerschenkron to Adam Smith? A reflection on the emergence of big business in India after 1991", paper presented to the Tokyo Preconference, 19 p.

can be considered leading multinational forms. Some already acquired large companies abroad: Tata Motors bought companies as Jaguar and Land Rover. Nevertheless, for many, the big market remains Indian, because: rise of the middle classes and appearance of new local consumers, infrastructure growth, state aid, support of local population against the will of large companies to expropriate them.

The most important shareholders are “promoters”, either a private entrepreneur and his family, or the state, through participation in the private sector. In 2016, these two groups represented between 20 and 60% of the shares. Among the private entrepreneurs, on the one hand, there are old families, like Tata and Birla, but, on the other hand, entrepreneurs who started modest, in the 1950s or 1960s, like Ambani and Anil Agarwal in Vedanta. Even if these companies sometimes belong to very diverse groups (Tata, Birla, Reliance), only two diversified beyond their original actives (Reliance and M&M), their diversification remaining a minor strategy. For the other companies, the followed strategy was either horizontal (Tata), vertical (SOEs) or diversified within the main branch of activity (Hindalco). Then why become LMI (Leading Multinational firms). Six important factors could play:

- 1/ to obtain foreign investments;
- 2/ to seek additional resources (oil and gas companies), particularly in Africa, Russia and, even, North America;
- 3/ to expand their markets in neighboring countries (TCs, Infosys, Rajesh);
- 4/ technology transfers, by joint venture with international groups (Hindustan Petroleum/Total) or by it is often risky to invest too much there (Infosys);
- 5/ to face the international competition: Tata Steel took back Cyrus and, more recently, was in negotiation with Thyssenkrupp, to fight the Chinese competition;
- 6/ opening branches abroad, in order to attract non-resident Indian and to help Indian companies abroad (banks).

However, Indian economic development had originally required significant foreign direct investments: from West Germany as early as the 1950s (Julian Faust).⁵⁸ Indeed because their re-internationalization after WWII, German companies became actors in the globalization processes leading to a closer integration of the developing economies into world Trade and value chains. The association with development policies and programs has been used as a strategy to gain foothold in the Indian Market. According to the model of Import-substitution industrialization (ISI), India had become to a more closed market to foreigners. Consequently, there appeared a coalition of interest between German companies and government in the early years of internatio-

58 – Julian Faust, “Industrialisation, German Development Assistance Policy and Private German Business Opportunities in the first two decades after Indian Independence”, Paper presented to the Beijing Preconference, 12 p.

nal development policy. German companies were able to use their origin and reputation. India was an excellent example of the formal and informal way in which German firms deals with the non-tariff/barriers and restrictions imposed on foreign investors in India. Indeed, many big players in German industry, like Bayer, established business ties with India before the war. These firms expected the country to become one of the largest markets in Asia in the future. The main objective was the Indian domestic market. Consequently, German manufacturers developed strategies to deal with growing market regulation and entry barriers such as production and import licensing. Companies like Bayer and Bosch were competing to set up the first joint venture production units and their industry. The Indian government only granted the necessary production capacity to one or very few companies. After the market was closed to other competitors, this crated opportunities.

The intervention of foreign companies was encouraged by the protection of the fledging industry, the need for know-how and foreign capital for India, without completely offsetting its balance of payments. In these conditions, Bosch and Bayer demonstrated their goodwill, their technical know-how, their commercial expertise. They saved their investments against strong regulation, bureaucracy and pressure on their joint ventures to become a minority. Bayer and Bosch offered products and expertise in critical areas for the advancement of the Indian economy. With such offers and investments in products strategically offering a growing market and political support for German development aid, German participation in the planned industrialization of India was actively promoted until the mid-sixties. The German label was an advantage over other competitors in other countries. Because the political foreign policy, West Germany economy was less contested than the American capitalism within the “India’s Socialist pattern of society”.

4/ OTHER EMERGING NATIONS

If Asia is the most important emerging continent, especially the Far East and the Indian subcontinent, other major regions of the world see the commitment and even affirmation of new industrialized nations.⁵⁹ It is particularly the case in Latin America. Once again, macroeconomic approaches developed in the context of nations, and microeconomics, essentially business history, is enriching each other, as in the case of cooperation and competition in Brazil. But Eastern Europe, especially with Russia, the Middle and Near East, and

59 – Dominique Barjot, “Introduction”, in Dominique Barjot (ed.), “Globalization, national patterns of development and strategies of firms (19th-21st centuries) – Mondialisation, modèles nationaux de développement et stratégies d’entreprises (XIX^e-XXI^e siècles)”, *Revue Française d’histoire économique - The French Economic History Review*, No. 1, May 2015, p. 14-27.

finally North and Sub-Saharan Africa, also bear witness to the worldwide spread of industrialization.

4-1/ Latin America: complementarity of macro- and micro approaches

Since the Second World War, the nations of Latin America have become highly industrialized, not without tensions and crises, notably because excessive inequalities of income and wealth. From this point of view, Peru provides a good observatory of the contradictions inherent in the Latin American development; Columbia too, where the work of the World Bank has been decisive. In these countries, one of the major challenges has been the formation of human capital, as the Brazilian example reveals. Moreover, as in all emerging countries, one the keys to industrialization has been the emergence of global payers, including Mexico's Cemex, the World's four largest cement company, but the leader in terms of profitability, and Brazil's Vale in iron ore are emblematic examples. However, it also essential to take into account the development of consumer sectors or services: thus television in the case of Brazil.

4-1-1/ The macroeconomic approach: Peru, Columbia and Brazil

Getsiva Cayo questioned the economic models adopted by the Peruvian government during the 1950s and 1960s.⁶⁰ While, after the WWII, most Latin American countries adopted protectionist policies, Peru preferred another way. Indeed, since the crisis of 1930s, two models of development clashed in Latin America: the first-export model (or outward-looking model) and the industrialization by import model (or inward model). According to the theory of dependence developed by Raul Prebisch, Argentina, Brazil, Mexico, Chile, Columbia and Uruguay chose the inward model. Peru remained a supporter of the outward one. It was only from the 1960s that the impact of the Prebisch's though became effective. In fact, the policies implemented by the Peruvian governments led by liberalism and the ISI were contrasted, but not totally opposed. Since the late 1950s, protectionist policies have been implemented, revealing the limits of the "outward-looking", "inward" or "mixed models" did not guarantee success because the lack of continuity in adopted policies. The Peru's take-off was delayed or even blocked by both endogenous and exogenous problems: political instability, corruption, economic dualism, conflict between social classes, rapid and uneven demographic growth, strong geographical constraints and the increased dependency of commercial (terms of trade) and financial (investment, credit) sectors.

60 – Getsiva Cayo Durand de Geist, « Le développement économique péruvien durant les années 1950 et 1960 : distinguer deux modèles ? », paper presented to the Paris Preconference, 32 p.

Elisa Grandi studied the World Bank's policy in Columbia from the start of the first missions to 1966.⁶¹ Born in 1944, the World Bank played a pioneering role in setting up development assistance programs. Focusing on the period between 1949 and 1954, E. Grandi described the emergence and institutionalization of a dual process concerning both international development and the management of international credits by Columbian actors. The World Bank's general inquiry Mission to Columbia, launched in 1949, initiated this process. The network analysis of the actors of the Columbian missions combined with a study of the microstructure of the World Bank missions provides new insights into the World Bank's early policies. According to E. Grandi, the specificity of early intervention by World Bank and the special relationship developed by Columbian elites with international lending organizations in the 1920s and 1930s allowed local staff to access international credit directly through their operations, direct management and loan. The social and relational capital that some actors acquired during the mission has also influenced the repayment of loans. Personal relationships played a fundamental role in the emergence and affirmation of the organizational procedures.

Two structural changes are common in the development process: expanding a country's services sector and raising its level of schooling (Eduardo P. Ribeiro).⁶² In higher education, Brazil uses a dual system: tuition free public universities and tuition-free private institutions. Because the access to public universities is limited by admission examinations, private universities are responsible for sector's growth has been impressive. Indeed the accumulation of human capital has been a key factor in the growth, development and reduction of inequalities in Brazil since the 1950s. Mergers are an important feature of private higher education (HEIs) in Brazil. As a result, the merger is subject to antitrust review by the Brazilian Antitrust Authority (CADE). The case of the Anhanguera Group demonstrates the positive impact of a competitive regulation (extended economies of scale, evolution towards & modern-type corporation). Of course, the demographic changes of the 1980s (declining family size), the explosion of basic education in the 1990s, and the pro-poor growth cycle of the 2000s have created opportunities for growth of HEIs.

4-1-2/ The microeconomic approach: Cemex, Vale and Brazilian TV

The microeconomic approach is not less fruitful, especially for the study of leading multinational like Cemex or Vale, but also of specific sectors such as television. In 2008, Cemex was the world's fifth largest cement production

61 – Elisa Grandi, "Networks of experts and political actors in the Missions of the World Bank. Programs in Columbia and Their overall effects on aid to development 1(940-1960)", paper presented to the Paris Preconference, 17 p.

62 – Eduardo Pontual Ribeiro, "Education higher education expansion in Brazil. A case study", paper presented to the Rio de Janeiro Preconference, 18 p.

capacity and the fourth largest in terms of turnover.⁶³ Number 1 in Latin America, the Group was and is today the world leader in ready-mix concrete. At the same time, Cemex remained a Mexican group headquartered in Mexico City and all directors of the board always are Mexican. Founded in 1906, the company symbolized the success of the capitalism of Monterrey, where is coming the family Zambrano, preeminent shareholder. Consequently, Cemex became an original model. He was at the same time the world leader in white cement and trading, had the most advanced information and communication technology in the cement industry, was very creative in financial solutions, and the lowest cost of its sector. Cemex also appeared as the first global enterprise in Mexico. After having taken over the national market between 1982 and 1989, the group established in USA, Spain and South America, from 1989 to 1994. He had broken into the trading market between 1992 and 2000, before joining the global firm, since 1997. In spite of a strong financial crisis in 2009-2010, in 2016, the group maintained its position in its three dominant markets, but reoriented its activity towards cement, the most profitable segment in the sector and renounced its diversification activities. In spite of the difficult acquisition, in 2007, of the Australian group Rinker, Cemex became the North American leader and remained, in 2016, always in the hands of the Zambrano family. More, in spite of its inferior size, Cemex is become more profitable than its major European (Lafarge-Holcim, Heidelberg-Italcementi, CRH) and Chinese competitors.

The Brazilian Mining company Vale is a good example of “global challenger” (Boston Consulting Group).⁶⁴ The company was created, in 1942, by nationalization and incorporation of two existing companies. Because Western allies needed iron ore for armament industries, it was an opportunity to penetrate successfully developed markets. But at the end of the war, Vale remained without a guaranteed market. High sea freight costs have made it difficult for Vale to compete with companies closer to the consumer markets of Europe, USA and Asia. In the 1960s, the CEO, Elieser Batista, chose to supply the Japanese industry, thanks to the use of large multipurpose ships. In doing so, Vale became able to compete with Australian Miners, continuing productivity gains and economics of scale. During the 1970s, Vale became the World’s largest producer of iron ore. After privatization in 1997, the company’s main goal was to maximize value for its shareholders. In 2001, the company implemented a multi-year strategy, setting out clear principles: maximizing margins, becoming a global multi-producer. Nevertheless, its potential for product diversification was limited and the international presence of company remained modest. Always leader in Brazil, from 2001, Vale diversified its portfolio in investing

63 – Dominique Barjot, “Cemex or the Rise of a Mexican Multinational”, paper presented to the Paris Preconference, 18 p.

64 – Hildete de Moraes Vodopives, “Becoming a multinational mining company: the case of Vale (Brazil)”, paper presented to the Paris Preconference, 39 p.

in coal, copper, cobalt, platinum and fertilizers. Because iron ore remained its main product, Vale wanted buy a big North American Miner. It was a success with the Canadian Inco's acquisition (2006): following the transaction Vale became one of the three largest diversified mining companies in the world, with BHP Billiton and Rio Tinto.

Television appeared in Brazil in the 1950s.⁶⁵ During this decade, the first television channels and the home appliance industry were created. Television broadcasting was originally limited to a few major cities, but half a century later, television was present in every home in the country. If this remarkable growth was a highly concentrated process, mainly developed in Rio de Janeiro and Sao Paulo, the Brazilian market also became more complex and sophisticated (Pay TV, Internet streaming services). These massive transformations were made possible by the introduction of recording and transmission technologies (videotapes, microwaves and satellites), in the 1960s and 1970s, and the subsequent conversion of television into consumer goods, subject to large-scale production and extended credit. In the 1990s, a combination of technological and commercial innovations led to the emergence of a new market of more sophisticated audiovisual content for more demanding niche consumers. Technological changes have extended the television industry. Additional information and communication technologies, including Internet, have recently emerged. The impact of these changes has been much greater than that of national broadcast television networks decades ago. Many innovation companies have been created in response to the opportunities generated by Internet. The previously high barrier to entry into the audiovisual industry established in the 1950s has been lowered. The Internet also allows a business model with revenue streams based on subscription fees to fund the production of premium content (Netflix, HBO Go and Globosat Play). Despite the low market share, these services have grown rapidly. This new way could become an important market in the near future.

4-2/ Latin America: competition and cooperation in Brazil

Since the 1990s, Latin America economies have moved towards development models that make a greater contribution to the market economy and competition: this has been the case in Brazil. The introduction of antitrust scheme has paved the way for better monitoring of mergers. The legal provisions adopted have revealed their importance for achieving significant results, particularly in the energy and mineral resources sectors.

65 – Luiz Carlos Delorme Prado, "A Short Economic History of the TV industry in Brazil", paper presented to the Rio de Janeiro Preconference, 33 p.

4-2-1/ Establishment of an antitrust and competition policy

Since the 1990s, many developing countries have adopted antitrust laws (Ribeiro, Pieren-Alves Delorme Prado).⁶⁶ This was the case in Brazil. The first modern Brazilian antitrust law was promulgated in 1994, in order to break the rapid growth of prices and without resorting to the direct control used since the 1960s. If the separation between the power of investigation (Conselho Administrativo de Defesa Economica or ADE) and the authorities in charge of notification decision (Minister of Finance, Minister of Justice) was necessary in 1994, the law suffered from significant limitations. Adopted in 2011, a new law concentrated both the investigation and decision-making roles in a new and reorganized CADE. The experience can be transparency have been used to strengthen the legitimacy of the transition to the new law. Using international criteria, external legitimacy favored technology transfers as a result, competition policy agency played a decisive role in the strengthening of the pro-competitive policies at all levels government. Today, the new CADE offers a wide margin of action in terms of condemning abuse of dominant position (Leopardi Mello).⁶⁷

4-2-2/ A first application: merger control

The objectives of competition policy are to preserve economic efficiency by avoiding abuses of market power and to punish anti-competitive practices (Pires Alves and Gutierrez Bonfatti).⁶⁸ Quantitative tools have increasingly been used by antitrust authorities and stakeholders, because of theoretical and calculation advances. There are three types of model used by antitrust authorities around the world:

1/ simulation models are used to estimate the price effects (unilateral effects) resulting from a merger, assuming a demand system and a model of oligopolistic competition;

2/ the Upward Price Pressure (UPP) model is used to estimate the coordinated effects resulting from concurrent accommodative behavior among competitors, gives the upper limit of prices increases that companies would accept;

3/ natural experiments is based on the comparison between different geography markets with the same product size, taking into account the presence of competitors on the market and the effects on the price level of the elimination of one of these competitors.

66 – Eduardo Pontual Ribeiro, Camila Piers-Alves, Luis Carlos D. Prado, “Antitrust and Competition Policy in Brazil”, paper presented to the Rio de Janeiro Preconference.

67 – Maria Tereza Leopardi Mello, “Law & Economics in the antitrust enforcement”, communication presented to the Rio de Janeiro Preconference.

68 – Camila C. Pires Alves and Marina Gutierrez Bonfatti, “Quantitative methods in merger effects’ analysis: the Brazilian experience in the last 15 years”, paper presented to the Rio de Janeiro Preconference, 20 p.

Since the Nestlé-Garoto merger (2002), the first case to use a simulation model, the Brazilian experience provides interesting information. Since the creation, in 2002, of the Department of Economic Studies (DEE) within CADE, the models presented by the CADE have always been taken into consideration in order to limit or to block certain merger cases (5% on average each year from 2002 to 2017).

In the energy sector, a new legal and institutional framework has been in place in Brazil since 1995, under the Cardoso's administration (Queiroz).⁶⁹ It was marked by the constitutional reform leading to the abolition of the Petrobras monopoly, but also the Law on concessions defining new guidelines for concession contracts in public sector. The result was the establishment, in 1996 and 1997, of regulatory bodies: ANEEL and ANP (regulatory agencies) and the CNPE (Inter-ministries Council for Energy Policy). Electricity has seen three successive reforms (in 1996 with ANEEL, 2003-204 and 2027). This has resulted in uncertainties about old concessions, a financial crisis and a new wave of privatizations. Oil also evolved: reform of the concession regime (1997); creation of a specific regulatory body, the ANP (1998); production sharing contract (2010). In this sector, institutional, legal and regulatory reforms have led to the arrival of many new players and the adoption of clear rules. Brazil has become an important oil exporter, but downstream remains a *de facto* Petrobras monopoly. If the gas sector was later reformed (2009), nevertheless, globally speaking the results were uneven: lack of guidelines for energy polices, conflicts between agencies and government administrations, etc.

4-2-3/ Competition for mineral resources: BHP Billiton, Rio Tinto and Vale

In the 2000s, the mining industry experienced an intense consolidation. Mergers and acquisitions (M&A) have benefited, in unequal ways, the three leaders of the global mining industry: the Australians BHP Billiton and Rio Tinto, and the Brazilian Vale.⁷⁰ BHP Billiton is the most diversified and largest mining company in the world. It is also a major player in oil. BHP's transformation into a global supplier of natural resources was completed when the company sold its steel business in the early 2000s. In 2001, BHP merged with South African mining giant Billiton. The merger took place as China became the world's largest market for iron ore and coal, as well as other minerals in which BHP Billiton has specialized.

The origin of Rio Tinto result of a merger, in late 1995, between British RTC Corporation plc (now Rio Tinto Ltd). In 2010, Rio Tinto ranked the second

69 – Helder Queiroz, "Twenty years of Energy Regulation in Brazil: Results and Challenges", paper presented to the Rio de Janeiro Preconference, 19 p.

70 – Hildete de Moraes Vodopives, "The Competition for Mineral Resources and Industry Consolidation in Brazil, 2000-2009", paper presented to the Rio de Janeiro Preconference, 12 p.

largest diversified mining company and the third largest by market capitalization in the world. Rio Tinto is one of the Top five producers of iron ore, alumina, aluminum, copper and uranium, but also operates in diversified areas (coal, uranium, industrial metals). Because Rio Tinto's strategy has been to focus on large-scale, long-term, low-cost operation, his management style has long been characterized by high profit margins. But, in 2007, Rio Tinto acquired Alcan at a record price. In the following months a sharp drop in aluminum have greatly reduced investor appetite.

Among the companies that have grown in this period was the Brazilian Vale, leader in global ore production. Following the Inco's acquisition in 2006, Vale moved from sixth to the second place among the world's mining producers. But the emergence of Vale took place after its privatization in 2017. Vale return on investment in recent years suggest that privatization has led to a significant imprudent in its performance. In the case of Vale's acquisition of Inco and Rio Tinto's acquisition of Alcan, the timing played a decisive time: if riot into bought Alcan in the worst possible time, in the Vale's case, the transaction was positive.

4-3/ Globalization and emergence: Eastern Europe, Near and Middle Orient

If Latin America has seen the affirmation of powerful emerging economies such as Brazil, Mexico or Columbia for example, the phenomenon has become global. It also characterizes the margins of Europe, Eurasia, with Russia as well as the Near and Middle Orient. In this zone, Russia appears to be most powerful emerging economy, but the countries of Central Europe are also of great interest. In the Near Orient, a large neighbor to Russia, Turkey has experienced a spectacular rise in power, while the oil and gas economy has ensured the prosperity of the Gulf countries, as shown by the example of the United Arab Emirates.

4-3-1/ An economic renaissance of Russia?

Today, as on the eve of the WWI, Russia is an emerging nation.⁷¹ In 2015, at purchasing power parity, as in 1914, Russia was ranked sixth world economic power. From 1892 until 1914, Russia experienced a spectacular take-off, based on rapid industrialization and an influx of foreign capital. It resulted of a national

71 – Dominique Barjot, «Introduction », in Thierry Claeys et Francine-Dominique Liechtenhan (eds.), «Economic, financial and technological relations between the Russia and the West at the dawn of First World War. Les relations économiques, financières et technologiques entre la Russie et l'Occident à l'aube de la Première Guerre mondiale », *Revue française d'Histoire économique - The French Economic History Review*, n° 7-8 (n°1-2), avril-octobre 2017, p. 14-32.

strategy, identified with Witte and Stolypin. Accompanied by a rapid worsening of social and geographical inequalities, the Russian economic growth attracted French capitalists and entrepreneurs. Thanks to important technology transfers from Western Europe, Russia conquered the fifth place among the main industrial nations. At the beginning of the 20th century, technology transfer took place on a large scale in the advanced branches of industry.⁷² The independence of economic development was achieved through a sustainable policy of technology adoption by a number of Russian entrepreneurs. As Morozov, Russian entrepreneurs have done their best to replace foreign specialists with highly qualified engineers, graduates of local universities.

The problem of the Russian economy, today remains largely the same as at the time. Sustained between 2000 and 2008, the annual average growth rate of GDP fell from 7.8% in 2009 to 4.5% in 2010, then declined until 2015-2016. In 2017, a slight recovery operated. Russia achieved some success in the construction of aircraft and missiles, in pharmaceutical and electronics industries, automobile (80% of the cars assembled in Russia benefit from a local assembly), and, above all, agricultural and food industries. But Russia seems to be sacrificing her R&D expenditures. As a result, the competitiveness of Russian economy is deteriorating as wages remain too high in relation to productivity. Because Russian real incomes decrease, 14% of the country's inhabitants are now below the poverty line. More, because foreign investment fell from 2013 to 2017, the dynamism of Russian economy remains suspended in the oil cycle.

Rusal, in aluminum, provides a good example of global challenger.⁷³ The Rusal ascent was a direct consequence of the major upheavals occurred for forty years and internationally in this industry. The Russian aluminum industry was strongly developed during the Soviet Era, but, during the 1990s, aluminum sector experienced a deep crisis. At the initiative of Oleg Deripaska, a powerful oligarch and with the support of the Vladimir Putin's regime, a vast group of factories, centered on Siberia, evolved into a competitive multinational. Rusal became the second world largest aluminum producer in 2017. If its industrial base was built partly thanks to the French technologies (Pechiney), since the USA blacklisted Rusal on April 2018, sanctions make it extremely difficult to do business in dollars.

72 – Irina Potkina, "The Nikolskaya Mill Partnership and the West European Firms: some aspects of technological transfer" in Thierry Claeys et Francine-Dominique Liechtenhan (eds.), "Economic, financial and technological relations between the Russia and the West at the dawn of First World War", *op. cit.*, p. 34-48.

73 – Dominique Barjot, « Rusal : l'émergence d'un challenger. Premiers résultats », in Patrick Fridenson & Florence Hachez-Leroy (eds.), *L'aluminium, matière à création XIXe-XXIe siècles*, Tours, Presses Universitaires François Rabelais, 2017, p. 273-307.

Indeed, foreign capital played a very positive role in the economic development of Russia from the beginning of the Second half of the nineteenth century.⁷⁴ Thanks to capital transfers, Russia also benefited from technology transfers. Nevertheless, during the Soviet period, the machine tool industry had insufficient capacity to produce special machines and automatic lines for mass production. More, the Soviet industry lacked experience in managing automobile production at the scale provided for the long term transportation plan. French and Italian car manufacturers (Renault, Fiat) were selected to provide technical assistance. Consequently, European manufacturers largely contributed to the development of the Russian car industry. The success of today's Russian industry is largely due to the transfer of Western and especially French technologies, as shown by the case of the construction of the Renault car plant in Moscow. At the same time, Total established strong partnership with leading Russian companies in the oil and gas sector. Since 2015, Russia has become the largest contributor to Total's global hydrocarbon production and most of its contribution in gas.

4-3-2/ Central Europe and Middle Orient: national competitive advantages for small countries

Central Europe offers several examples of small countries: successful was the Hungary's industrialization process.⁷⁵ As shown by the example of two Hungarian companies on the world market between 1867 to 1989, it is possible to use the double diamond approach, applied by Michael Porter into the analysis of the determinants of rational competition advantages for countries outside Europe, but also for Hungary.⁷⁶ The Hungarian developmental state, by his intervention in industrialization influenced the multinational activities of the Hungarian national champions in the long term. But, emphasis must be placed on the efforts of these companies to overcome the constraints of their small open economy and late industrialization by promoting their competitiveness through better integration into the world economy. Indeed Hungary provides a good example in term of fundamental changes in the political and economic system, according to the theory of the state backed path of industrialization, but also constant efforts to catch up with the precursors of industrialization.

74 – Boris Vinogradov, "Russia of the 20th century, Russia today, the permanence of technology transfer", paper presented to the Paris Preconference, 13 p.

75 – Mária Hidvégi, "The double diamond and the state-backed path of industrialization in small open economies: Two Hungarian companies on the world market 1867-1989", communication presented to the Paris Preconference.

76 – Michael E. Porter, *Competitive Strategy*, Free Press, New York, 1980; *Competitive Advantage*, Free Press, New York, 1985; *The Competitive Advantage of Nations*, Free Press, New York, 1990, 1998; A.M. Rugman and J.R. D'Cruz, "The "Double Diamond" Model of International Competitiveness: The Canadian Experience", *Management International Review*, 33 (2), 1993, p. 17-39.

Another good example can be provided by the gulf countries, especially the United Arab Emirates (G. Crouzet).⁷⁷ The concept of the “Rentier state” (Giacomo Luciani, Steffen Hertog and timothy Mitchell) was coined to describe the Gulf oil producing countries and their unique economic, social and political characteristics.⁷⁸ Nevertheless, we need to take a less Eurocentric view of the oil states of the Persian Gulf: Saudi Arabia, but also Iran (with the experience of Mossadegh, at the origin of NIOC), Bahrein, but also United States Emirates, which have taken the same path as Norway to secure the long-term future, i.e. the creation of a powerful sovereign fund. The United Arab Emirates thus appears as an anti-model of Saudi Arabia. When the UAE were created in 1971, the federal government paid little attention to the industry.⁷⁹ A part from hydrocarbons, oil and gas, operating mainly in Abu Dhabi, the seven emirates did not have other natural resources. The UAE had only a small population and non-manpower to work in the factories. The internal market was also limited. Oil revenues generated a rentier mentality among the local population. Because a minority of Emiratis and Arabs living in the UAE engaged in business. It called the federal government and this one of Abu Dhabi to prefers industrial autonomy rather than external dependence. The two decades following independence showed Dubai’s leading role in UAE industrialization. Consequently, the Emirate, namely the Maktoum family, opened Minds and prepare them for a strategy for survival. Security was conceived most as an ability to produce enough wealth to support long-term economic and demographic growth.

4-3-3/ *The shift to sustained growth: the case of Turkey*

The history of the Ottoman economy was more complex and unequal than the notion of regular decline would imply (M. Bulut).⁸⁰ Ottomans did not follow the modern Eastern capitalist path to economic growth and development. If the Ottoman economy showed signs of significant dynamism and growth, sustainable growth could only be based on a profound change in the Ottoman economic mentality. But the Ottoman economy could have been much more dynamic and robust than the euro-centric theory of decline suggests. Recent researches indicate that certain sectors and regions of the Ottoman experienced

77 – Guillemette Crouzet, “The Oil Issue and the Persian Gulf”, communication presented to the Paris Preconference.

78 – Hazem Al Beblawi and Giacomo Luciani, “The Rentier State in the Arab World”, in Giacomo Luciani (ed.), *The Arab State*, London, Routledge, 1990, p. 87-88; Steffen Hertog, “The oil-driven nation-building of Gulf States after World War II”, in J. E. Peterson (ed.) *The Emergence of the Gulf States: Studies in Modern History*, Bloomsbury Academic, London, UK, 2016; Timothy Mitchell, *Carbon Democracy. Political Power in the Age of Oil*, New York, Verso Press, 2002.

79 – William Gueraiche, “The Emirati Industry, from Security to Diversity” in Dominique Barjot (ed.), «L’ascension économique de l’Asie», *Entreprises & Histoire*, n° 90, 2018/1, p.106-113.

80 – Mehmet Bulut, “The development of the Ottoman economy from the era of industrial revolution to the present times: political economy, dynamics and paradigm in economic sustainability”, communication presented to the Paris preconference.

considerable economic growth and dynamism during the 19th century. The priority for the Ottomans was sustainable economic growth and maintenance of social equilibrium over time. The elements must be recalled to explain the start of growth in modern Turkey since the establishment of the Republic to the present day.

During the 19th, Pax Ottomana, on major routes between Europe and Asia, was shaken by the effects of the industrial revolution. This was marked by the creation of the Istanbul stock Exchange and the Ottoman bank. From 1830 to 1911, thanks to the growth of trade and despite the growth of the population, GDP per capita remained stable. After the WWI and from 1923 to 1938, the Atatürk regime was dominated by the strong state intervention in economy. The WWII opened the way to the experience of democracy and the market economy, but at the cost of successive currency devaluations. The period of internal disorder opened in 1960 resulted in a military coup in the 1980s. The latter came to an open and market economy, set up thanks to the reforms of Turgut Özal, become prime minister. This was the starting point for sustained growth: the Turkish GDP increased by +4.1% in annual average and by +3.6% from 1990 to 2002. From 2002, Turkey's economic growth became very stable. Despite difficult relations with the European Union, the Erdogan era, from 2002 to 2018, was characterized by a rapid economic growth (+4.8% in annual average from 2003 to 2014). It was the result of a long-term strategy based on privatization and an opened economy.

4-4/ Africa: French heritage and new ways to development

Would Africa be left out of industrial development and be “badly off”, as the French economist and agronomist René Dumont said in the 1960s? Certainly, the difficulties of Nigeria, after the ebb of oil prices, in the 1980s, the failures of the iron and steel industry in Algeria and Nigeria still, the deep economic crises crossed by Senegal or Cote d'Ivoire from the second half of the 1980s, the continued collapse of the Malagasy economy, the tragedies brought about by the regional wars, all of this plead for a negative response. Nevertheless, as the examples of South Africa or Egypt show, Africa has also been able to form emerging multinational, global players, while some countries, Angola, Kenya, more recently Ethiopia, were returning to prosperity. In this respect, an examination of the evolution of the French speaking Africa reveals its interest: the importance of the role played by Sonatrach in Algeria, Tunisia's attempt to tie itself closely to the European Community, the adoption of original patterns of development by Senegal, Ivory Coast and Cameroon, today among the most dynamic African countries, the persisting role of the France zone.

4.4.1/ Algeria and oil: curse of raw materials or instrument of national independence?

Marta Musso studied the economic history of independent Algeria.⁸¹ Indeed, the Algerian hydrocarbon industry is closely linked to the independence process. Until the 1970s, oil appeared to be the best tool for solving the problem of capital in a newly independent country. It was also an opportunity to promote industrialization through the abundance of a cheap energy source, making potential companies competitive with Western companies. Finally, oil was seen as a mean of pressure against the largest importing area. The oil companies also supported the theory of oil as an instrument of development. The industry has emerged both as a beneficiary of international development, because of the contribution of capital provided by revenues. Oil was directly related to development. The higher is the oil consumption, the higher is the level of economic development of a country. Countries that do not depend on oil imports are therefore considered as candidates for aster development. Gradually, this optimistic view of oil as an instrument of development has given way to oil as a major explanation for the economic failures caused by decolonization, with the success of notions like “Rentier states”, “oil regimes” and “oil wars”.

Algeria has rarely been the subject of studies devoted to the oil curse. Large oil and gas reserves were discovered by French companies at the beginning of the Algeria war, which had a significant impact on the negotiations between Algeria and France during the conflict and since. For Algerian governments, oil was considered as the resource opening the way for economic growth, economic independence from France and reduction of the development gap with Europe. There is therefore a close link between the construction of the state and the development of the Sonatrach, biggest state owned company, benefitting of a state monopoly. The nationalization of the oil industry has been considered as one of the reasons why oil has become a curse rather than a blessing for the economy of the producing country. Nevertheless, thanks to the nationalization of the oil industry, Algeria was able to regain control of its oil in the same way that France had regained control of the Sahara : a mixed system with the widest possible participation of state in oil industry and a massive effort to develop local technology and skills. There is no evidence that, if the oil industry had seen left in foreign hands, the political and economic development of Algeria would have resulted in a more democratic and integration state.

81 – Marta Musso, “Oil and development in Algeria (1956-2000)”, communication to the Paris Preconference.

4.4.2/ Tunisia: a resistible association with EEC?

The cooperation between Tunisia and the European Economic Community (EEC) was characterized by multiple divergences of interests, changing realities within the EEC, multiplicity of point of view regarding the forms of possible partnerships and, above all, the inescapable face-to-face with France (M. Sassi).⁸² The first half of the 1970s coincided with major international crises, with the consolidation of the EEC institutions and the advent of a Mediterranean policy. If Tunisia was one of the main beneficiaries, the rules of the game remained mainly defined by the European partner. Because the formation of a united Europe required protectionist forms of the Common Agricultural Policy (CAP) type, no country, with the exception of the Netherlands, intended to subject its farmers to competition in world market. Although Tunisia enjoyed the support of most of the Six when launching its association project with the EEC, tensions with France caused huge losses in terms of synergies. On the other hand, Europe was of an unusual institutional complexity. With markets increasingly globalized since the 1960s, there was already a high mobility of capital and real opportunities for Tunisia. But Tunisian diplomatic action focused on the demand for institutional aid and much less on the supply of market opportunity as a growth factor for European companies.

4.4.3/ French-speaking Black Africa : Senegal, Ivory Coast and Cameroon, three development models?

Senegal and Ivory Coast were the two privileged colonies of the former French colonial power in West Africa (J. Diouf).⁸³ After the WWII, their respective leaders, Léopold Sedar Senghor and Félix Houphouët-Boigny, condemned colonial policies. They contributed to the creation of the Rassemblement Démocratique Africain or RDA in 1946. Then Senghor created the Bloc Démocratique Sénégalais or BDS and Houphouët-Boigny the Parti Démocrate de Côte d'Ivoire or PDCI. Thanks to these political organizations, the two leaders successively held posts of deputy, then minister, with the framework of the French Union, then the Community. Similarly, Senghor and Houphouët-Boigny did not want immediate independence, but are strong supporters of maintaining the link with the former colonial power : consequently, they endorsed and signed the cooperation agreements preceding the accession of their country to full sovereignty. Thus, the first became President of the Republic of Senegal, while the second was elevated to the presidency of the Ivory Coast. However, the two men had different visions of the development of their country. As a result, the two countries had opposite development trajectories.

82 – Mohamed Sassi, « les relations de la Tunisie avec la CEE : les débuts difficiles (1957-1976) », paper presented to the Paris Preconference, 23 p.

83 – Joseph Diouf, “Western Africa: Compared models of Development: Léopold Senghor Sédar Senegal and Côte d'Ivoire of Houphouët-Boigny”, paper presented to the Paris Preconference.

Senghor defended a development model based on African socialism, but, in a cold war context, both rejected Marxism-Leninism and Western capitalism. On the contrary, Houphouët-Boigny chose the liberalism inherited from the colonial development policy. In addition, cash-crops remained the pillars of development: cocoa and coffee in Ivory Coast, groundnut in Senegal. However, if these cultures had made the wealth of these two countries as evidenced by the “Ivorian Miracle”, it nevertheless led to bankruptcy in the late 1970s.

If historians frequently neglect quantitative sources, Africa now offers statistical series allowing retrospective studies over sufficiently long period (Mimbang).⁸⁴ Cameroon, which ranked in the category of underdeveloped countries in 1950, underwent profound transformations giving to the country the prospect of entering the emerging nations. Cameroon does not yet all the characteristics of an emerging country. But the development of its infrastructures, the progress of schooling and the birth of a fabric of small and medium-sized enterprises make it a country which is less unfavorably inserted than formerly in international exchange and which has the means to pursue a sustained growth. As an exporter of raw materials, he is slowly becoming an exporter of a more sophisticated products. Since the severe depression of 1957-1994 and the readjustment that followed, the country has grown faster. Renouncing to a speculative economy, the incentive to work increased in the working class and pushed the elites to seek more than formerly in the free enterprise a promotion that they no longer found in the public service. To 2014, the growth rate of Cameroon's GDP was still far from the 6-7 % per annum that can be observed in many emerging countries, allowing convergence towards the living standards of richer countries.

4.4.4/ The Franc zone: does the theory of optimal currency to be applied to Franc?

According to Olivier Feiertag, the Franc zone offered a case study to deal with an area corresponding to an optimal currency.⁸⁵ This zone knew her Golden Age in the 1960s, became very influenced by the colonial pact. According to the Mundell's analysis concerning the role of money in the industrialization process, it is possible to speak about the optimal currency area. If the Franc zone was heterogeneous, the monetary unification aimed to accelerate a good circulation of factors of production. She was organized in three zones : French West Africa, French Equatorial Africa, Madagascar. It was the reason of the reluctant integration of the Franc zone. In 1962, the West African Monetary Union was created to promote intra-zone trade. The history of the Franc zone showed three phases. the Golden Age of the 1960s ended in the 1980s: Ivory

84 – Lucie Zouya Mimbang, « Le Cameroun, au seuil de l'émergence ? De la lisibilité des séries statistiques du produit intérieur brut », paper presented to the Paris Preconference, 16 p.

85 – Olivier Feiertag, “History of the Development of the Franc zone (1939-1944), Does the Theory of Optimal Currency to be applied to Franc?”, communication to the Tokyo Preconference.

Coast and Cameroon's advance on the other countries was more and more growing. If a change occurred in the 1980s, it was primarily because of the African debt crisis; indeed, the end of the commodity boom provoked an asymmetrical shock. The result was the devaluation of the CFA franc in 1994, a decisive turning point of globalization. Finally, the optimal currency model applied well to the Franc zone in the 1960s, but no longer in the 1980s and 1990s. The illusion of homogeneity disappeared. The Franc zone was a victim of national rivalries, but also the progress of the Pan-Africanism. More fundamentally, the move to the global market could only reduce the power of the Franc zone.

5/ CONCLUSION

From this vast collective work come three main conclusions:

5.1/ The contract initially fixed, namely the confrontation of the models of interpretation of the phenomena of industrialization conceived by Western thinkers with the reality of the national ways of industrialization, was only imperfectly fulfilled. Indeed, the study of these phenomena implies the control of an important statistical apparatus, but also the realization of numerous calculations and the reading of a huge mass of scientific works pertaining to the economic history, but also and especially of the disciplines which are related to him. The consequence is that the process involves long-term, difficult work in the short three-year interval between each international congress of economic history. Nevertheless, it has been possible to make a useful comparative review and a no less useful inventory of the research carried out on the subject. The latter probably reflects quite well the different degrees of progress of the questions and methods of economic history and their renewal.

5.2 / In general, theoretical models of Western origin, whether macro- or microeconomic, are useful and even indispensable, because they are the basis of possible typologies, but also likely to provide explanatory models.

5.2.1/ Some models appear more relevant than others. Such is the case of the Rostow, Kuznets and Gerschenkron's analyzes in the macroeconomic field. In their major axes, they have been largely confirmed by history: the advantage of delay is a reality, but also the superiority of development models based on exports of goods and services and imports of technology and technology. know-how. In terms of technology, the relevance of Schumpeterian or Neo-Schumpeterian approaches, but provided however not to oppose them systematically to monetarist approaches. As far as regional economic development is concerned, Michael Porter's cluster vision offers the advantage of providing more explanatory elements than the growth pole theory and of applying to a number of cases, much larger than the A. Marshall's industrial districts.

5.2.2 / But the complexity of historical phenomena often leads to the combination of approaches. Thus the neoclassical analyzes of economic growth remain relevant. Not only do they permit simple comparisons between industrialized or developing nations, but they also provide the broad categories necessary to measure the respective importance of the factors of economic development. They are not incompatible with the approaches often adopted today in terms of learning by doing and path dependency, but also with the specific contributions of industrial microeconomics and management sciences. In this respect, evolutionary theories offer particularly useful perspectives, as they also place a premium on technological and scientific evolution, the specific role of human capital, without closing the door to more quantitative and statistical approaches. taking into account monetary and financial phenomena. They are also entirely compatible with taking into account the effects of competitiveness to which Michael Porter attaches all importance. Both the path dependency and the Porter's analyzes have the advantage of being able to pass without difficulty from the micro level to the new macro without modifying a better sensitivity as part of the reasoning.

5.3 / Under these conditions, are the Western models, the real ones, not those of stylized facts and theory, so specific that they cannot be compared to those of emerging industrialized countries of today? In this regard, some remarks can be made:

5.3.1/ As Western studies on the phenomena of industrialization in the West have shown, it is clear that there is no paradigmatic model, that of Great Britain (England, Scotland and Wales), which would have been reproduced by the continental countries and North America. Some even defend today the idea that Britain was rather an exception. In fact, if there is proximity between it and Belgium, the case of France is largely at odds with British development. This disparity is found in the next generation, that of the United States and Germany, or that of the latecomers such as Italy and, to a certain extent, Russia. Nevertheless, these disparities in the development model have never excluded vigorous transfers of technology and know-how, driven in particular by trade and services. Moreover, what differs in a clear way at the macroeconomic level, differs or sometimes opposes at the microeconomic level: that of the regions (Wallonia, Nord-Pas-de-Calais, the Ruhr, or even Silesia, are not without points in common with British countries), but also companies (similarity of functioning in the nineteenth century, between British and French companies in the textile industry).

5.3.2 / This remark also applies to Asia, where the Japanese model has often been used as a reference, especially to the "Four Dragons" from the 1970s to 2000, but also, to a certain extent, to the "Asian Tigers" from Southeast Asia. Certainly, these pathways of industrialization adopted in China or Vietnam

have little to do with that of Japan. The same is true of Hong Kong, Singapore and Taiwan, where Chinese influence has always dominated. The similarities are even smaller if one looks at the Indian subcontinent. Nevertheless, if we go beyond the big aggregates of the economy to look at the regions, the companies and, more broadly, the actors, then some elements of comparison emerge: the importance of industrial conglomerates or, in the East Asian countries, the influence of Confucianism, often compared to that of Calvinism in the West, or the role of minorities (in India, Bombay, Malaysia).

5.3.3/ Even if the news would have the tendency to make it believe, there is not *a priori* countries definitively barred in the course to industrialization and development. This shows the Latin American example. Although for a long time dominated by the economic and financial interests of Western Europe and then of the United States, Latin America opened the way to industrial growth. This is the case of Brazil, thanks to the appearance of industrial giants, first with public capital, and then become multinational through privatization. The adoption of pro-competitive policies has been a key factor in easing economic blockages. But, it would be inaccurate to downplay the role of families, individual entrepreneurs and their business networks, as in Mexico especially around Monterrey. Brazil and Mexico are not the only examples of industrial take-off, with their successes, failures and fragilities still great. Today we are well aware of Colombia's spectacular breakthrough, which has drawn American and World Bank lessons from an original development, but also from Chile, Peru and, presumably, Paraguay. Remains the case of Argentina, which could have been a southern Canada, but which nevertheless benefits from the dynamic printed by Mercosur. Certainly, in Europe, as in Asia (with ASEAN for example), but also in North America (NAFTA) and South (Andean Pact), the integration efforts have encouraged the acceleration of the phenomena of industrialization.

5.3.4 / In the rest of the world too, industrialization is progressing. Such is the case of Russia, again, as on the eve of the First World War, one of the major emerging powers (third of the BRICS behind China and India, but almost equivalent to Germany in purchasing power parity). It also gave birth to powerful multinationals (Gazprom, Rusal), developed technological skills and benefited from foreign investments (especially Western European) on its soil. The same goes for Turkey, which continues its slow economic rise, thanks to the dynamism of its entrepreneurs and the support provided by the state. Although the idea of a commodity curse should not be ruled out, the example of the United Arab Emirates, well after that of Canada, shows that there are original ways of development capable of generating self-sustaining growth, conditional on sustained and increased global economic integration. In a way, it's a message to Africa. Indeed, if it is important, as in Algeria that the oil resources are in the hands of the state, this cannot be enough if one does not

seek, like Tunisia, the way of the international economic integration. Thus, the small African countries and even the largest ones (Ethiopia), worn today by their internal dynamism, could, like Cameroon, Senegal or Ivory Coast, find the way to sustainable development. Their high-level graduates would have to flee the country in a large number, if the current Trade War would plunge the world economy into a deep depression, which would hit the weakest economies, as in the 1930s.