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# Emerging Markets

*Edited by Vito Bobek and Chee-Heong Quah*

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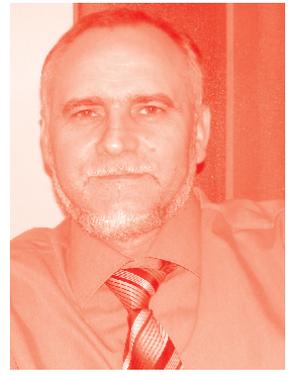
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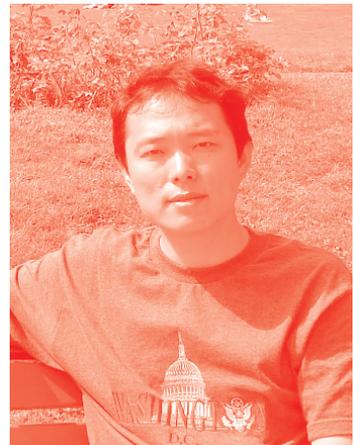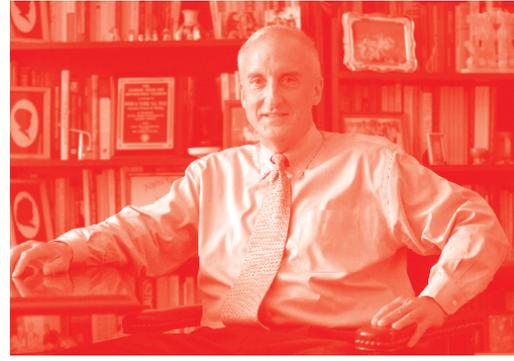
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# Meet the editor

Dr. Vito Bobek works as an international management professor at the University of Applied Sciences FH Joanneum, Graz, Austria. He has published more than 400 units in his academic career and visited twenty-two universities worldwide as a visiting professor. Dr. Bobek is a member of the editorial boards of six international journals and a member of the Strategic Council of the Minister of Foreign Affairs of the Republic of Slovenia. He has a long history in academia, consulting, and entrepreneurship. His own consulting firm, Palemid, has managed twenty significant projects, such as Cooperation Program Interreg V-A (Slovenia-Austria) and Capacity Building for the Serbian Chamber of Enforcement Agents. He has also participated in many international projects in Italy, Germany, Great Britain, the United States, Spain, Turkey, France, Romania, Croatia, Montenegro, Malaysia, and China. Dr. Bobek is also a co-founder of the Academy of Regional Management in Slovenia.

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# Contents

# Preface

First, a clarification of when a country is classified or considered an "emerging market" should be provided. There are some varieties within the existing literature of this specific field. The literature defines the critical characteristic of an emerging market as a permanent change. Such markets show attributes of an evolving economy, ongoing improvement of living standards, and stable development of their economy and institutional structures. Overall, an emerging market must be in a steady state of economic and social evolution. The wealth of the country is neither extraordinarily high nor extremely low. The economy and political situation are not too protective among foreign capital and actions.

However, according to the literature, the widely used economic development measure of emerging markets is the doubling of per capita income. The United States needed 47 years from 1838 onward, and Britain needed even longer with 58 years starting from 1780. The Asian countries overtook them by far, needing only 34 years during the countries' industrial-economic liberalization through the United States in 1885, and South Korea achieved a doubling in 11 years in 1966. China topped that growth by achieving a doubling of per capita income in only nine years, followed by another doubling in the subsequent nine years, and achieved this a third time as well. India showed a slower but steady growth and managed a doubling in 25 years the first time. It can be concluded that a country is considered an emerging market when it shows the following characteristics: steadily changing but improving economy, certain liberalization of the economy, increasing living standards, and working institutions. In addition, it must be able to double its per capita income—expanded by the indicator of a still low indicted economy which demarcates from an industrial fully developed country.

Some chapters in this book outline preconditions necessary to clarify the origin and development of an emerging market. According to the literature, two principal strategies exist for the acceleration of an emerging economy. The first path is based on the fact that every country striving for an emerging economy can learn valuable lessons from countries that went through all development phases before them. According to their advanced and wealthy economies, the Asian countries went through that development in the last two decades to become high-level emerging markets. Those countries became so-called Organization for Economic Cooperation and Development (OECD) countries and provided sufficient guidelines for creating a development strategy.

Those guidelines include several historical experiences, observations, and analyses that indicate the chances of success or failure of specific strategic approaches to become an emerging nation. Historic observation of economists suggests that market economies typically have good chances to outperform a planned economy, which increases when production activities become more information-intensive and sophisticated. Furthermore, it could be determined that there is no evidence of significant economic development under the governmental form of autarky since a certain liberalization of an economy, its openness to trade, as well as the support of

technology and innovative ideas from foreign countries, are preliminary attributes to start significant and fast economic growth. However, recent studies have emphasized the multiplicity of attributes that can be beneficial to or inhibit increasing development and, in particular, the idiosyncrasies of institutions. This proposes that there is no transparent development model or a simple policy prescription that guarantees development. Exemplified by China and India, both countries' development strategies were significantly different, and neither corresponded precisely to the neoclassical economic tenet.

The second strategy for the acceleration of an emerging economy is the overall influence and toleration of foreign influence since those international resources will be an essential facilitator for the progress of economic development. Sufficient monetary resources are essential to trigger real economic growth. These monetary resources can be raised by domestic savings or be provided by Foreign Direct Investments (FDIs). China and India provide a real example of increasing their national economy by investments from international sources. Both economies relied heavily on foreign capital to build up and drive new industry branches, particularly China, which attracted enormous monetary flows into the domestic economy. Those financial streams under international businesses' control have tremendous positive side effects for an emerging economy since they also provide more than just sheer capital, such as knowledge, know-how, technology, management skills, innovations, and overseas market access. Very labor-intensive, small-scale (clothing, toys) industries were the first targets of these international investments, in later years followed by high-tech multinational companies. In comparison, India's focus is the attraction of technological know-how to build up a significant service industry for software-related development that directly benefits the nation's technological expertise.

One precondition to continue the growth and stability of an economy, in the long run, is a stable macroeconomic environment. If this stability is missing, domestic economic agents are reluctant to commit capital and contribute to the development of a nation, and international financial investors are likely to avoid such economies. Analyzing poorer countries or regional areas on a global scale that continue failing to trigger the economic development process can determine that those countries are in grave danger to miss the political broader sense. In most cases, the sources of economic, political, or social failure can be determined as factors of economic instability. Stability needed to perform an economic reform includes controlling certain institutions and processes that facilitate economic stability, inflation control, currency fluctuations, unsustainable trade deficits, or excessive governmental expenditures.

Additionally, the stabilization of the national economy's opening is a key factor in sustaining ongoing growth. Historical analysis has shown that partial or complete liberalization of the national economy is preliminary to attract foreign resources since there is no evidence for rapid economic growth of a closed economy of autarky. The literature points out that the administration of a nation needs to address specific points when performing an economic reform of the country, including the necessity to allow or encourage certain privatization actions of publicly owned facilities within the national economy to lower expenses and abet knowledge transfer. Privatization benefits allocation efficiency through improved management and lower prices. It increases the production rate of used resources (time and material) since privatization enables the creation of market-based

incentives representing protection against the threat of failure or takeover. The focus of privatization-based organizations switches to a profit-orientated management perspective.

Furthermore, the reliance on international institutions and organizations who monitor and support but provide consultation to economic development is necessary. Those institutions guarantee international law enforcement regarding property and contractual rights and serve as a transmitter of information, managing competition and observing and regulating the process of investing and growth.

Even though there is no clear blueprint for creating an emerging market, including the factors mentioned in this Preface, the illustration below draws the analyzed interrelations between national institutions and areas to give an overview of necessary attributes to address the future development of emerging markets.

The start of the economic evolution of emerging markets relies on specific external and internal influences. International organizations represent external resources that provide a list of recommendations for those nations, such as trade, aid, and financial matters. The so-called Washington consensus provides a clear set of beliefs building the fundamental attributes of development policy. Those attributes included the mentioned liberalization of external economies to deregulate and privatize industry branches, pursue monetary asset flows, and create a stable fiscal policy.

In an ideal case, the literature recommends a combination of globalization and liberalization as the real possibility to increase economic growth and levels of competition on a global scale. This increasing competition contains specific negative and positive side effects, as the domestic market's pressure increases due to the global selection of industry. On the other side, this increased competition will also raise investors' attractiveness level and benefit the overall import rate of tradeable goods. Nevertheless, both need to be considered by the host country since a certain level of limitation and restriction is necessary to protect the new emerging economy and production from global competitors and international investors. This level of national economy protection needs to be well-balanced to remain attractive for foreign players and protect the national economy to enable sustainable growth. This is mainly because in the very early stages of an emerging market, the FDIs of external powers will focus on an undeveloped country's infrastructure and technology. This high focus on rudimentary infrastructure sections can significantly influence and long-term dependency on foreign players at the local level. Examples of a balance between those factors are Singapore, Costa Rica, and the Republic of Ireland, especially for FDIs as the main drivers of economic growth. Nevertheless, while it has been tolerated that external factors could limit the domestic policy discretion, considerable freedom for national management remains. To lead back to the illustration above, the initial task of a nation should be to focus on macroeconomic stability, containing a stable growth, low level of inflation, a good external and fiscal balance, and an attractive business environment in the form of well-developed infrastructure.

We would like to thank IntechOpen publishing for the opportunity to serve as editors of this book. We appreciate that they believed we could provide the necessary knowledge and technical assistance. Together we managed to find the other great colleagues that contributed to this book. We thank each of the authors for

their valuable contributions. We think this volume will be an asset to the professional community. We also wish to thank our technical reviewers and colleagues at IntechOpen. We could not have done it without you.

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Section 1

# Critical Issues of Economic Development of Emerging Markets

# Liberalism, the Only True Humanism

*Pascal Salin*

## Abstract

Liberalism is often criticized because it is said that it is concerned only by economic problems (and not more general human problems) and because it is in favor of selfishness. This is wrong and, in fact, liberalism is, on the contrary, the necessary consequence of a universal and valid conception of ethics. The foundation of liberalism consists in the fact that everyone must be respectful of the legitimate rights of any person (as regards, for instance, his body, his mind, and his legitimate property rights). Therefore, it implies that one ought to be respectful of another person either if this person is generous or if he is selfish (one is not obliged to be selfish, but one has the right to be selfish). Thus, liberalism is founded on the fundamental universal ethics and it is respectful of the individual conceptions of personal ethics. It is not in favor of selfishness, but in favor of individualism. This is why it must be said that liberalism is the only humanistic approach of social problems. However, many people consider that it is ethically justified to impose a redistribution policy to decrease so-called "social inequalities." But, so doing, a state is not respectful of the legitimate property rights of those who are obliged by legal constraint to pay taxes. A voluntary distribution of resources from individuals who give part of their legitimate resources to other individuals is ethically justified. But it is not the case whenever this transfer of resources is made by using coercion. And it must be added that it has negative consequences. Those who benefit from the redistribution policy are less induced to make productive efforts. And those who have to pay the taxes are also less induced to develop their productive activities. Therefore, the production of resources is diminished by the redistribution policy and all the members of a society (for instance a country) suffer from this non-ethical policy.

**Keywords:** liberalism, ethics, individual rights, redistribution policy

## 1. Introduction

The discredit from which liberalism suffers in our time, in many countries, is an astonishing and appalling phenomenon. In reality, this discredit is based on caricatures of liberalism, complacently spread by those who have an interest in fighting it or who are unaware – sometimes voluntarily – of what is the true liberalism. Thus, it is claimed that liberalism is supporting rich people against poor people, that it gives human beings the sole objective of seeking material benefits, that it advocates selfishness, etc. Nothing could be further from the truth, and that is why all those who love the truth should be concerned about learning more about liberalism [1]. Unfortunately, all people have very rarely the opportunity to make this intellectual re-examination, and I am struck, for example, by the fact that all young people who

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discover by chance a correct explanation of what liberalism is are amazed by its intellectual coherence and the solidity of its ethical foundation.

## 2. Liberalism, ethics, individual rights and redistribution policy

Liberalism consists into developing ideas based on individual behavior and individual aims to analyze or to promote the working of a society. And this is why liberalism must be considered as a true humanism, since humanism means a way of thinking or acting coherently with what human beings are. And humanism can be considered as the foundation of ethics since ethical actions and thoughts imply to be respectful of the very nature of human beings.

Indeed, liberalism is both a method of analysis and an ethic. It is a method of analysis because it consists in thinking – and this should be obvious – that we can only understand the functioning of a society by having a realistic vision of what a human being is, of his deep nature, of his behavior. A society is not a kind of great machine, but a collection of men and women who have – each of them – their own individuality, but who interact one with the other and are therefore, from this point of view, necessarily in solidarity with each other. Just to give an illustration of the problem, economists quite often develop analyses of what is called "macro-economics." But they possibly define discretionary concepts – such as "national income" – which may not have any link with individual behaviors. Thus they may deduct economic proposals which are not respectful of individual behaviors and aims so that they may not be efficient and, above all, they may not be coherent with ethics. To avoid such errors, many intellectuals are in favor of what is called praxeology, that is, the science of human action. Such is the case, in particular, of Ludwig von Mises in his book, *Human action*, [2] and more generally of the so-called Austrian economic theory (initially developed by Ludwig von Mises and Friedrich Hayek [3, 4]). They rightly consider that it is necessary to begin any social analysis by using realistic assumptions about the behavior of individuals.

As regards liberal ethics [5] it implies that there is a universal duty to be respect-ful of everyone's legitimate rights. Of course, each of us also has his or her own personal moral principles regarding how to behave with others. These personal morals are highly respectable, provided, however, that they are not incompatible with the universal ethic of respect for the legitimate rights of others.

It may be said that liberal values are Christian values or at least are fully com-patible with them. It is Christianity which has enabled the emergence of individual freedom in the Western world and which has, moreover, enabled economic take-off and enabled countless masses to escape from poverty. With Christianity, as with liberalism, a human being is not just a cog in the great social machine, but a person who deserves respect as such.

Liberalism and Christianity share a common basis in terms of universal values. But, of course, within this general framework each can develop its own moral con-cepts. Thus, Christianity considers altruism as a virtue. But this is not incompatible with liberalism. Indeed, a liberal must be intransigent with the universal duty to respect the rights of others, but he does not claim to suggest a particular conduct to human beings, for example, to suggest – or, even less, to impose – altruistic or selfish behavior toward this or that person or category of persons. He considers that this is a matter of personal responsibility and that it is his duty to respect such personal ethics as long as it does not contradict the universal duty to be respectful of the rights of others. That is why it is absurd to say that liberalism supports selfishness. Based on an absolute respect for individuals, liberalism refrains from making judgments about the conduct and opinions of individuals unless they infringe the legitimate rights of

others. Thus, it will consider a person's generous behavior to be perfectly respectable. But it will challenge the State's claim to redistribute resources through the use of coercion, which in itself constitutes an infringement of the freedom and rights of individuals. Solidarity is worthy of respect when it is voluntary; it is not worthy of respect when it is compulsory. In the latter case, moreover, it is all the less not a moral value since in reality, it is most often used as a means for politicians to serve their own personal interests: They obtain votes in elections by distributing the resources they have taken by force from certain taxpayers. And this is all the more questionable since many people bear the burden of taxes without knowing it.

By giving to itself a virtual monopoly in the exercise of solidarity, the State destroys natural solidarity. It destroys the incentives to work, save, innovate, and undertake in order to create resources (since it takes a large part of the fruits of all efforts), which undermines the prosperity of all and harms the poorest in particular. At the same time, however, it destroys the propensity of individuals to act generously, as they are led to see this role as being played by the State.

This shows how wrong it is to claim that liberalism is attached to material values, that it defends the rich against the poor, the powerful against the oppressed. It is, on the contrary, state interventionism which, by depriving individuals of the full exercise of their freedom, provokes a war of all against all. As the famous French economist [6] put it so well at the beginning of the nineteenth century, "The State is the great fiction through which everyone tries to live at the expense of everyone else." It should therefore come as no surprise if, in a country like France, one has the feeling that most citizens are embittered, demanding, and frustrated: their fate now depends only marginally on their own efforts and sense of responsibility, it depends on what the State will take from them and give to them in this war of all against all.

What a contrast with what would be a perfectly liberal society based on the freedom of each individual and therefore on individual responsibility! Such a society, totally respectful of the rights of each person, would be peaceful and prosperous. It would allow everyone to live according to his own moral principles, his own goals, and his own decisions. Could we not then trust human beings to build, through their interactions, the peaceful society that each of us deeply desires within our society? And should we not be surprised that citizens hand over so many decisions concerning their lives to men and women who are not chosen for their sense of ethics or, for that matter, for their skills, but more often than not for the promises they make and who are financed by the catching of resources which they did not create and which therefore do not belong to them? It should not be surprising, moreover, that in this immoral world built by statesmen, we find all sorts of corruption scandals and illicit enrichment throughout the world. These are obviously the same people who go to war against liberalism because it threatens their privileges and their spoliations. They do not hesitate to disguise reality and present liberalism as something it is not. In this terribly politicized world in which we find ourselves unfortunately, the confusion of ideas reaches an incredible level. One comes to reproach so-called liberal policies (which are not liberal) for the failures due to state interventionism. As Marine Le Pen – the head of a nationalist extreme-right political party in France – has said, one even comes to claim that liberalism is totalitarianism, even though it is and always has been the only real enemy of totalitarianism!

Should not the trust we place in human beings and in their extraordinary capacities lead us to hope that all these confusions, lies, and the resulting disasters will be dispelled and that, as free beings, they will be able to live in a harmonious and peaceful society?

However many people believe that there are so-called inequalities between the members of a society (for instance the members of a country) and that it is the important role of a State to decide a redistribution policy. It is understandable that

some people find it difficult to accept large differences in incomes and living conditions, and the fight against inequality therefore seems sympathetic. But beyond feelings, what is called "inequalities" must be rigorously analyzed. In a country, there is not one big central distributor who would have created all the wealth and who could distribute it in an egalitarian way. There is a multitude of individuals who create their wealth thanks to their efforts of work, savings, entrepreneurial risk-taking, etc. What characterizes a human society is not inequality, but diversity. All human beings are different and the wealth they create is unequal because they differ in age, talents, abilities to make efforts, life choices, etc. However, all members of a society are "united," for example, because we cannot have prosperous employees if we discourage their employers by overloading them with exorbitant taxes.

At some point in time the situations of all individuals are obviously diverse ("unequal"). But these relative situations change and it is important to give everyone a chance. It is interesting to note, for example, that according to many studies in the United States a significant proportion of those who have high incomes at one point in time have much lower incomes a few years later. On the contrary, there is a significant progress for those with low incomes.

The feeling of solidarity exists in the hearts of human beings and there have always been private initiatives to take care of the weakest people. This voluntary solidarity has a moral basis: those who practice it sacrifice resources they have created to help others. This has nothing to do with the so-called compulsory "solidarity" practiced by representatives of the State and public organizations, which is done with the money of individuals (even if some have a sincere desire to help others). And one can always suspect that they are pursuing personal goals: getting votes in elections. This is why, for example, in most countries, an income tax has progressive rates: politicians do not lose much electoral support by taxing a small number of high-income people heavily in the name of fighting inequality. But in fact they are hurting everyone. Indeed, in a free society, those with high incomes are the ones who create the most wealth through their talent, their productive efforts, and their ability to take risks. They create jobs, and they introduce technical progress which increases everyone's purchasing power. But if they are too much taxed, they are discouraged from making efforts or they go into exile, depriving their country of opportunities for growth, which is detrimental to everyone. And it would be better if, by reducing this policy of fighting inequality, one could finally see a strong growth, a rapid increase in wages and full employment. The important thing is that everyone should be able to become richer, especially the poorest people, whatever is the evolution of "inequalities."

Many people – and specially politicians – claim to be in favor of "social justice." But it is important to analyze what is meant by "social justice" and the remarks made above can help to develop such an analysis. There are two very different definitions of "social justice." The first one is concerned by what could be called "universal ethics," namely being respectful of individual rights. On the other hand, the specific and personal ethics of each individual is inspiring the second definition of "social justice": it consists in comparing the actual situation of individuals and to decide subjectively that some specific differences are fair or not. This second definition is the most widely accepted one and usually, when speaking of "social justice" people care mainly about the monetary incomes of individuals. According to a personal judgment – more or less shared by a great number of people – one considers that the differences between individual incomes must be more or less diminished. Now, some more characteristics of both definitions must be clarified in order to have a rigorous analysis of this problem.

Let us first consider the first definition of social justice. We just mentioned that it means that individual rights are respected by everyone. But it is not sufficient to

care about respecting rights, since individual rights have to be ethically founded for a situation respectful of rights to be ethically justified. In fact, let us assume that there is a society in which most properties have been got by stealing them; it is obvious that, in such a case, there is no justification for respecting property rights! This means that it is important to determine in which cases property rights are legitimate.

The basic principle of ethics consists in claiming that individuals are free, which means that they are not subject to the constraint of other people, that is, they are the owners of themselves. But one is not his own owner if ever he is not the owner of the goods and services he is creating by using his mind and his physical activities. Therefore, it must be considered that legitimate property rights are those which are obtained by acts of creation (and obviously, by exchanging goods and services which have been created by partners in exchange).

Thus, the first definition of social justice can potentially be accepted by everyone all over the world (at least if people agree about the legitimacy of property rights). But, as regards the second definition of social justice – namely a comparison of the standard of life of individuals in a society – each individual has a different definition of what he considers as socially fair. There is therefore a very important problem, namely the coherence between these different opinions. As, very likely, all individuals have different opinions about "solidarity" there cannot be an "universal" criterion of what should be considered as "social justice," that is, the fair distribution of resources. It is then assumed that social justice in the distribution of incomes can be defined by a majority of votes in a democratic system. Nowadays, when speaking of social justice one implicitly means redistributive activities (social policy), which refers to the second meaning of social justice. It is implicitly assumed that social justice implies a reduction of inequalities. In the term "equality" or "inequality," there is an implicit value judgment. This is why one considers the reduction of inequality as being a morally justified policy.

Libertarians are frequently critical of egalitarian policies so that it is often claimed that they promote selfishness, and that liberalism must be challenged for ethical reasons. But human beings are characterized by their diversity and this is why one should, on the one hand, talk about diversity rather than inequality and, on the other hand, be respectful of this diversity inherent to human nature. The term of inequality would be justified if the fate of all individuals – and in particular their standard of living – was determined by a central authority owning all resources and able to "distribute" them more or less "equally." But it is not the case – fortunately – in a free society and that is why the expression "income redistribution" is totally misleading.

However, contrary to what is often claimed, liberalism is not supporting the freedom of anyone to do anything, but the freedom to act while respecting the legitimate rights of others. This freedom to act implies the freedom to implement one's own personal ethics, but only if it is legitimate and if it is respectful of universal ethics. It is the case if someone who holds legitimate property rights on certain resources uses a portion of these resources to help another person; his acts are then in accordance with his personal morality without being damaging to universal morality. This behavior is totally moral and respectable. But someone who steals goods to a person to give his loot to another person – because his personal morality induces him to help the latter – violates the property rights of the first person and therefore universal morality.

Now, it is exactly the same with "inequalities policies": Statesmen (politicians and bureaucrats) levy, thanks to coercion, resources from some people (known as citizens) to give them to others. In doing so, they undermine universal morality and therefore we must accept the idea that a policy aiming at the reduction of "inequalities" is

immoral in principle. Although statesmen are using their monopoly of legal constraint so that this coercion is legal, it is however immoral since it is an attack on legitimate property rights (and this is why one must consider as a moral duty to cut taxes as much as possible). It may be that, in doing thus, some statesmen try to implement their own personal morality, but anyhow they infringe universal morality. On the other hand, it is well known that, so doing, they often pursue personal goals. Thus, to be elected or re-elected, they transfer resources to a large number of voters at the expense of a minority. As we already said, it is for this reason that the progressive tax – immoral and unequal by nature – does exist. And the fact that politicians are elected by a majority of voters do not give them legitimacy since one can always find a majority to violate the legitimate rights of a minority as far as the exercise of legal constraint is possible.

Furthermore, equality is defined arbitrarily from a single criterion, namely income at some point of time. However the objectives of individuals are varied (they do not concern only monetary income), their age is different and therefore their experience and their capital (which are the sources of their incomes). Let us imagine that all individuals be identical, there would, however, be an inequality in incomes according to the age of each person.

Of course, some are victims of physical or mental disabilities and human history shows that charity has always existed in such cases. This charity, decided personally by each individual, is extremely respectable, unlike so-called public charity (which, moreover, is vitiated by prospects concerning elections and which therefore leads to new inequalities between those who thus come to power – claiming to take in charge poverty – and those who must undergo public choices).

Frédéric Bastiat has been a member of the French Parliament and he sat on the benches of the left. Left members of the Parliament applauded him when he advocated economic freedom to improve the life standard of the poorest people. Is that inconceivable in the present period? Improving the life standard of everyone, especially the most vulnerable, is possible and desirable. But we must take the means to do so. Liberalism is the best mean.

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# Institutions, Culture and Foreign Direct Investment in Transition Economies: Does Culture Matter and Why?

*Sabina Silajdzic and Eldin Mehic*

## Abstract

The aim of this research is to analyse the importance of cultural and institutional determinants in attracting FDI to transition countries. We rely on gravity econometric framework and examine the impact of cultural and institutional factors on FDI using bilateral FDI flows between home (i.e. major trading partners) and eight transition economies in the period 2000–2018. We study this relationship in an integrated framework considering principal gravity forces, traditional FDI determinants, policy and institutional factors. We provide strong and robust evidence that cultural factors, depicted in Hofmann cultural indices, influence MNCs' locational decisions. Other things held constant, specific cultural features seem more important than formal institutions, which seems at odds with standard neoclassical propositions, and shed some new light on the way we understand international business transactions.

**Keywords:** FDI, cultural factors, institutional factors, gravity model, transition economies

## 1. Introduction

Foreign Direct Investments (hereinafter: FDI) has been largely found to positively affect economic growth in transition economies. Increases in FDI have been associated with productivity and export growth of local companies via knowledge spillovers and complementary effects on domestic investment. The impact of FDI on economic growth seems, however, conditional on the level of human capital and absorptive capacity of a host economy. Determinants of FDI in transition economies have been intensely researched highlighting the importance of traditional factors, institutions and policy choices in determining locational decisions of multinational corporations (MNCs). Although informal institutions and cultural factors have increasingly been characterised as important factors that off-set for the underdeveloped institutional capacity of transition economies, the impact of cultural ties on FDI remains fairly under researched. Informal economic structures and cultural similarities emanate trust and enable strong business ties across borders. How important are these factors in explaining differences in FDI flows among transition economies is the principal question investigated in this research.

Culture, in a broader sense, means a pattern of behaviour based on values and beliefs that develops over time in a particular society. While culture in a narrower sense represents the way of life of a social group, i.e. a society that includes language, tradition, knowledge, customs, laws, art and other tangible and intangible features of social life that are passed down through generations, cultural is of course subject to change. Culture includes a set of values and attitudes of a homogeneous group of people that are passed down from generation to generation, and these patterns of behaviour change rather slowly.

The importance of cultural factors has been increasingly emphasised in the FDI literature. In particular, the impact of cultural distance between home and host countries has found to be significant in number of studies investigating the role of culture in explaining FDI flows. However, few studies concentrated on the transition economies of Central and Eastern Europe. These countries are viewed as specific in terms of both scope of economic and institutional transformation, and specific (common) legacies of socialism. We contribute to recent literature on FDI in transition economies, by analysing the significance of broad set of institutional and cultural indicators ought to influence MNC decisions on where to invest. A special reference is given to the discussion on the relationship between formal and informal institutions, assumed to be predominantly depicted in cultural dimensions of a specific country. In addition, the relevance of specific Hofstede cultural dimension to foreign firms is brought to the fore. Having said this, the hypothesis tested imply 'favourable cultural context' that is, specific cultural characteristics that are assumed to be preferred by foreign firms. We posit somewhat universal aspects of culture related to Hofstede cultural dimensions that constitute favourable cultural environment to foreign firms. Furthermore, we make use of the gravity model and the panel data framework to examine the importance of relative differences between home and host country characteristics in explaining bilateral FDI stock. The gravity-panel empirical framework allows us to draw important and detailed conclusions with respect to the relative importance of formal institutions vs. cultural aspects to foreign firms. Our dataset includes 10 source countries (i.e. major trading partners) and 8 home countries (transition economies of Central Eastern and South East Europe for which the cultural indicators were available).

This paper is structured as follows. Next we elaborate on basic theoretical propositions underpinning the mechanism of institutional and cultural influence on FDI, with special reference to empirical work on the matter. In discussion theoretical and empirical issues, we present the conceptual framework for the empirical strategy used in this analysis discussing number of important issues including interplay between culture institutions and FDI, definitions and measurement issues, and research hypothesis. The third section relates to the empirical analysis where detailed description of the model, data and variables and methodology employed is provided and followed by the interpretation of the empirical results. The conclusion follows.

## 2. Institutions, culture and FDI: conceptual framework and literature review

### 2.1 Institutions: what they are and why they are important?

Institutional environment often encompasses political systems, policy making and policy enforcing institutional structures which determine economic structures at the national and sub-national levels. It includes institutional setting that provides formal rules of the game and sets forth the incentives to economic/societal agents as

well as informal norms, set of beliefs, systems of values, customs considered also an important feature of the institutional environment of a given country. Different scholars perceive differently the relative importance of these various components, including the role played by formal and informal rules and conventions as well as the importance of and role played by organisations, encompassing both economic and social agents of various sorts.

They are competing theoretical perceptions and different values attached to institutions and organisations in the contemporary literature [1–3]. Generally, institutions are perceived as frames or rules of the game while organisations are defined as social agents constituting and carrying these rules [2]. Importantly, the relationship between institutions and organisations is not a straight forward one. There is a general consensus among scholars that institutions principally evolve in response to market- related imperfections, and as such, institutions are considered a mechanism to enhance efficiency associated with economic transactions. However, whether institutions evolve primarily in response to changes in values, perception and attitudes embodied in organisations (i.e. various social agents) including theirs' perceived inefficiencies in functioning of the market, or whether institutional development can be viewed as principally exogenous process where norms dominantly govern actions of social agents is still a debated issue [1–3]. Relate to this is a question whether institutional development is constrained by organisations' preferences and capacities? Arguably the answer to these questions depends on how we perceive institutions and how do we value the relative importance of institutions *vis a vis* organisations.

The theoretical conceptualisation of institutions has mostly favoured the stream of literature which views institutions as frames or rules of the game which both guide and constrain actions of social agents i.e. organisations of various sorts including political and economic agents that make up societies. This stream of literature suggests the dichotomy between institutions and organisations. Accordingly institutions reveal formal and informal rules and conventions which set the structures within which, and upon which societal agents act [1, 2]. More precisely, the dichotomy in the words of [2] implies a clear conceptual distinction between institutions and organisations as follows; institutions define 'the rules' of the game and organisations are 'the players' by whom the game is played. Similarly, [4] suggests that institutions provide the set of rules defining frames within which organisations act. This is where the importance of cultural dimensions become crucial in understanding the institutional performance and in particular the differences in economic performance among countries amid similar institutional development and/or quality of institutions.

In this respect, 'good' institutions are only necessary but not sufficient condition to promote successful change within a society and/or to achieve desired societal goals. This view implies that although institutions evolve in response to market failures encompassing various forms of imperfections related to economics transactions and exchange they evolve in particular socio-historical context, and in accordance with prevailing preferences, norms and ethics of organisations that embody, interpret and influence the institutional conditions i.e. the specific (endogenous) rule setting [5]. These endogenous norms and values of a society have been embedded in what we call informal institutional structures of the economy. Put differently, formal institutions are embodied in culture, and culture matters for understanding the link between formal and informal institutional setting of individual countries [2, 6, 7]. The culture of a society determines informal behavioural patterns of economic agents, and by that the quality and the efficiency of formal institutions. This is to say that institutions, e.g. the relevance of formal rules, adherence to formal principles and legal provisions rests within organisation and

agencies that is with people who implement those rules. This stream of literature, which identifies culture as important aspect of formal institutions, may help us disentangle the relationship between formal and informal institutions, and, in particular, may help us comprehend how societies with similar quality of formal institutions have divergent economic outcomes.

As pointed by [8], it is possible that societies with identical institutional setting perform differently assuming that societal agents are not 'passive' but influence and determine the outcomes of any particular institutional structure in relation to their competences and preferences as well as in relation to what is called informal institutions. The latter include rather endogenous institutional features or their evolution such as norms, social ethics, prevalence of (old) institutional legacies, initial institutional conditions, institutional and individual's values and competences. This would imply that it does not suffice to develop 'quality' institutions in the form of extensive and desirable legislative and institutional infrastructures, or 'optimal' set of rules, but also necessary organisational capabilities that affect policy impacts and subsequent institutional change. Institutional development should be perceived as a long-term process of societal change, a one that certainly involves the development of 'better' or 'improved' conventions but importantly the process that rests on the commitment and competences of prevailing human and organisations kinds involved in those processes.[1]

Here it is important to emphasise that theoretic perspective of institutions matters for: (i) our understanding of the evolutionary dynamics of institutional development and change; ii) the importance of informal institutional structures and their link with formal institutions; as well as iii) the way we measure institutions in our empirical analysis. As pointed by [8]: "*Whether institutions are viewed as endogenous to the relevant domain or exogenously set in the polity may have significant implications for the role of public policy*." This is to say that if institutions are exogenous than we could relatively easily transplant the best practices of other (more advanced) countries in the forms of formal rules and conventions and anticipate increases in efficiency and welfare. If the reverse is true, and if institutions evolve principally in relation to a country specific historical, political and cultural context assuming interdependence among institutions, constrained and influenced by informal norms and social ethics, competences and capabilities of human and organisation kind, then the intended outcomes and consequences of any institutional conditions would vary considerably in relation to these important but intrinsic features of a given country. These raise important considerations for researches analysing the role of institutions in economic performance as well as international business.

The comparison of transition institutional reform, particularly the evidence revealing contrasting experiences and institutional performance across countries, however, led to doubts and seriously questioned the conventional wisdom of straightforward transplantation of practices of developed market economies [9–11]. Contrary to what has been expected, the years of transition saw institutional building and reform as exceptionally challenging and complex. The initial years of transition witnessed the remarkable differences in institutional progress among transition economies (EBRD, 2001). Empirical evidence point to the highly intrinsic and endogenous nature of institutional development including the varying institutional performance among transition economies [9–12]. Transition economies were faced with the necessity to reform their economic and institutional structures on a large scale moving from centrally planned to free market economic system and

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[1] Commitment implies willingness whereby individuals perceive the benefits associated with 'good' institutions.

resource allocation. The conventional economic wisdom implied that former centrally planned economies needed to develop institutions which underpin free market transactions and well functioning of the markets as quickly as possible. The importance of institutional environment conducive to rapid market development has been put high on the transition reform agenda. The initial institutional development in transition economy context reflected the establishment of institutions fundamental to free-market economies including setting proper incentives through policies of macroeconomic-stability, price liberalisation, denationalisation and privatisation, as well as through institutions underpinning effective financial sector reform and private sector growth. The prevailing conceptualisation of institutions at the time envisaged that institutions are somewhat easily transferable, exogenously created whereby institutions are built following best practices elsewhere [13]. However, over the course of transition, growing empirical evidence on the matter of institutional change in transition suggested that the important historical, political and social factors have played a role. The empirical studies pointed to the interrelatedness and interdependence between institutions and diverse political, cultural and economic contexts of a given country [8]. Among others, the initial institutional conditions and institution-related legacies, as well as cultural dimensions largely influenced the pace and character of institutional development in transition economies (see [11, 14]).

Despite these efforts, we do have a limited understanding of the processes and lack meaningful explanation on the diverging pattern of institutional development among countries including TEs. Analysing relationship between formal and informal institutions may help disentangle differences in institutional performance among transition economies. Such analysis is fairly constrained by number of difficulties including conceptualisation of the relationship, as well as data limitations and number of measurement issues related to informal institutions of the economy. We believe that indicators of cultural dimensions may help comprehend at least some aspect of this complex relationship. In view of this, we argue, that it is important to study institutions in an integrated framework, and point to the relevance of cultural factors.

In this paper, an attempt is made to illuminate the importance of formal institutions relative to the distinctive cultural features of a society in comprehending differences in FDI flows across transition economies. We use a narrow-definition of institutions and focus on institutions revealing principally formal rules specifically related to FDI such as the rule of law and corruption. Relying on previous empirical work, we emphasise the importance of corruption [15–18], regulatory and governance indicators [19–21], as well as legal indicators in our empirical analysis. We identify institutional variables to be included in the model based on these results, and include three institutional variables (Corruption, Good governance and Rule of Law and Efficiency). Since we investigate the impact of institutional factors on FDI in transition economies, we do not use Political stability variable amid low variation in the data, and relatively similar Political stability index across CEE transition economies. In the light of the forgoing discussion, however, we acknowledge that by the way we measure institutional dimension in this analysis we possibly do not account for complex informal social structures (including social ethics and norms, preferences and capabilities of organisations) which may well influence the outcomes of institutional environment in a given country. This is why we include cultural indicators (Hofstende Cultural Dimensions) in the analysis in order to account for important aspects of both institutional and cultural behaviour of individual (host) countries that may influence FDI flows in transition economies.

While there is considerable number of studies analysing the impact of formal institutions on FDI, very little empirical research has been done on the importance

of culture, and cultural factors in determining FDI. Furthermore, we study the impact of institutional and cultural factors on FDI in an integrated framework, where we assess the relative importance of formal institutions vs. cultural factors.

## 2.2 Culture and its relevance for understanding institutions-FDI nexus

Informal institutions are often considered important determinant of FDI since they could compensate for the deficiencies associated with underperforming or poor quality formal institutions. Despite this, they are often overlooked in the FDI literature whereby the emphasis is given to the quality of formal institutions per se. The rationale behind is that while formal institutions ensure efficiency of foreign operations in a new environment, informal institutions mostly favour local economic agents. Local agents are assumed to have better access to political and local facilities and processes. Given this, reliance on informal institutions in ensuring efficient economic transactions is least favoured by MNCs. A study by [22, 23] have shown that institutional development in transition economies has had an impact on foreign investors' strategic decisions, arguably their entry modes, whereby quality of formal institutions seems of greater importance for establishing wholly owned ventures. The study by [22] reveals evidence that quality of institutions does seem to impact type of ownership related to FDI, where poor institutional development is more likely to result in network- types of FDI (i.e. joint-ventures, contracts). This is why the FDI literature mostly emphasise the relevance of formal institutions as locational advantage as reliance on informal institutions tend to increase transaction costs of foreign investors relative to domestic agents. The cultural features seem to have been disregarded as important factors which influence the way in which markets develop and evolve.

Notwithstanding this, in this paper we argue that cultural dimension is important determinant of FDI, in the sense that culture 'shape' formal institutions (see for instance [24]). Cultural dimensions of a society depict ways in which 'nations' tend to understand the rules and norms of social behaviour. The role played by formal institution(s) within a society and their relative importance *vis a vis* informal social structures (e.g. social networks, linkages) is deeply rooted cultural phenomena. The perception of formal institutions that prevails among general public, on this particular matter, is important to be understood, when examining the relationship between formal institutions and FDI. Having said this, culture may reflect on 'tacit' aspects of general-purpose or more specific 'market-enhancing' institutions within countries. The diverse and distinct concepts of social behaviour, present important features of a society that not only influence and model the behaviour of local economic agents, but affect the quality and the efficiency of formal institutions. Reliance on informal institutions as opposed on formal institutions may well be associated with weak and malfunctioning formal institutional structures. On this ground it seems reasonable to posit that informal institutions reflected in cultural dimensions are also likely to influence MNC's decisions on where to invest.

Overall, we strongly believe that the essential question on the matter of culture-institutions-FDI nexus, is to what extent 'formal institutions' and the why we measure them, reflect society's adherence to formal rules, as opposed to society's 'modus operandi' e.g. collective actions, practices, behaviours that may contradict formal codes of conduct? Here it is worthwhile mentioning the theory of 'institutional stickiness' which firmly explains the relationship between culture and institutions [25]. The authors posit that formal institutions are stuck to what they call *'metis',* which may be defined as 'values' that are largely 'exogenous' to people and that shape our social relations and constitute important unwritten behavioural patterns.

Therefore, relying solely on formal institutions, and formal institutional indicators of one country, including various legal indicators that are of specific interest to FDI, when analysing the importance of formal institutions, may be associated with ambiguities and uncertain 'policy' implications. This is not to say that formal institutions are of less importance, but it is at least important to acknowledge that 'good' institutions are embodied in culture. These societal values, attitudes and norms evolve overtime and reinforce formal institutions [25, 26]. This means that overtime, cultural changes influence acceptance of formal institutions as values of a society in general, and society at large adheres to these formal 'rules of the game'. Along the lines of these theoretical propositions, [6] investigates both direct and indirect effect of culture on FDI, and finds that culture impact FDI indirectly through its impact on formal institutions, as well as directly. The indirect impact of culture on FDI is mediated via formal institutions, which confines the hypothesis that culture 'shape formal institutions'. Essentially, the impact of cultural factors is found to be more important than the impact of formal institutions. Similarly, a recent study by [27] finds significant and greater effect of cultural factors (embeddedness vs. autonomy; hierarchy vs. egalitarianism, mastery vs. harmony) than formal institutions in cross-country regressions. Both studies render support to the theoretical propositions underlying the importance of cultural factors in comprehending role played by formal institutions, as well as that distinctive features of national cultures influence FDI flows.

Culture seems to reveal hidden behavioural patterns that underpin societal prosperity, including society relation to and the perception of responsibility, ethics and trust. The idea that these norms affect companies' efficiency and growth prospects cannot be dismissed. On the contrary, these factors should be perceived as important determinants of FDI that not only minimise transaction costs, but also enhance productivity potential of foreign affiliates, and/or simply create an environment conducive to business growth. Such an environment is perceived as friendly and or familiar market from MNC perspective. What kind of information MNC search for when deciding about new investment site is important? Do managers look at formal institutional indices, or have other sources of knowledge and information that reveal 'true' that is prevailing aspects of social relations, ethics and norms? Studying the impact of formal institutions on FDI, in an integrated framework in which we control for cultural factors, along with traditional FDI determinants, becomes of crucial importance.

In what follows we discuss in greater detail the relevance of culture in international business and briefly review past empirical research on the role of culture in attracting FDI.

## 2.3 What role for culture in attracting FDI

According to the literature cultural dimension can influence foreign direct investments in two ways. First theoretical proposition suggest that more culturally diverse societies tend to be perceived as favourable cultural environment by MNC, while the second theoretical proposition implies that foreign investors prefer to invest in cultures similar to their own. These two distinct theoretical perspectives imply first that more culturally diverse societies positively impact foreign direct investments, and second that lower cultural distance between home and host countries positively affects FDI. As for the former, culturally diverse countries reflect on more open and welcoming societies that are viewed positively by foreign companies. As for the latter cultural difference between home and host countries is often associated with high transaction cost arising from uncertainty and lower FDI.

*2.3.1 Cultural diversity and religion as cultural factors influencing FDI*

Alesina [28] argues that high level of ethnic, linguistic and religious diversity requires well functioning governments and as such is positively associated with FDI. Additionally, more culturally diverse society is more tolerable and less reluctant to foreigners, which is perceived positively by MNCs. A number of research investigate the impact of religious factors including religion diversity and pluralism [29, 30] religious similarity [31, 32] and religious groups [31, 33] on FDI and find that religion does influence FDI. Accordingly, religious pluralism is found to be positivelly associated with FDI and thus more important compared to religious similarity, while a study by [31] finds positive relationship between all monotheistic religious groups (Catholic, Protestant and Orthodox Christian) and FDI, but for Islam. According to the results of their study, significantly negative relationship is thus suggested between Buddhism and FDI. No doubt, the results of their study suggest that MNCs are not indifferent to culture, broadly represented by diverse religious groups, and that only certain religious groups are positively associated with FDI. However, the empirical evidence on the matter is scarce and far from uniform to draw any sensible conclusions.

In this paper we, however, argue that, while religious believes may influence attitudes toward free market, competition or foreign investors, it may be fairly misleading to associate specific attitudes and values to individual religious groups per se, based on our assumptions, generalisation and even pre-assumptions about religious constituencies of individual nations. This tendency to assign specific societal attributes to certain religious groups such as is the case of the La Porta et al. study [34], which prescribe and impose 'low institutional quality, institutional inefficiency, political and economic instability, high level of corruption and tax invasion etc.', to reside and prevail within the so called 'hierarchical religious' such as Catholicism, Orthodox Christianity and Islam is rather forged, deceptive and ambiguous.

Certainly, a genuine and reasonable approach to study religious aspects of cultural dimension and its relationship to FDI and/or economic growth need be based on attitudes toward certain economic concepts and principles, as well as on values assigned to those, including wealth and growth, competition-rivalry and struggle, market openness and foreign investors. In case, significant differences assigned to those concepts, could be associated with specific religious believes or related value-systems, then we could sensibly argue of the prevailing religiously rooted 'cultural' differences. This is to say, that we need to investigate the link between religious beliefs and values assigned to aforementioned economic concepts. How differently are these concepts perceived and valued by different religious groups need be the principal question investigated, and not something a priori assumed and assigned to specific religious groups. In line with this reasoning, for instance, Guiso, Sapienza and Zingales [33] conclude that Catholics and Protestants are more positively associated with attitudes favouring market-efficiency and economic growth, while Muslims are found to be negatively associated with competition. Last but not lease, if we consider far-reaching cultural differencies existing within supposedly homogenous religious groups across different nations, such as is the case of Islamic countries (Malasya vs. Tukey vs. Saudi Arabia vs. Iran), or cultural differences across supposedly Catholic states such as is the case of Ireland vs. Poland vs. (South) Italy, we clearly face the measurement problem that may bias the results. This could partly explain why number of studies including [34] failed to find significant impact of religious groups per se on either economic growth or FDI. The notable exception is the aforementioned study by Lucke and Eichler [31].

Overall, in this paper we argue that analysis of cultural influence on FDI, that measure cultural diversity via dichotomous variables depicting religious group(s)

fails to sensibly reflect on the important cultural dimensions that are of relevance when studying the link between culture and FDI. This is to say, that it is fairly improper (invalidate) to a priori assign that certain religious groups are indifferent to economic growth or adversely oriented toward foreigners, unless we truly conceptualise and measure links between prevailing religious beliefs and some 'relevant' economic categories or attitudes. Most studies investigating the link between religious groups and FDI fall short of addressing this issue. We first need to conceptualise on, and empirically establish the link between certain believes and attitudes including individual aspirations for growth, attitudes toward risk and competition, attitudes toward other groups/individuals and specific religious groups, as suggested by Guiso et al. study [33], before we examine the relationship between supposedly distinct religious groups and FDI or economic growth.

The empirical evidence on the matter is far from consistent and far from its mature phase. In light of this discussion, we argue that although religion constitute important cultural dimension of a society, it may well be inappropriate and misleading to include religious group(s) as dummy variables in regression equations to estimate the effect of culture on FDI. In contrast, considering religious diversity or similarity across nations may reflect on cultural distance that could be associated with costs of transition to new business or cultural environment. Most empirical studies have, in fact, followed this line of reasoning where, cultural similarity is considered important, *a priori* positive determinant of FDI, as we discuss below.

### 2.3.2 The relevance of cultural proximity (distance) as determinant of FDI

Kogut and Singh [35], posit that foreign investors prefer investing in countries culturally similar to their own. Sharing similar attitudes and values implies better knowledge of the local market, customers and business practices. Greater cultural differences between the host country and the source country lead to higher costs of doing business in another culture, such as the cost of obtaining information or the cost of searching to discover the specifics of the local bureaucracy [31]. This theoretical proposition has dominated the research on culture and FDI. Most empirical studies analyse the impact of cultural distance per se on FDI, and hypothesise that cultural similarity between home and host countries positively affects FDI flows.

Accordingly, the principal question investigated by researcher refers to the effect of 'cultural distance' on FDI. Siegel and Licht [35] in their analysis using instrumental variables (social factionalization, dominant religion, 19th century war experience, previous communist rule) measure how cultural distance in terms of egalitarianism vs. hierarchy affects FDI flows. The analysis is based on a 2005 Schwartz study [36]. The results obtained explain that the egalitarian distance has a negative and statistically significant impact on FDI flows. Similarly, [35] conduct a comprehensive analysis on the impact of cultural distance on FDI. They rely on 'egalitarianism vs. hierarchy' dimension of culture developed by Schwarz [36] and argue that the greater the distance between culture of origin and destination country the greater the difficulty in interacting with stakeholders in the host country. The results of their study confirm the negative and significant impact of cultural distance on FDI. Moreover, [31] study suggest that foreign investors from developed countries are negatively affected by greater 'cultural distance' when investing in developing and transition economies. Lee, Shenkar, and Li [37] come to similar conclusions when it comes to the impact of cultural distance measured by Kogut and Singh index on inward FDI in South Korea.

Number of empirical studies uses cultural proximity as determinant of FDI, relaying on common language, common history (e.g. colonial legacy, socialist past), and common border as cultural proxies. Most studies find significant and positive

impact of cultural proximity along geographical distance on FDI [32, 38]. Lopez-Duarte and Vidal-Suarez [39] analyse how language distance affects the choice between greenfield investments and acquisitions when investing in other countries. 383 foreign direct investments from Spain in 44 different countries in the period 1989–2003 were analysed. The authors find strong support for the role of language distance as the main factor causing transaction costs. The results suggest that investors avoid acquisitions as a way of investing in countries characterised by high language distance. Bandelj [40] analysed the cultural connections (presence of a national minority) between investors and recipients of investments (hosts). It measures how the presence of national minorities affects the movement of FDI between pairs of countries. Bilateral flows of 11 Central and Eastern European countries (recipients of investments) and 27 investor countries were analysed. The author came to the conclusion that cultural ties that have historically been formed due to the presence of national minorities of the host country in the investor country, and vice versa, positively and statistically significantly affect FDI flows between the two countries.

Although, the results of majority of studies on cultural distance and FDI support the hypothesis that greater cultural distance negatively affects FDI, and that cultural proximity plays important role in attracting FDI, studies by Voyer and Beamish [41], Grosse and Trevino [42] find that cultural distance does not exert significant negative impact on FDI, and that cultural distance does not seem to influence FDI flows. Tang [43] reports mixed results on the impact of all cultural distance variables (four Hofstede cultural indicators) on FDI and concludes that 'cultural difference does not always imply cultural conflict'. In similar vein, Barkema, Bell, and Pennings [44] (following [45]) argue that the risks arising from cultural differences can be over-come because investors can learn over time how to deal with those differences. According to them, experienced investors, both from developed and developing countries, ultimately do not consider cultural differences a significant obstacle.

Analysing the impact of cultural distance on foreign direct investment has, however, proven to be quite complex resulting in inconclusive and even contradictory empirical evidence. Part of the reason can be attributed to the fact that authors use different measures of culture from which they construct cultural distance variable, rendering support to the need to understand the mechanism underpinning the influence of 'cultural distance' on FDI. Moreover, the problem of measurement of cultural distance variable has been investigated by van Hoorn and Maseland [46]. The authors analyse the implications of using 'cultural distance' variable, defined as a difference between home and host country scores of one or more cultural dimensions, on robustness of the empirical results obtained. They conclude that one cannot compare the impact of this 'cultural distance variable' on FDI for different countries of origin. Following the conclusions emanating from their study, Kapas and Czegledi [47] construct a 'cultural distance' variable taking into account the problem of 'the mixed impact of cultural distance and the culture in the host country' when constructing cultural distance variable. Essentially, the results of their study suggest that the impact of culture measured in levels on FDI is greater than the impact of 'cultural distance' variables. The results of their study along the van Hoorn and Maseland [46] study clearly suggest the possible bias effect of earlier studies analysing the impact of 'cultural distance' on FDI.

In light of this discussion and in view of the important insights arising from the previous empirical work, in this study we analyse the impact of culture on FDI in transition economies while highlighting the following:

   i. The importance of cultural features of host economy that are independent of culture of the origin country, that is of specific values that could be

attributed to individual national cultures as 'core' to comprehending the cultural influences on FDI

ii. The importance of analysing the impact of institutional and cultural factors in an integrated empirical framework in which we take control of both institutional and cultural factors and examine their relative importance on FDI

In view of the possible biases associated with the 'cultural distance variable' constructed by subcontracting the origin form destination country cultural scores, we refrain from using 'cultural distance' variable in our empirical analysis. On the contrary, we postulate the importance of specific and intrinsic cultural features that reflect on deep cultural traits and different cultural models, developed by Hofstede [48, 49] to be important determinant of FDI. In what follows, we discuss the relevance of Hofstede cultural factors as determinants of FDI inflows. The impact of these factors has been fairly under-researched in transition economy context.

## 2.4 Which cultural factors matter for FDI and why: measurement issues and hypothesis

We postulated earlier that culture is important aspect of informal institutions. As such culture is associated with way formal institutions function, their quality and efficiency. Apart from this, local culture is associated with 'social risk' of investment and transition to a new market embedded in social relations. Risks associated with cross-border business go beyond economic analysis and economic risks. The social characteristics are important determinant of FDI in that they influence operational and the external environment of business, influencing business success factors in the long run. Social characteristics depicted in cultural dimensions of a society are considered important to the internationalisation process ([50] as companies do not perform their businesses in isolation from other firms and/or networks of firms [51] nor do they construct their internal capabilities in isolation. Local work ethics, values and attitudes affect business performance of foreign companies through social relations of the workforce. All economic activities are 'submerged in social relations' [52]. Social characteristics and relations are embedded in cultural dimensions of a society.

Research on culture attempted to define important elements and dimensions of national culture relating to both conscious and unconscious set of beliefs, values and norms that reflect general attitudes and preferences of a society. Hofstede study and the model of national culture presents a systematic and pioneering work on the matter, that had a major influence on understanding cultural differences among nations [52]. Hofstede introduced four cultural dimensions of a society, namely Power Distance (PDI); Masculinity (MAS); Individualism (IDV); and Uncertainty Avoidance (UAI). The fifth cultural dimension, Long term orientation (LTO) was later developed and added as additional variable by Hofstede and Bond (1988). Further research on cultural dimension and its measurement resulted in the development of the Globe cultural dimensions (Global Leadership and Organisational Behaviour Effectivness, Kogut and Singh's Index of cultural distance [53] and Schwarz Value Survey [36]. The literature has critically assessed various aspects of these cultural indices, including the Hofstede work on culture and cultural dimensions [54–56]. Most of criticism is related to the problem of time invariant nature of cultural indices including Hofstende cultural dimensions, and lack of genuine (socio) anthropological aspect of culture. In this research we follow arguments presented in [57] on the rationale of using Hofstede cultural indicators

encompassing discussion related to the i) the benefits of using separate indices rather than aggregate cultural distance indices developed by Korgut and Singh (see [57]); ii) the stability of cultural values over time and the empirical evidence pointing to no significant variation of Hofstede indices over time; iii) the benefits of using Hofstede cultural dimensions over other indices that have been originally developed using Hofstede cultural dimensions such as is the case of the Globe indices or Kogut and Singh's Index. Thus, Hofstede [58] argues that the Globe index is deficient amid its complexity and, as such is less useful in empirical analysis, while Shenkar [59] points that we lose important information relying on aggregate cultural index i.e. Kogut and Singh's Index. In what follows we present the five Hofstede cultural dimensions, brifly review the empirical literature using Hofstede indicators and present the hypothesis.

### 2.4.1 Power distance index (PDI)

The first cultural dimension is Power Distance. This cultural dimension uncovers general perception of social inequality predominantly related to power concentration and social status [60].

This dimension represents the degree to which less powerful members of society within their institutions (family, school, etc.) expect and accept that power is unequally distributed. People are not equal by nature and inequality is present in every profession, but this fact is experienced in different ways. The distance of power actually shows how society faces inequalities. And the main issue that this index deals with is how society solves inequalities among people. People in societies that have a greater degree of power distance accept a hierarchical order in which everyone has their place and do not require further explanations. In these societies, independence is a feature of a small group of people, and others depend on them. On the other hand, in societies with a low degree of power distance, people try to equalise the distribution of power and look for explanations for the unequal distribution of power. There is interdependence between people, and subordinates perceive orders as ordinary people, and superiors are available to subordinates [61].

This cultural dimension uncovers general perception of social inequality predominantly related to power concentration and social status (Ferraro, 2002). Having said this, it's worth emphasising that it indicates 'the degree to which members of an organisation or society expect and agree that power should be unequally shared' [62]. Applied to a firm level, it could be fairly assumed that the lower the index the higher the demand from workers within an organisation for more equally distribution of power (wealth) and higher the demand for 'justification for' and 'rationale behind' certain decisions or actions on a company level. All of these could lead to potential conflict between the workers and their superiors. Dispute and conflict(s) may arise from supposedly higher intolerance toward specific hierarchical structure of power, injustice or inequalities. Members of such society (workers within companies) prefer more horizontal organisational structure. On the other side, workers within societies with high power distance indices may be assumed to be: i) more submissive to 'formal power structure' and associated social distances; ii) to have lower levels of self-esteem associated with conflict-avoidance, (positive) affirmation and obedience. All of these lead to higher tolerance of: improper communication, improper job appraisal, overtime and unpaid work, and high tolerance of wage gaps that may be persistent within particular organisation. In light of this discussion it is firmly difficult to hypothesise what are the preferred cultural features by multinational companies seeking investments abroad. Whether a particular MNC prefer societies with high or lower Power distance depend on host of factors including company culture, organisational structure and motive of investment.

As for the latter, we argue clearly that internationalisation of production activities through FDI seeking natural resource and/or cost-efficiency is concerned with, or values, work ethics that has a respect for 'social hierarchical distance'. On this ground it seems plausible to argue that MNC seeking to access resources or to reduce production costs prefer societies with higher Power Distance. Given the specific context of our research the positive relationship between PDI and FDI could be assumed. However, from theoretical perspective, we do acknowledge that the sign of the relationship could go both ways.

H1: *Power Distance positively affects foreign direct investments in transition economies*.

### 2.4.2 Individualism versus collectivism (IDV)

Societies in which the degree of individualism is higher compared to collectivism value the efforts of the individual more than the collective and team results. Collectivism, on the other side represents a firmer social framework in which individuals can expect their extended family or some other group to care for them in exchange for unquestioning loyalty. Individualism, on the other hand, uncover preference that everyone is responsible only for themselves, the emphasis is on individualism and the ideal is leadership, belonging to an organisation is optional, the identity of the individual is based on his personal characteristics. Collectivism emphasises the organisation, the ideal is group membership, belonging to an organisation is a matter of morality, the identity of an individual is based on his belonging to the collective [52].

In view of this, in this research, we posit that more individualistic societies have positive attitudes toward competition and rivalry, with individuals being more determined and oriented toward self-interests, self-promotion and struggle for achievement. The individualistic society is thus characterised with proactive individuals, who strive to achieve their goals based on their individual efforts, and are less relying on social-framework. In view of this, we argue that individualist societies embody values and attitudes conducive to economic growth and efficiency, and are more likely to and/or that they willingly engage in 'competitive (social) struggle' that underpins productivity growth. Hence, the positive relationship between IDV and FDI is anticipated.

H2: *Individualism positively affects foreign direct investments in transition economies*.

### 2.4.3 Masculinity versus femininity (MAS)

These dimensions do not describe a person's gender but character in humans. Societies ruled by masculinity indicate that society has propensities for heroism, assertiveness, authority, success, and material rewards for success. Society as a whole is more competitive, money and material goods are important, successful and independent people are respected, and people are valued according to the material goods they own. The opposite of masculinity is femininity which signifies modesty and a propensity for agreement. Also, indulgence and consensus are considered women's values, as well as caring for the weaker, and people in society are more focused on quality of life [52].

According to [63], apparently, more masculine societies uncover cultural models that value material goods and material rewards for success, as opposed to quality of life and merits associated with common good that present attitudes of more feminine societies. Having said this, it could be reasonably expected that more Masculine societies are characterised by individuals and leaders who are competitiveness driven and who manage business operations by objectives. Such leaders are less sensitive to social or employee issues, they are decisive and act in isolation. On the other hand, leaders and managers of organisations of more feminine societies prefer consensus over

aggressiveness. In view of this, it could be reasonably assumed that more masculine societies are more competitive societies, assumed to be societal attributes that foster better economic performance in general framework of a capitalist society. Notwithstanding this, it could be argued, that masculine culture traits embodied in an individual managers are not always preferred by MNCs. In case MNC's organisational culture rests on assertiveness and collective affirmation, and in case company values organisational capabilities as opposed to self-affirmation of individual employees, more feminine model of culture may be preferred. In light of this discussion, we assume that more masculine societies could be both positively and negatively related to FDI.

H3: *Masculinity positively (negatively) affects foreign direct investments in transition economies.*

### 2.4.4 Uncertainty avoidance index (UAI)

This dimension expresses the degree to which members of society feel fear or discomfort from an unfamiliar situation. This index is often misinterpreted as risk aversion. Risk avoidance is a characteristic of the individual, while uncertainty avoidance is a feature of society. The basic question this index deals with is: should we try to control the future or just let it happen? We have societies that are actively dealing with the future, i.e. they have inherent control, and societies where events are out of control (fatalism). Countries with high DACI exhibit "rigid" behaviours and are intolerant of unusual behaviours and ideas. Such nations prefer strict and precise rules of conduct in society, regulations and guidelines to minimise uncertainty. People in such societies feel more comfortable when there is a clear structure and when society is well organised. On the other hand, countries where the DACI is low reflect a more relaxed attitude in which practice is more important than rules. In such societies there is aversion to any rules and norms. But if aversion is "moderate," then it's mostly societies that are more creative and flexible. People in such societies use common sense when making decisions and rely less on prescribed rules [52].

Overall, it could be said that societies with high uncertainty avoidance are characterised with high emotional resistance to change and may feel anxious about the future [60]. It could be reasonable assumed then, that these societies are reluctant to working in unfamiliar (uncertain) environment linked to foreign companies, and may be resistant to changes in organisational structure, or any changes in business conduct. As for the former, they can present additional obstacles to foreign companies, and may thus result in "discrimination by the government, consumers, and suppliers" [64]. As for the latter feature, it is probably least preferred by international business, amid the dynamics of changes of microeconomic determinants of global industry competitiveness and the constantly changing international business environment. Bearing this in mind, we hypothesise that uncertainty avoidance exhibit a negative influence on FDI.

H4: UAI *negatively affects foreign direct investments in transition economies.*

### 2.4.5 Long term orientation versus short term normative orientation (LTO)

A society from a long-term oriented environment cultivates virtues that are future-oriented - perseverance, thrift, while societies from a short-term oriented environment cultivate virtues that are related to the past and present - respect for tradition and fulfilment of social obligations. Societies that have a low LTO index generally prefer to maintain traditions and norms that have been respected in the past, while social changes are viewed with suspicion. On the other hand, societies with a high LTO have a somewhat more pragmatic approach: they encourage savings and innovation in education as a way to prepare society for the future [52].

As far as the latter characteristic is concerned it could be argued that MNCs prefer societies with long-term, rather than short-term orientation.

H:5 LTO *positively affects foreign direct investments in transition economies.*

## 2.5 Review of empirical literature on the impact of Hofstede cultural factors on FDI

Holmes et al. and Mac-Dermott and Mornah conducted research on how collectivism and future orientation affect the movement of inward FDI [65, 66]. Data from the Global Leadership project and the effectiveness of organisational behaviour (House et al., 2002) were used. The analysis was conducted on 50 countries (21 from Europe, 15 from Asia, 9 from North, South and Central America, 3 from Africa, 2 from Australia) for a period of nine years. They came to the conclusion that the greater presence of collectivism in society negatively affects the attraction of FDI, and that societies that are future-oriented promote capital investment of domestic entities. Bezpaliukh (2016) using Hofstede's dimensions in his paper analyzes how cultural factors, primarily concentration of power, avoidance of uncertainty, and language influence the attraction of DSI. The analysis covers post-Soviet bloc countries (Estonia, the Czech Republic, Poland, Slovakia and Hungary) and the results suggest that a higher degree of uncertainty avoidance, a lower concentration of power and a common language have a positive effect on FDI inflows.

Bhardwaj, Dietz, and Beamish analysed how cultural factors, more precisely the avoidance of uncertainty and trust, influence the choice of locations of foreign companies [67]. They concluded that foreign companies prefer to invest in countries that have a higher degree of uncertainty avoidance and a high level of trust. Steigner, Riedy, and Bauman examined the impact of Hofstede's cultural dimensions on DSI flows. [68]. They came to the conclusion through OLS regression that countries with civil law and countries with customary law prefer to invest in different countries and sectors. Hofstede's cultural dimensions are also analysed by Goraieb [69]. They conducted an MRQAP analysis on the example of 45 countries and came to the conclusion that firms avoid investing in countries that differ from theirs in terms of the presence of a high degree of uncertainty. Also, firms prefer to invest in countries that are similar to theirs in terms of power concentration. What these four studies have in common is that they all use Hofstede's cultural factors.

We will also use Hofstede indices in this study. Most research focus on specific factors such as collectivism and future orientation or avoidance of uncertainty and trust [65, 67]. We contribute to the literature on foreign direct investment by testing the widest possible set of cultural dimensions that can influence the investment decisions of foreign companies in a particular country. Unlike previous research, we include 8 transition economies as host countries. The analysis includes also the four countries of Southeast Europe (Albania, Bulgaria, Croatia and Serbia) that have not been previously investigated. Using a bilateral econometric framweork on FDI stock gives us the opportunity to question in more detail the importance of cultural and institutional factors in explaining differences in FDI.

## 3. Empirical analysis

### 3.1 Model and data issues

In order to analyse the impact of institutional and cultural determinants on FDI, we pursue a panel data analysis. The empirical analysis covers four South East European countries (Albania, Bulgaria, Croatia and Serbia) and five Central and Eastern

European countries (Estonia, the Czech Republic, Poland, Slovakia and Hungary) in the period from 2000 to 2018, containing information on FDI and host country characteristics. Each observation point in our dataset reveals FDI flows between home country "i" (ten major trading partners) and host country "j" in the period under observation. We develop a baseline specification of the following form:

$$Ln\ FDI_{ijt} = \beta_0 + \beta_1 ln\ GDP_{it} + \beta_2 ln\ GDP_{jt} + \beta_3\ DIST_{ijt} + \beta_4\ INFL_{jt} + \beta_5\ TradeO_{jt}$$
$$+ \beta_6\ ln\ WAGE_{jt} + Country + Time + \varepsilon_i$$

(1)

Where
$lnFDI_{ijt}$ denotes log FDI stock between home i and host countries j in period t;
$lnGDP_{it}$ denotes log of gross domestic product of home country i in the period t;
$lnGDP_{jt}$ denotes log of gross domestic product of home country i in the period t;
$DIST_{ijt}$ denotes log distance between capital cities of host and home countries;
$INFL_{jt}$ denotes the inflation rate of the host country j in the period t;
$TradeO_{jt}$ denotes exports and imports share in GDP of the country *i* in the period *t*;
$WAGE_{jt}$ denotes relative unit labour cost of the host country j in the period t;
Country denotes country dummy variables used to control for time-invariant country specific effects;

Time denotes year dummy variables used to control for time specific effect; and.
$\varepsilon it$ —random error (structure eit determined by the Fixed Effect (FE) model).

We then investigate which particular features of institutional quality are important determinant of FDI flows in transition economy context while incorporating three individual institutional indicators in equations of the form:

$$Ln\ FDI_{ijt} = \beta_0 + \beta_1 ln\ GDP_{it} + \beta_2 ln\ GDP_{jt} + \beta_3\ DIST_{ijt} + \beta_4\ INFL_{jt} + \beta_5\ TradeO_{jt}$$
$$+ \beta_6\ ln\ WAGE_{jt} + \beta_8\ INST_{jt+}\ Country + Time + \varepsilon_i$$

(2)

where INSTjt represents institutional quality indicators developed by the World Bank including Government Effectiveness ($GovEff_{jt}$), Control of Corruption ($Corrupt_{jt}$) and Rule of Law ($R\_Law_{jt}$).

As noted earlier, the purpose of this empirical analysis is to examine whether cultural effects play an important role in explaining differences in bilateral foreign direct investment flows in the context of transition countries. With this in mind and in line with the previously reviewed empirical literature, we further expand the analysis and include cultural distance variables in our model. Using Hofstede's cultural dimensions, we decide to utilise the gravity equation to analyse the impact of individualism (IDV), power distance (PDI), uncertainty avoidance (UAI), masculinity (MAS) and long-term orientation (LTO) on FDI. More specifically, we have:

$$Ln\ FDI_{ijt} = \beta_0 + \beta_1 ln\ GDP_{it} + \beta_2 ln\ GDP_{jt} + \beta_3\ DIST_{ijt} + \beta_4\ INFL_{jt} + \beta_5\ TradeO_{jt}$$
$$+ \beta_6\ ln\ WAGE_{jt} + \beta_7\ PDI_{jt} + \beta_8\ IDV_{jt+}\ \beta_9\ MAS_{jt} + \beta_{10}\ UAI_{jt}$$
$$+ \beta_{11}\ LTO_{jt} + Country + Time + \varepsilon_i$$

(3)

## 3.2 Data and variables

### 3.2.1 Dependent variable

In this research, we use FDI as our dependent variable which is the log of stock FDI between home and host countries in EUR. According to Christie (2003),

looking at the stock level has the advantage of stripping out the business cycle and any other 'time anomalies'. In addition, another reason for this choice is related to the functional form of the gravity equation because FDI inflows can be nil or even negative, which is something that the gravity equation cannot account for. The source of data for this variable is Database on FDI published by The Vienna Institute for International Economic Studies (WIIW).

### 3.2.2 Institutional variables

According to North (1990), good institutions influence economic activities through various channels, such as reducing transaction and production costs. Moreover, quality institutions help reduce operating costs, which increases profitability. Foreign investors are reluctant to invest in a risky and unconvincing environment and prefer locations that offer the best economic and institutional environment. Lucas (1993) suggests that in transition economies, institutional factors play an important role in attracting foreign investment compared to purely economic factors.

In order to estimate the impact of institutional determinants on FDI, we employ three indices developed by Kaufmann, Kraay, and Mastruzzi including government effectiveness, rule of law and control of corruption [70]. Each governance index ranges from $-2.5$ to $+2.5$, with higher scores corresponding to better governance outcomes. Government effectiveness (GovEff) assesses the soundness of the host country's policies and the efficiency of the administration that implements them. Rule of law (Rule) measures the confidence of agents in the rules of society, including the quality of contract enforcement, property rights and the effectiveness of the judiciary. Control of corruption (CCorr) measures corruption among public and private officials and the extent of bribery. The source of data for these variables is the World Bank. A detailed description of each institutional variable used in this analysis is given in **Table 1**.

### 3.2.3 Cultural variables

Our variable of interest is the cultural variable. Our measure of cultural variable is based on the scores developed by Geert Hofstede, which reflect country averages of individuals' attitude toward power, uncertainty, individualism etc. A detailed

| Variable | Description |
|---|---|
| Government Effectiveness (GovEff) | "Government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies." |
| Rule of Law (RoL) | "Rule of law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence." |
| Control of Corruption (CCorr) | "Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests." |
| Source *[71]*. | |

**Table 1.**
*Description of institutional variables.*

description of each cultural variable according to Hofstede (2018) used in this analysis is given in **Table 2**.

In our sample, the scores for the cultural variables can take values between 0 and 100, with a higher value indicating that power distance, individualism, masculinity, uncertainty avoidance and long-term orientation are more firmly entrenched in a nation's culture. The source of data for this variable is Hofstede [71].

| Variable | Description |
|---|---|
| Power Distance (PDI) | "This dimension expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally. The fundamental issue here is how a society handles inequalities among people. People in societies exhibiting a large degree of Power Distance accept a hierarchical order in which everybody has a place, and which needs no further justification. In societies with low Power Distance, people strive to equalise the distribution of power and demand justification for inequalities of power." |
| Individualism (IDV) | "The high side of this dimension, called Individualism, can be defined as a preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families. Its opposite, Collectivism, represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular ingroup to look after them in exchange for unquestioning loyalty. A society's position on this dimension is reflected in whether people's self-image is defined in terms of 'I' or 'we'." |
| Masculinity (MAS) | "The Masculinity side of this dimension represents a preference in society for achievement, heroism, assertiveness, and material rewards for success. Society at large is more competitive. Its opposite, Femininity, stands for a preference for cooperation, modesty, caring for the weak and quality of life. Society at large is more consensus-oriented. In the business context Masculinity versus Femininity is sometimes also related to as 'tough versus tender' cultures." |
| Uncertainty Avoidance (UAI) | "The Uncertainty Avoidance dimension expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. The fundamental issue here is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? Countries exhibiting strong Uncertainty Avoidance maintain rigid codes of belief and behaviour, and are intolerant of unorthodox behaviour and ideas. Weak Uncertainty Avoidance societies maintain a more relaxed attitude in which practice counts more than principles." |
| Long Term Orientation (LTO) | "Every society has to maintain some links with its own past while dealing with the challenges of the present and the future. Societies prioritise these two existential goals differently. Societies who score low on this dimension, for example, prefer to maintain time-honoured traditions and norms while viewing societal change with suspicion. Those with a culture which scores high, on the other hand, take a more pragmatic approach: they encourage thrift and efforts in modern education as a way to prepare for the future. In the business context, this dimension is referred to as "(short-term) normative versus (long-term) pragmatic" (PRA). In the academic environment, the terminology Monumentalism versus Flexhumility is sometimes also used." |
| Indulgence (IND) | "Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. Restraint stands for a society that suppresses gratification of needs and regulates it by means of strict social norms." |

Source *[52]*.

**Table 2.**
*Description of cultural variables.*

*3.2.4 Control variables*

Further, we incorporate a set of control variables. In our model we include information on gross domestic product of home and host country (GDPi and GDPj), distance (DIS), labour cost (LC) and inflation rate (INF), which proved to be significant in a number of previous empirical studies on FDI determinants.

As stipulated by the gravity model, both home and host countries' market size are important determinants of FDI. The market size of the home country is a proxy for the economic power of the source country. The host country GDP serves as a proxy for the host country market size and thus the potential market for the investor's products. We expect the coefficients of both GDP variables to be positive. The source of data for this variable is The Vienna Institute for International Economic Studies (WIIW).

Distance in this research pertains to geographic distance and serves as a proxy for all possible transportation and operating costs (see [72, 73]). The rationale behind including geographic distance to explain FDI is the greater cost of obtaining relevant information as well as the difficulties in managing affiliates in distant regions. The distance in this paper represents the geographical distance between the capital cities of home and host country in km. The source of data for this variable is CEPII database.

Furthermore, the prevailing factors for attracting FDI, besides market size and access to host market, certainly include the costs of the input factor. Previous empirical studies show that labour costs have a significant impact on FDI and play a crucial role in labour-intensive industries, as lower labour costs attract more investment. Studies suggest a double effect of labour costs. Numerous studies show that labour costs have a negative impact on foreign direct investment inflows, which is in line with the findings of Bevan and Estrin [74]. On the other hand, certain authors found that labour costs have a negative but statistically insignificant impact on FDI [75]. In our analysis unit labour cost is measured as average gross monthly wages. The source of data for this variable is UNECE.

We incorporate inflation rate as a control variable in our model. Inflation rate is often used as a proxy for macroeconomic stability in general. Political and macro-economic stability along with transparency of legal regulations, such as land acquisition and repatriation of profits, can be important when making investment decisions [76]. The lack of macroeconomic stability creates a high degree of uncertainty for investment projects. Successful implementation of economic reforms in transition countries can be a good sign for potential investors to invest, given that stable macroeconomic performance implies lower investment risk. Thus, the lower the average inflation rate is in the host country, the more foreign investment will be attracted to the country [77]. We expect that foreign investment, ceteris paribus, will be attracted to countries with lower inflation rates. Source for this variable is IMF database.

Finally, we incorporate openness as a control variable in our model. Previous empirical results show that the openness of the economy is positively and statistically related to attracting foreign direct investment. Mphigalale states in its research that the openness of the economy contributes to attracting foreign direct investment in transition countries, but this must be complemented by appropriate macroeconomic policies [78]. The openness of the economy is the sum of exports and imports of goods and services measured by gross domestic product (**Table 3**). The source of data for this variable is the World Bank. Descriptive statistics for each variable are presented in **Table 3** while the correlation matrix is in Appendix 1.

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| lnFDI | 1112 | 9.02 | 0.43 | 6.80 | 10.69 |
| lnGDPhost | 1197 | 24.72 | 1.16 | 21.97 | 27.09 |
| lnGDPhome | 1197 | 27.24 | 1.40 | 23.73 | 29.01 |
| Distance | 1197 | 949.92 | 468.34 | 59.61 | 2126.43 |
| Inflation | 1197 | 4.09 | 8.96 | −2 | 112 |
| Trade oppeness | 1197 | 111.92 | 36.34 | 24.17 | 192.34 |
| lnWage | 1064 | 6.55 | 0.63 | 4.24 | 7.33 |
| IDV | 1216 | 49.75 | 17.61 | 25 | 80 |
| PDI | 1216 | 68 | 19.49 | 40 | 104 |
| UAI | 1216 | 77.12 | 13.93 | 51 | 93 |
| MAS | 1216 | 59 | 25.72 | 30 | 110 |
| LTO | 1216 | 25 | 6.76 | 15 | 33 |
| GovEff | 1224 | 0.46 | 0.48 | −0.84 | 1.16 |
| RoL | 1224 | 0.32 | 0.60 | −1.27 | 1.37 |
| CCorr | 1224 | 0.17 | 0.51 | −1.17 | 1.30 |

**Table 3.**
*Descriptive statistics.*

### 3.3 Methodology

In order to account for the panel structure of the data, we use bilateral fixed effects (FE) and random effects (RE) estimations. To choose between the FE and RE estimator, the Hausman (1978) test statistics are computed. The results of Hausman test showed that the model should be set as fixed effect model. This type of model is basically an Ordinary Least Squares (OLS) regression that includes a dummy variable for each country to account for country-specific effects (LSDV model). The OLS method is optimal if error processes have the same variance (homoscedasticity) and all of the error processes are independent of each other. According to Plümper et al. [79] panel data typically display contemporaneous correlation across units (i.e. large errors for country i at time t will often be associated with large errors for country j at time t), unit level heteroskedasity (i.e. variances of the error processes differ from country to country) and serial correlation (i.e. errors for each country show temporal dependence) making inference from standard errors produced by LSDV incorrect.

In order to test for possible serial correlation, we employ the Wooldridge (2002) test which indicates the presence of serial correlation in the panel data. In addition, the Breusch and Pagan test and Pasaran CD (cross-sectional dependence) test indicate a significant presence of heteroscedasticity and cross-sectional dependence/contemporaneous correlation. To avoid these problems, we follow Beck and Katz's recommended procedure, using OLS with panel-corrected standard errors (PCSE), a method widely used in empirical research that assumes by default that the disturbances are heteroskedastic and contemporaneously correlated across panels [79, 80]. This estimation approach is the suitable method to test our hypotheses with the available data and provides efficient and robust outcomes, suitable for formulating accurate conclusions. We note that we do not make use the alternative the Generalised method of moments estimator due it is not feasible for our data set (see [81]).

**Tables 4** and **5** report the results of the econometric analysis of the model specifications presented above. Specifically, the table reports OLS fixed effect panel data estimates with panel-corrected standard errors. We first estimate Eqs. (1) using three individual subdimensions of institutional development singly due to the problem of multicollinearity between the individual institutional variables.

The "traditional" gravity variables in all specifications are proved to behave as expected. Both host and host countries' economic size, proxied by GDP levels, are important determinants of FDI. The distance variable is also found to have significant implications for FDI flows which is in line with the gravity model hypothesis and previous empirical findings.

We find that labour costs adversely affect FDI flows. The coefficient on labour cost is negative and significant at 1% level. The coefficient of Trade openness is positive and significant at 5%, whereas the inflation rate is not suggested to influence FDI flows. This result may be explained by the observation that we are no longer in the early years of the transition process and all transition countries from the sample are characterised with relatively stable macroeconomic environment.

When it comes to institutions, the most important conclusion resulting from our analysis suggests that institutional variables do not exhibit significant influence on FDI flows in transition countries. The results obtained in this analysis are consistent with those obtained by Lucke and Eichler who study the impact of institutions and cultural factors in an integrated empirical framework [31]. Noteworthy is that institutional variables remain insignificant even when including lagged values, and the results are robust to different model specifications (i.e. manufacturing value added, productivity levels and differentials, population).

Regarding cultural determinants of bilateral FDI, **Table 4** reports the results based on the Hofstede cultural frameworkandsummarizestheresults for

|  | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| GDP home | 0.103*** | 0.103*** | 0.103*** |
|  | (0.000) | (0.000) | (0.000) |
| GDP host | 0.580*** | 0.605*** | −0.646*** |
|  | (0.000) | (0.000) | (0.000) |
| Distance | −0.000*** | −0.000*** | −0.000*** |
|  | (0.000) | (0.000) | (0.000) |
| Inflation | −0.001 | −0.001 | 0.001 |
|  | (0.139) | (0.140) | (0.153) |
| Trade openness | 0.001** | 0.001** | 0.001** |
|  | (0.009) | (0.005) | (0.000) |
| Wage | −0.607*** | −0.601*** | −0.583*** |
|  | (0.000) | (0.000) | (0.000) |
| Gov. Effectiveness | 0.050 |  |  |
|  | (0.452) |  |  |
| Control of Corruption |  | 0.007 |  |
|  |  | (0.888) |  |
| Rule of Law |  |  | −0.051 |
|  |  |  | (0.369) |

*Notes: All the regressions include a constant, country and time dummies (not reported in the **Table 4**).*
*\*Statistical significance at the 10 percent level.*
*\*\*Statistical significance at the 5 percent level.*
*\*\*\*Statistical significance at the 1 per- cent level.*

**Table 4.**
*Regression results: FDI and institutions (OLS with PCSE).*

| | Model 4 |
|---|---|
| GDP home | 0.109*** |
| | (0.000) |
| GDP host | 0.281*** |
| | (0.000) |
| Distance | −0.000*** |
| | (0.000) |
| Inflation | −0.001** |
| | (0.038) |
| Trade Openness | 0.000 |
| | (0.537) |
| Wage | −0.293*** |
| | (0.000) |
| Power distance (PDI) | 0.006*** |
| | (0.000) |
| Individualism (IDV) | 0.012*** |
| | (0.000) |
| Masculinity (MAS) | −0.008*** |
| | (0.000) |
| Uncertainty avoidance (UAI) | −0.005*** |
| | (0.000) |
| Long-term orientation (LTO) | 0.003*** |
| | (0.016) |

Notes: All the regressions include a constant, country and time dummies (not reported in the **Table 5**).
[*]Statistical significance at the 10 percent level.
[**]Statistical significance at the 5 percent level.
[***]Statistical significance at the 1 per- cent level.

**Table 5.**
*Regression results: FDI and culture (OLS with PCSE).*

thecoefficientson fivecultural indicatorsincludingindividualism (IDV), power distance (PDI), uncertainty avoidance (UAI), masculinity (MAS) and long-term orientation (LTO).

We find that higher levels of individualism, power distance and long-term orientation in the host countries have significant impact on the FDI. Meanwhile, thecoefficients on uncertainty avoidance andmasculinity are negative andsignificant as expected. Thus, theresults render support to the a priori postulated hypothesis.

## 4. Conclusion

Foreign Direct Investments has been largely found to positively affect economic growth in transition economies. Increases in FDI have been associated with productivity and export growth of local companies via knowledge spillovers and complementary effects on domestic investment. The impact of FDI on economic growth seems, however, conditional on the level of human capital and absorptive capacity of a host economy. Determinants of FDI in transition economies have been intensely researched highlighting the importance of traditional factors, institutions and policy choices in determining locational decisions of multinational corporations. Although informal institutions and cultural factors have increasingly been

characterised as important factors that off-set for the underdeveloped institutional capacity of transition economies, the impact of cultural ties on FDI remains fairly under researched. Informal economic structures and cultural similarities emanate trust and enable strong business ties across borders. How important are these factors in explaining differences in FDI flows among transition economies is the principal question investigated in this research.

The cultural features seem to have been disregarded as important factors which influence the way in which markets develop and evolve. Homogenous cultures tend to understand the rules and norms of social behaviour in which firms operate and construct their capabilities. These tacit aspects of market, reflected in diverse cultural features of a society, shape and model the behaviour of local economic agents. As such, these are also likely to influence MNC's decisions on where to invest. They seem to reveal hidden behavioural patterns that underpin societal prosperity, such as responsibility, ethics and trust. The idea that these norms affect companies' efficiency and growth prospects cannot be dismissed. On the contrary, these factors should be perceived as important determinants of FDI that not only minimise transaction costs, but also enhance productivity potential of foreign affiliates, and/or simply create an environment conducive to business growth. Such an environment is perceived as friendly and or familiar market from MNC perspective.

We rely on gravity econometric framework and examine the impact of cultural factors on FDI using bilateral FDI flows between home (i.e. major trading partners) 8 transition economies, depicted as host countries, in the period 2000–2018. We study this relationship in an integrated framework considering principal gravity forces, traditional FDI determinants, policy and institutional factors.

In this research we provide strong and robust evidence that cultural factors, depicted in Hofmann cultural indices, influence MNCs' locational decisions. Other things held constant, specific cultural features seem more important than formal institutions, which seems at odds with standard neoclassical propositions, and shed some new light on the way we understand international business transactions.

Having said this, here we do not intend to generalise our findings, since we examine the relative importance of cultural factors measured in levels, and assigned to certain cultural values, in attracting FDI in the specific context of transition economies. However, we do pay attention to the relative importance of formal institutions in explaining differences in bilateral FDI stock between selected transition economies considered as host economies in our analysis. The fact that institutional factors have not proven to exert significant influence on FDI in our analysis does not imply that formal institutions are not important or of lesser importance. We, however, believe that more work on the matter of interplay between culture and formal institutions in comprehending differences in inward FDI flows is needed. Future research should focus on disentangling the impact of institutions possibly conditional on some important, intrinsic cultural values. The nature of our dataset inhibits further investigation of the possible interplay, suggested by the Du et al. study [82].

## Appendix 1

```
            | logFDI logGDP~t logGDP~e DISTANCE  INFL  TradeO logWag~t  GovEff  R_Law  Corrupt   PDI
------------+------------------------------------------------------------------------------
     logFDI | 1.0000
  logGDPhost| 0.5809  1.0000
 logGDPhome | 0.2727  0.0411  1.0000
   DISTANCE | -0.1890 -0.3242  0.3486  1.0000
```

```
        INFL |  -0.1338  -0.2630  -0.0591  -0.0050   1.0000
      TradeO |   0.0560   0.0196   0.0746   0.0290  -0.2563   1.0000
 logWagehost |   0.2710   0.4907   0.1298  -0.1621  -0.4883   0.4015   1.0000
      GovEff |   0.1631   0.2069   0.0350   0.0064  -0.3580   0.5840   0.5953   1.0000
       R_Law |   0.2140   0.2824   0.0441   0.1055  -0.3268   0.5579   0.5404   0.9373   1.0000
      Corrupt|   0.0770   0.0669   0.0362   0.2775  -0.2848   0.4105   0.4304   0.8394   0.8946   1.0000
         PDI |  -0.0495   0.0364  -0.0221  -0.3175   0.0878  -0.1498  -0.1013  -0.3901  -0.5724  -0.5897   1.0000
         IDV |   0.2657   0.3912   0.0003   0.0082  -0.1425   0.5403   0.3158   0.6734   0.7871   0.6845  -0.5641
         MAS |   0.2096   0.4224  -0.0236  -0.3800  -0.0569   0.4921   0.1989   0.2574   0.1797   0.0102   0.4222
         UAI |   0.1929   0.3534  -0.0150  -0.0454   0.1184  -0.6783  -0.2291  -0.6100  -0.4481  -0.4224  -0.1482
         IVR |   0.2433   0.4877  -0.0453  -0.6144   0.0221  -0.2467   0.2786  -0.0731  -0.1599  -0.2871   0.2971


             |    IDV      MAS      UAI      IVR
-------------+----------------------------------
         IDV |   1.0000
         MAS |   0.4786   1.0000
         UAI |  -0.2121  -0.3567   1.0000
         IVR |   0.0659   0.4164   0.3032   1.0000
```

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# Africa's Journey to Industrialization

*Chimezirim Young and Ayo Oyewale*

## Abstract

This chapter examines the history of other nations in achieving rapid industrialization, explains the scientific processes involved, as well as developing a model to guide Nigerians in curbing mass unemployment. This industrialized countries where selected randomly from the pool of industrialized nations, to represent the different continents. Their journey to industrialization was studied and itemized to help developing countries design a unique strategy to curb mass unemployment. The chapter adopts historical analysis to gather evidence and formulate ideas from the past and empirical analysis by direct and indirect observation. The data used in this study were both primary and secondary. The results of the study were descriptive in nature. The study revealed several models that would guide Nigerians to achieving industrialization. In conclusion, the principles and strategy applied by the industrialized nations for achieving industrialization and curbing mass unemployment is learning: theory and practical. Learning: proper education and training on how to manufacture products promotes industrialization, productivity and create job opportunities. The study emphasizes education and training as the principal learning tools for increasing employment in quantity and quality and promoting improved productivity.

**Keywords:** industrialization, productivity, learning, sustainable development, policies, science and technology, technological entrepreneurship, manpower development and innovation

## 1. Introduction

History is important, present decisions can be concluded based on yesterday's events. Just as a man values his memory, so the human race should value their history. Deductions from history enlighten the present mind, bringing about self awareness and historical exposure. History is indeed, "a roadmap that shows where you were from where you are and navigates you to the future". It is a wonder to note that many people and society plan without taking history into cognizance. Consequently, most men have been thinking and doing things as if the world began today. The flagrant disregard of history has led to man's inability to predetermine events and procedures, which makes man to continue to repeat his mistakes and suffer avoidable pains [1].

This book presents how Nigerians can start a journey towards industrialization; solve their myriads of problems, improve on its performance and save the failing nation from further collapse. It presents the experiences of other nations in promoting rapid industrialization; explains the scientific bases of the activities they carried

out, and describes how these other counties have used their experiences to achieve industrialization and enhance their performance. History is indeed, "a roadmap that shows where you were from where you are and navigates you to the future". It is a wonder to note that many people and society plan without taking history into cognizance. Consequently, most men have been thinking and doing things as if the world began today. The flagrant disregard of history has led to man's inability to predetermine events and procedures, which makes man to continue to repeat his mistakes and suffer avoidable pains [1].

## 2. Lessons from history

History shows that Britain and France spent 2000 years before achieving modern industrialization [2]. Here is an account of the positive changes which formed an intrinsic part of their evolutionary development voyage. Most pre-industrial European economies also had subsistence (as it is the case in Nigeria, today) standards of living among majority of the population. For example, in medieval Europe, a large percentage of the labor force was employed in subsistence agriculture. Increase in Poverty, Increase in population and escalated crime rates; during the reign of Henry VIII, approximately 72,000 people were executed for criminal offenses [3].

In the eighteenth and nineteenth centuries, massive increase in agricultural productivity due to the mechanization of agricultural processes was experienced by the United Kingdom, this experience was known as the British Agricultural Revolution. The British Agricultural Revolution enabled and freed up a significant percentage of the workforce from farming and helping to drive the Industrial Revolution. Increase in steel works and Demand for more machinery was increasing, job opportunities also began to increase [4]. The overwhelming efficiency of mechanized farming made the increased population not to be dedicated to agriculture. The process of production was divided into simple tasks, each one of them being gradually mechanized in order to boost productivity and thus increase income. The application of new technologies enabled the industrialization process to continue to evolve. Industrialization is the replacement of hand tools by machine and powered tools by a society. Industrialization also involves vast economic and social changes, e.g., a tendency towards urbanization, a growing body of wage earners, increased technical and advanced education [5].

In 1938, a ship-building yard was established and engineering works began. In 1939 the corset iron company started a steelworks. France, Germany, Sweden and other European nations had similar experiences and Britain had a single digit unemployment rate of 4.0% (tradingeconomics.com) and the ability of their economy to absorb labor increased [6].

In Singapore's case the most feasible solution to their low economic development and high unemployment rate was to embark on a bold and comprehensive program of industrialization. Labor-intensive industries were a prime target. However, industrialization was a relatively new experience to Singapore because they had no industrial tradition. Both capital and entrepreneurship had historically been active in trading and commercial activities. The working population in Singapore focused mainly in trade, processing and service activities [7].

The Economic Development Board (EDB) of Singapore invested in manpower development, being an investment promotion agency? They work with other relevant government agencies, skills and technologies. In 1971, an Overseas Training Program for Singapore workforce was established by the EDB for training in industrialized countries and subsequently, technology and design training

institutions in Singapore and other foreign countries. Additionally, to encourage the right kind of manpower training, the EDB administers the Skills Development Fund and promotes the opportunity for the trained to apply the acquired knowledge and this paid off, because they currently have an unemployment rate of 2.20%.

The need to develop a highly learned and versatile workforce is very important, and Singapore has been preparing its human capital by developing a wide pool of skilled knowledge workers. The outcome of all these developments is rapid economic growth and full employment.

Singapore emphasized the increase on R&D and the installation of high technology based industries, this restructured industries [8]. This brings about product diversification which is crucial in enhancing sustained export performance and growth. There are two engines of economic growth identified in the restructuring process in Singapore: manufacturing and services.

Studying the case of America, Colonies gained independence in 1783 just as industrial productions and coordination's were beginning to shift production from handmade to machine made. The Industrial Revolution (1820–1870) was significant to the economic development of the United States. The Industrial Revolution itself refers to a change from hand and home production to machine and factory production.

People in the Pacific Northwest practiced food preservation although substantial agriculture, built wooden houses, used nets and weirs to catch fish, and was not developed [9]. Throughout the colonies, people were self-sufficient, they lived primarily on small farms and in the few small cities and among the larger plantations, some necessities and virtually all luxuries were imported in return for tobacco, rice, and indigo exports [10].

A unique confluence of geographical, social, and economic factors facilitated American industrialization. The passage of the Embargo Act of 1807 and the War of 1812 was the real impetus for America entering the Industrial Revolution. The British opened fire when they were not allowed to search the Chesapeake ship and this made Americans upset. The desertion caused from seizing four men and hanging one of them resulted in much public outrage and the passage of the Embargo Act which stopped the export of American goods and effectively ended the import of goods from other nations. Eventually, the war with Great Britain in 1812 made it apparent that America needed a better transportation system and more economic independence. The manufacturing industry began to expand and employment began to boom [11]. This gave rise to increase in productivity and ability of the nation to absorb labor.

Small local industries such as sawmills and gristmills emerged as the colonies grew and standard of living generally increased [12]. However, the people involved were small in number which in turn slowed down their rate of technological change and advancement [9]. To check this, everybody including children worked in large numbers in mines, glass factories, textiles, agriculture, canneries, home industries, and as newsboys, messengers, bootblacks, and peddlers. The industrial processes were able to keep the unemployment rate to 3.70%.

## 2.1 Sustainable industrialization and development

Sustainable Economic Growth, Industrialization and Development (SEGID) are achieved through learning. The value of the "learning-man" appreciates in a compound fashion with learning intensity and time [12]. So what does learning involve? Stahl [13] observed that learning begins from the novices' position and progresses to the experts' position. This in turn creates relatively permanent changes in

knowledge, skills and other behaviors [14]. Thus, when a person commences an educational or apprenticeship program, he or she usually begins from the minimum level. At the end of the first year of learning, the learning-person is promoted to the second level having learnt the things scheduled for the first level. The growth achieved this way is sustainable [15]. The learning person builds up capabilities or competence i.e. **the ability to do things**. The ability to do things increases with learning. The build-up of competence continues as long as the learning person continues to learn. Hence, performance enhancement is continuous, sustainable and effective.

If this is what learning involves, what then is the benefit of learning? Drucker [16] said that only man is capable of enlargement, because man grows, develops and acquires skills, and individuals can learn a specific type of knowledge, and the amount they learn is cumulative [17]. Learning and acquiring knowledge, skills, and capabilities and applying these in solving problems, including production, are the basis for achieving sustainable economic growth and industrialization [18].

Education and training are both essential arms of the learning process. But then, Ehiametalor [19] suggests that a clear path between education and training is very important for successful manpower planning. Formal education emphasizes on the acquisition of theoretical knowledge and the development of basic mental capabilities and general knowledge. Education, according to Coombs [20], is institutionalized instructions or course of study designed to make the learning persons, or student, experience the type of curriculum that is capable of providing essential learning needs. Education equips the individual with the ability to think and reason. Nyerere [21] considered education to be an instrument for effecting economic and technological change, change in ideas and personality. The essence of education is in developing critical thinkers and enhancing performance.

Coombs [20], however, defines training as a scheme designed to generate expertise or skills needed to perform a particular job or series of jobs. Kanawaty [22] observed that training prepares people for work and life-skills are largely developed in a working situation; competence develops through improvements of awareness, knowledge and skills. These work skills are of three types: technical, interpersonal or human and conceptual skills [23]. These skills are obtained through learning. That is, from "learning-by-doing" and "learning-by-adapting" to "learning-by-design" and "learning-by-improved design" and then to "learning-by-setting-up a complete production system." [24].

## 3. Science, technology policy and modeling

Policy is a guide to thinking and action [25]; policy guides every thought process and activity undertaken in a society. Therefore, Nigeria must carefully consider its science and technology policies to guide the way we think and act.

Policies will not be successful if they do not go through the formulation stage, the implementation stage and the evaluation stage [26]. Policies once formulated, tend to become doctrines and models; they direct and justify action for some time, hence they should not be entered flimsily.

The knowledge and understanding that the scientists have about the world is often represented in the form of models. This scientific method is basically one of creating, verifying, and modifying models of the world and the goal is to simplify and explain the complexity and confusion of the world. The applied scientists and technologists then use the models of science to predict and control the world.

## 4. Models for industrialization

Discussing the journey to industrialization requires an emphasis on the desire to achieve industrialization, the desire to improve work performance and the desire to acquire knowledge. These models represented in this chapter would have no effect if there is an absence of genuine desire.

Each model discussed in this chapter represents a policy statement for personal and economic development. The policy statements were adapted from developed countries and modeled for easy interpretation and understanding. Nations must realize that attaining industrialization transforms the economy from a dependent state to an independent one, even further more to an interdependent state. Hence, the importance of these models for personal growth, economic development, performance enhancement and industrialization cannot be over emphasized. Therefore, to grow into a dependent or interdependent state, an individual or country needs to improve their manufacturing and service performance.

Every developing nation must know why and what to do to achieve that development and also know how best to go about achieving such an endeavor. It is good to understand that real growth and development do not take place suddenly; the price must be paid over an extended period of time in order to reap the benefits for a long time.

The following models offer insights on the concept of industrialization and performance enhancement. There are models that guide developing nations on the path to industrialization and models that transform individuals to become active creators, learned and productive.

### 4.1 The creed (model 1)

Before a nation attempts to be industrialized, there must be proper groundwork: research. This means a nation must undergo proper planning and forecasting. However, before a nation can plan, they need to have a direction, a goal and a vision. That direction must be well stated. This model emphasizes the need for sustaining values, having a unifying language, goal, purpose or creed to form a seamless boundary to curb tribalism, individualism, terrorism, nepotism and religious segmentation. Invariably all Africans should resolve in their hearts saying, *"I promise to think and act in a way that has not been done before, but can be done now, and should be done immediately."*

Let the vision be in a form of multiyear development plans. These multiyear development plans can make the attainment of economic development easier and faster. They can form a positive norm in the hearts of the citizenry, improve their performance and gear them towards productivity.

This creed, when said often becomes the subconscious language of the citizens. The citizens become a group of people who through their oneness of mind and language are able to achieve whatever they planned to do.

This creed is a guide and mandate that everyone must uphold, and it is a language everyone must speak. By so doing, it promotes unity and oneness. At this point, everyone would understand that although they have diverse cultures and tongues, they are one through the attainment of this creed.

#### 4.1.1 Productive citizens

A productive Citizen is one who has the ability to think and act respectively. In order to make productivity a lifestyle, citizens must be constantly thinking of new

ways and seeking the slightest opportunity to apply those new ideas. The mind is the best creative tool. What flows into the mind is definitely what is expected to flow out. The mind helps to create a thinking atmosphere for new ideas and provides the ability for application. Each thought creates a neuron, each neuron directly and indirectly formulates a policy.

The mind power is the first tool to promoting sustainable growth, development and industrialization. The potential to think and improve the world around us is directly dependent on the level of knowledge or exposure attained – conceptually, technically and human relations. The true measures of any society or any individual is not what it knows but what it does with what it knows.

We have been made to constantly think that foreigners are better than us. We have harnessed this thought so much, creating millions of neurons and automatically is seems the foreigners are truly better than us.

## 4.2 Sustainable industrialization initiators (model 2)

Observing the historical experiences of Europe, America, Singapore and other developed nations, five factors are noted as key contributors that promoted their performance and industrialization process;

1. Manpower Development,

2. Employment Creation

3. Increased Productivity

4. Inventions and Innovations

5. Increased Learning Rate

These factors as presented in **Figure 1** either grow or reduce the industrial core. It was observed that a nation which hopes to manufacture many products must develop the people to manufacture them. These people developed are referred to as the nation's workforce or manpower. Developing nation's especially African nations need to set up a framework for training university graduates in a curriculum-based scheme for 4 years, so as to acquire the skills to modernize and repackage their traditional activities and for studying, servicing, maintaining, duplicating, and eventually improving upon the things they import today.

Nigeria and other African nations need to encourage, support and give opportunities to science and engineering graduates to input the theories they acquire in universities into their artisan/craft activities like blacksmithing, wood-works, textiles/tailoring, construction works, and factory floor work settings and all other places where skill acquisition opportunities abound. This is how the countries can improve performance and produce youths that can develop independent thoughts to solutions about everyday problems. These youth shall evolve to become Industrialization Vanguards (IVs). Their Productivity increases as they develop manpower capability and are employed into productive activities. This in turn creates more room for employment through expansion, and as they continually involve themselves in productive activities, inventions/innovations sprout out and these inventions/innovations form the basis for new knowledge.

Industrialization is not about erecting structures, it is about developing competencies and improving performances for doing uncountable things.

It is about ensuring a large percentage of resource is geared towards manpower development, employment creation, increasing productivity, promoting inventions and innovations and increasing the learning rate of the citizens. Industrialization is an all-encompassing process, it equals productivity and development. Actualization can be attained when industrialization, development and productivity are growing exponentially. **Figure 2** explains the components of the industrial core.
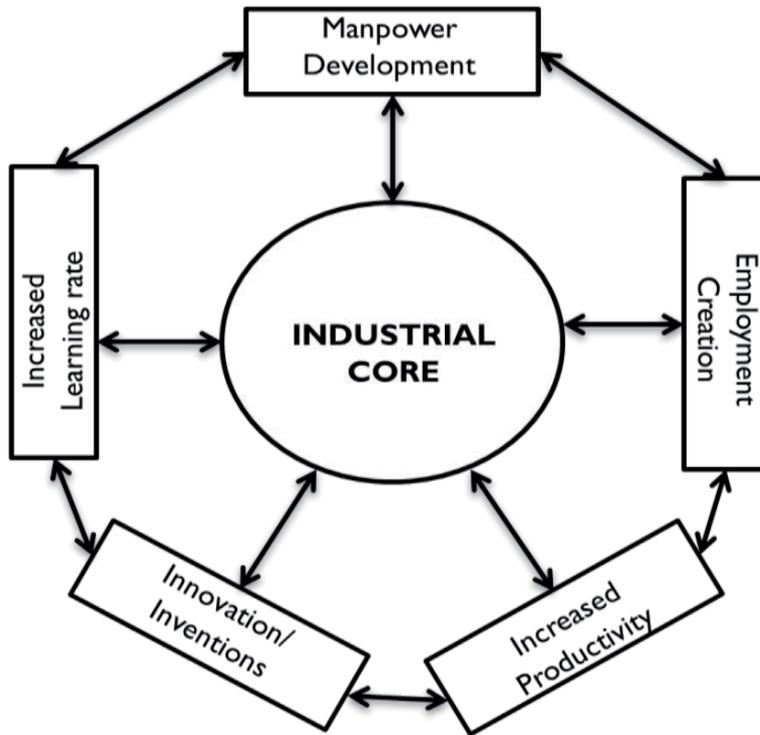


**Figure 1.**
*Sustainable industrialization initiators. Source: Author, 2012.*
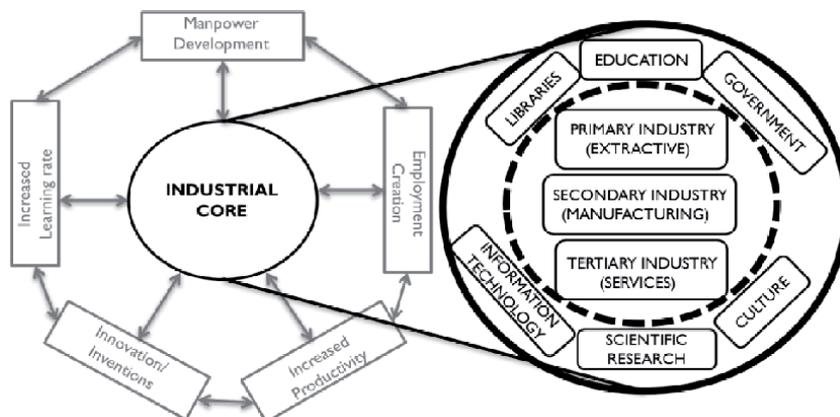


**Figure 2.**
*Components of the industrial core. Source: Author, 2012.*

### 4.2.1 The industrial core

The industrial core consists of simple parameters that must not be overlooked. **Figure 2** shows the components that make up the industrial core. The industrial core is made up of two layers: the INTERNAL CORE and the EXTERNAL CORE.

The internal core includes the primary, secondary and tertiary industries. The primary industry also known as the extractive industry deals with the extensive extraction of natural resources without provision for their renewal. The primary industry is key and fundamental for the effective existence of both the secondary and tertiary industries. The secondary industry is the manufacturing industry as it deals with the process of converting raw materials in components or parts with the use of machines, into finished goods that meet a customer's expectation or specifications. The tertiary industry which is also known as the service industry serves other industries. This basically refers to the intangible products that are important to the primary and secondary industries.

The external core constitutes the decisive environment such as the percentage utilization of libraries, educational centers, information technology centers, scientific research findings, cultural uniqueness of the citizens. The integration of all these into government policies go a long way to determine the kind of industries, level of industrialization, performances and growth prospects available. Below is a list of industries classified in their particular sector.

1. **PRIMARY INDUSTRY (EXTRACTIVE):** Agriculture, Mining, Forestry, Grazing, quarrying, Hunting and gathering.

2. **SECONDARY INDUSTRY (MANUFACTURING):** Metal works and Smelting, Automobile production, Textile production, Chemical Industries, Engineering Industries, Aerospace Manufacturing, Energy utilities, Construction industry, ship building, breweries and bottles.

3. **TERTIARY (SERVICES):** Retail and Wholesale, Transportation and Distribution, Entertainment (Movies, Television, Radio, Music theater, etc.), Restaurants, Tourism, Media, Insurance, Banking, Health care, Law.

Being ready for industrialization depends on the effectiveness of the components within the industrial core. An economy or an individual must first be familiar with the components within the industrial core before the industrialization process is initiated. That economy must clearly have a reason for industrialization and know how to go about it. This is the journey the nation needs to embark on to prepare for industrialization. This process is not a waste of time and this stage holds all the fundamental elements for development. The level of preparation determines the outcome that the nation hopes to achieve. At this phase policies are set, decision are made, objectives are outlined, plans are arrayed, resources are weighed based on availability and capacity of use, forecasts are determined and a focus is outlined. A country can only be ready for development when all these are sincerely and truthfully harnessed.

### 4.3 Three true measures of sustainable economic development (model 3)

From history we can deduce that there are three true measures of sustainable economic development and performance enhancement. They are: 1) the level of technological knowledge, 2) the level of industrialization and 3) the level of national productivity. As shown in **Figure 3**, these three true measures are intertwined.
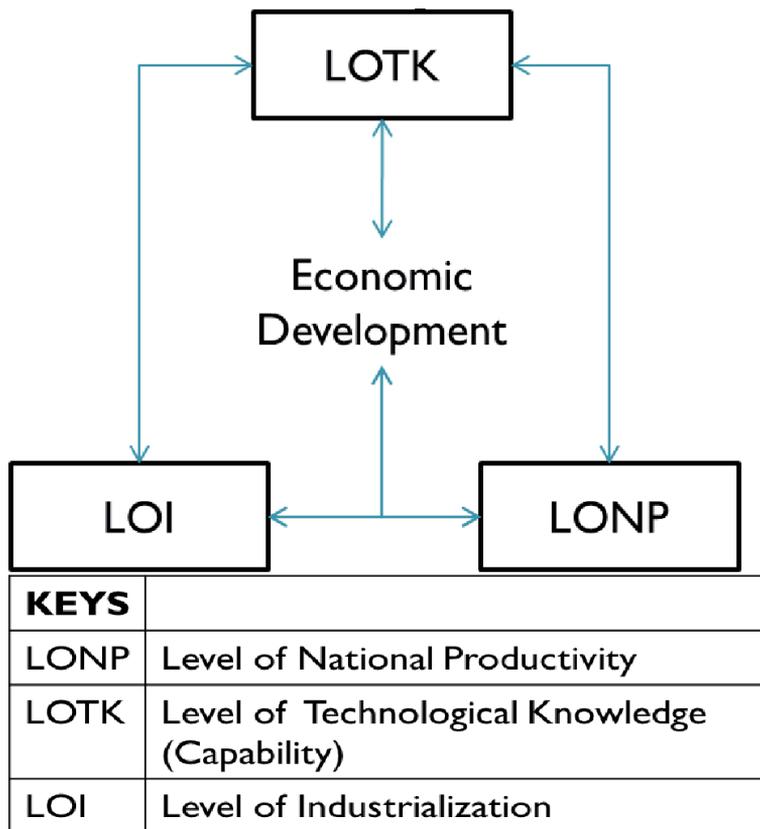
**Figure 3.**
*The three true measures of economic development. Source: Author, 2012.*

An increase in the level of technological knowledge through learning spurs increased national productivity through employment of a workforce that possesses technical knowledge. In turn, more industries would be established to utilize the knowledge and productivity in order to meet demands and exportation. As this cycle continues, the economy experiences sustainable growth and development and industrialization sets in. Industrialization is the extensive organization of an economy for the purpose of manufacturing. It introduces a period of social and economic changes that transform or liberates a human group from an agrarian society into an industrial one.

Historically, industrialization processes involves the expansion of the secondary sector in an economy originally dominated by primary-sector activities. The lack of an industrial sector in a country can slow growth in the country's economy and power, so government often encourages or enforces industrialization. These series of activities should lead to increased productivity, increased manpower that possesses technical knowledge and a high industrial cluster in all sectors.

## 4.4 The manpower learning model (model 4)

Manpower is that portion of the population which has actual or potential capability to contribute to the production of goods and services. They make up the workforce of a nation. The Manpower Development Learning Model has three key components that help initiate an efficient and effective workforce, as shown in

**Figure 4**. These components are 1) education (the theoretical part of Learning), 2) Training (the Practical part of learning) and 3) Age (experience and Timing).

A workforce that possesses a high composition of theoretical, practical and experiential knowledge can catalyze and experience greater productivity, increase in technological application, high performances and generate innovations. Industrialization can only strive where such a workforce exists. For an economy to achieve sustainable development there must be an increase in the level of industrialization, an increase in the level of national productivity and an increase in the level of technical knowledge.

A nation's workforce must therefore concentrate on increasing productivity and acquiring more technical knowledge through research and development to spur innovations. The process of acquiring such intellect is known as the Manpower Development process and the manpower learning model is a guide to effective acquisition of the knowledge. The three major components of the model, education, training, and age, are discussed below.

### 4.4.1 Education

The higher the university education completion rate, the higher the share of knowledge that intensive service industries receive. The Knowledge Intensive Service Industry provides consumers with knowledge – based services, mainly relying on high technology, expertise, information and experience. The service process includes knowledge production, knowledge dissemination and knowledge use. The knowledge Intensive Service Industry is supported mainly by science, engineering, technology and other industries. The education and skills of the labor force have been recognized to be the underpinnings of innovation.

Innovation is possible if there are people who can perform research that generates new ways of thinking and new knowledge, who can apply their knowledge and skills, and who can adapt to change. Therefore, the workforce must aim at attaining a high theoretical knowledge, especially science and engineering graduates. Simultaneously, s/he must receive complementary training and skills based on their age and educational attainment. A workforce should be encouraged to pursue a university degree, alongside complementary training/skills. Education helps to build the technical, interpersonal or human and conceptual skills of the workforce.

### 4.4.2 Training

Coombs [21] defines training as a scheme designed to generate expertise or skills needed to perform a particular job or series of jobs. Kanawaty [23] observed
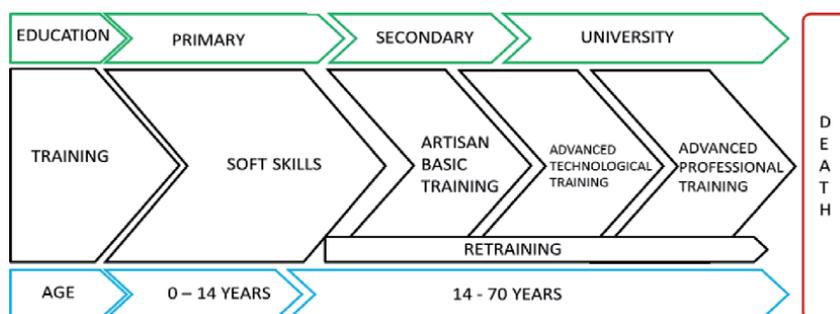


**Figure 4.**
*Manpower learning model. Source: Author, 2012.*

that the training that prepares people for work and life skills are largely developed in a working situation; competence develops through improvements of awareness, knowledge and skills.

Training skills range from soft skills, basic artisan skills to advanced technical skills. Training must be practical and must complement educational (theoretical) knowledge. Training begins when a child is born, with soft skills and goes through from basic artisan skills to advanced professional skills.

### 4.4.2.1 Soft skills

Soft skills build character; they help develop the character traits of a person and they help define their personality. Everyone needs soft skills to prepare them and maintain a healthy working attitude.

Soft skills can be learnt at any age, but the nature of these skills suggests that they are best learnt at a very young age because they are foundational. Soft skills build the competence and confidence of the labor force, giving room for more achievements.

Soft skills range from learning diverse languages, presentation skills, drawing skills, writing skills, reading skills, music skills, ethics and etiquettes, etc. These skills improve creativity. This skill will enable the workforce to create sustainable enterprises and visionary companies. Soft skills are critical for the foundational setting of the workforce. They can provide great energy and cohesion for the members of the workforce.

### 4.4.2.2 Basic artisan skills

An artisan is a craftsman, someone who does skilled work; making things with his hands, manually. The artisan skills range from woodland crafts, building crafts, field crafts, workshop crafts, textile crafts and domestic crafts.

a. Woodland crafts

This includes coppices, hurdle makers, rake makers, fork makers, besom makers, handle makers, hoop markers, ladder makers, crib makers, broaches and peg makers, clog sole cutters, charcoal burners, oak basket makers, stick and staff makers, field gate makers, willow basket makers, and net makers.

b. Building crafts

The builders include stone masons, plumbers, decorators, bridge builders, French polishers, and sign writers.

c. Farmers

This includes hedge layers, stile makers, well diggers, peat cutter, gardeners, horticulturists, tree surgeons, foresters, farmers, shepherds, shearers, bee keepers, millers, fishermen, orchardist, and veterinarians.

d. Workshop crafts

This includes chair makers, iron founders, black smiths, wheelwright, coopers, coppersmiths, tinsmiths, wood turners, coach builders, boat builders, boiler makers, boiler men, soap makers, gunsmiths,, clay pipe maker, and tool maker.

e. Textile crafts

This includes spinners, weavers, dryers, silk growers, tailors, seamstresses, milliners, hatter, lace makers, button makers, mat and rug makers, crochet workers, tatting and macramé workers, knitters, quilters, smock workers, embroiderers, leather workers, and felt makers.

f. Domestic crafts

Fish smokers, bacon curers, dish wash maker, insecticide makers, butter makers, cheese makers, brewers, cider makers, wine makers, distillers, herbalists, ice cream makers, bakers, barrister and coffee roasters, osteopaths, naturopaths, story tellers, teacher, naturalists, historians, jesters, actors, administrators, philosophers, laborers, poets, writers, midwifes, publicans, booksellers, Liberians, movie makers, public speakers, etc.

*4.4.2.3 Advanced skills*

Advanced skills are necessary for the mechanization or automation of artisan skills and the production of other advanced products not possible by craftsmen alone. Advanced skills include qualitative analytical forecasting skills, military training, leadership skills, teamwork and management skills, policy formulation and advocacy skills, wafer fabrication, Integrated Circuit Design, biotech, making petrochemicals, fine chemicals, pharmaceutical, automotive machines and cybernetics, aerospace, computer aided design tools and other precision engineering components.

Advanced skills involve a lot of research and development and are important to bring about innovation. Innovation improves and increases productivity, spurring industrialization and economic development. An advanced skill is a must-have collection of activities for advanced level students. The advanced training of workers is carried out through individual and team training, both on-the-job and in a variety of short courses. Such training is offered by institutes for improving the skills of managerial personnel and specialists. Advanced training does not usually require taking time off from work.

Therefore an "expert manpower" is one who has attained proper education and had been trained to an advanced professional technological level; integrating both theory and practice to improving productivity and promoting industrialization.

*4.4.2.4 Human activity valuation*

Every human being requires the opportunity to listen, teach and apply what they have learnt to productivity. Most of them do not know when to perform each of these activities, hence the need for the guide as represented in **Table 1**.

Listening is associated with the acquisition of theoretical knowledge, Teaching is associated with mentorship, raising successors and transferring values to younger generations. Application is simply the acquisition and utilization of practical knowledge.

## 4.5 Development flow chart (model 5)

Studying developed nations resulted in designing the Development Flow Chart, as shown in **Figure 5**. Studying the models of developed countries on how they scaled through the process of industrialization, we can identify various stages that

| Age | Listening | Teaching | Application | Total |
|---|---|---|---|---|
| 0–5 years | 85% | 05% | 10% | 100% |
| 6–19 years | 55% | 15% | 30% | 100% |
| 20–60 years | 30% | 30% | 40% | 100% |
| Above 61 years | 30% | 60% | 10% | 100% |

*Source: Author, 2014.*

**Table 1.**
*Human activity valuation model.*
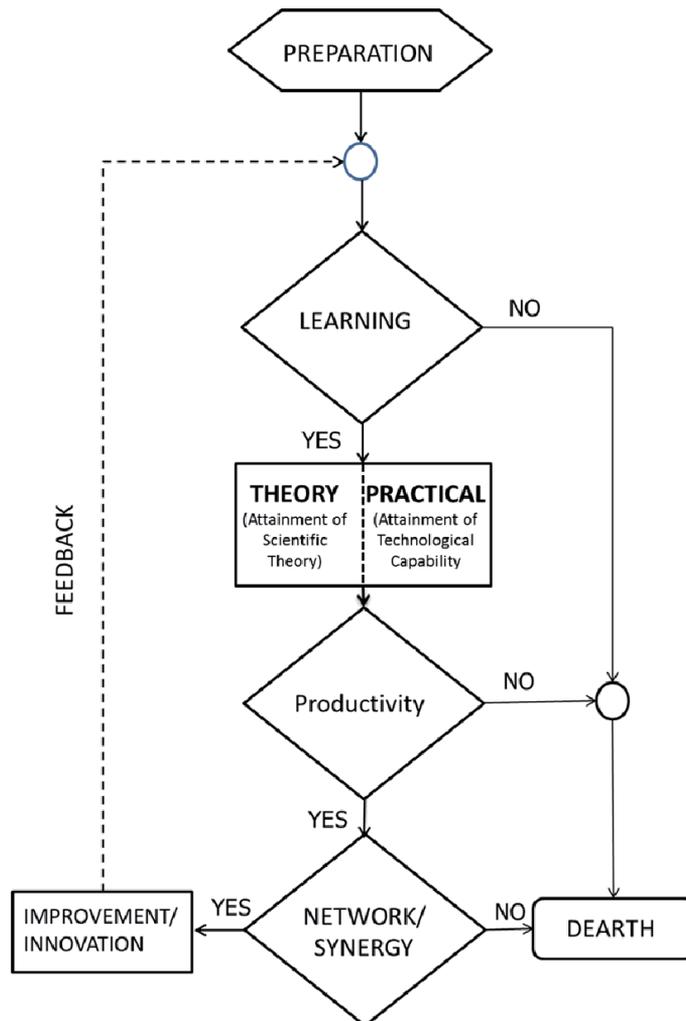


**Figure 5.**
*Development flowchart.* Source: Author, 2012.

promoted and sustained their ability to do so. These stages include; Preparation, Learning, Productivity and Networking of scientific ideas.

This flow chart shows the importance of Preparation. Although the United Kingdom went through industrialization process without preparation, it started out of curiosity. This curiosity-driven industrialization process lasted for a long time before actualization but studying other countries like America, Singapore and the

Newly Industrialized Countries (NIC) we see the elements of planning and preparation and industrialization were achieved in less than 50 years.

The developed countries had to prepare for development; hence the precursor was a decision for industrialization. Before a child is born, the parents get ready for the arrival of the baby. In the same way, before a country becomes industrialized, the country must prepare for the industrialization process.

The nation needs to setup policies to get them ready for industrialization. The nation needs to be willing to be industrialized, the nation needs to start up a chain reaction that leads to industrialization and get to a state of readiness, especially for industrialization.

From history, it was observed that learning was taken very seriously by the industrialized nations. For example, a developing nation could be likened to a growing child. A baby sits and observes, recording everything everybody does and then begins almost immediately to do likewise. The baby who depended on others to always hold her now runs on her own. That child that could only babble now speaks clearly. It is good to know that the child has been developing. No parent would be happy if their child, after two years, has failed to speak and walk. How does a child achieve all these activities? Learning!

Learning is the second stage as shown in **Figure 5**, and it comes in different forms; Learning-by-doing and learning-by-adapting, learning-by-design and learning-by-improved design, and learning-by-setting-up a complete production system [24]. People do not learn by-letting experts do everything for them. If so, they will continually be slaves to the expert who knows and the learner will lack the opportunity to become an expert.

The third stage is Productivity. A developing nation needs to acquire knowledge and that knowledge obtained should be mandatorily applied in productive activities to increase the total performance and value of goods produced and services provided within a year. The use of this knowledge obtained improves the effectiveness of the production, i.e. being able to produce quality amounts of goods, and services, etc.

The fourth stage is Networking/Synergy. The term synergy comes from the Greek word *synergia* from *synergos* meaning "working together" and it simply refers to the interaction of multiple elements in a system to cause an effect different from or more than the sum of their individual effects. In this stage, government, the institution of learning and working practitioners network and communicate, bouncing ideas off of one another and thus, synergistically developing and/or refining innovative concepts and ideas. The Flow Chart of Development systematically integrates all these stages to present a simple and clear representation of the process which would attain sustainable development and industrialization.

Nations or individuals that intend to adopt the Development Flow Chart, also known as "YOUNG's MODEL," must first prepare themselves for development. Any man that follows this path is on the right path towards development. If not, it is dearth (starvation, Poverty and Lack).

## 4.6 Industrialization based entrepreneurs (model 6)

The developing nations have lately been focusing on fostering the spirit of entrepreneurship in the hearts of the citizens. This is a good move, but the right kinds of entrepreneurs need to be developed. This book concentrates on two kinds of entrepreneurs that promote industrialization and growth; the technological entrepreneur and the commercial entrepreneur.

The technological entrepreneur is a producer who is involved in a considerable amount of research and development and his activities greatly promote industrialization, see **Figure 6**.

Technological entrepreneurship requires innovative skills for the creation of new products, new production methods, discovery of new sources of raw materials, opening of new markets and creation of new forms of organization [27].

Technological entrepreneurs are the right kind of entrepreneurs every developing nation requires. These are the kind of entrepreneurs you need to breed; those who enjoy innovation and production; those who enjoy mixing different procedures and processes; those who love creativity.

Technological entrepreneurship aims at creating new products, designing new production methods, discovery of new sources of raw materials, opening new markets and developing new forms of organizations through innovative skills. The performance measurement for these entrepreneurs include; number of innovation, number of new markets and number of new market products, number of new raw materials, of new production process, number of new forms of organization.

### 4.6.1 The commercial entrepreneur

Commercial entrepreneurs aim at creating profitable operations resulting in private gain. The performance measurements for these entrepreneurs include;
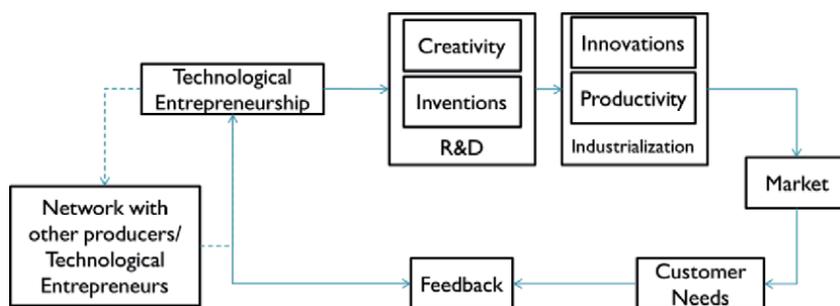


**Figure 6.**
*Schematic presentation of a technological entrepreneur.* Source: Author, 2012.
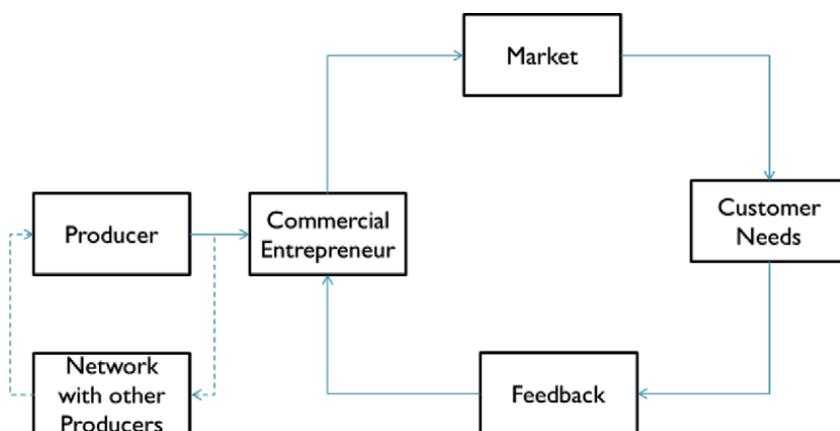


**Figure 7.**
*Schematic presentation of a commercial entrepreneur.* Source: Author, 2012.

financial indicators, market share, customer satisfaction and quality. **Figure** 7 is a diagrammatic representation of Commercial entrepreneurship. The producer determines how much the entrepreneur sells, and the time, quality and quantity of the goods to be sold. If the producer decides to pull out from that market the commercial entrepreneur is automatically knocked out of business.

The commercial entrepreneur is totally dependent on the producer. He is usually referred to as the lazy entrepreneur. He is not involved in productive activities. His research, development and innovative activities shall be limited to market and organizational innovation. All he needs to do is study a market; find out their need or the product demand of the market, link with the producer of such product and act as a middle man who suppliers the needed product to the market. The entrepreneur buys from the producer and supplies the market, simple!

However, the risk involved in being a commercial entrepreneur is far too great. We need both technological entrepreneurs and commercial entrepreneurs because when production meets distribution we attain optimum consumption and standards of living increase. It is paramount we have more technological entrepreneurs to boost economic productivity, because an increase in economic productivity increases economic strength, growth, development and industrialization.

## 5. Conclusions

A manufacturing revolution has emerged in the past 50 years that is as significant as the industrial revolution of the 19th century. The industrial revolution, which captured the introduction of radically new production technologies diffused across the globe and has fundamentally affected the nature of global production, birthed the manufacturing revolution.

Limited knowledge and ability of its people to create new innovations are the greatest challenges facing industrial process in developing nations. Failure to continuously strengthen and increase our knowledge base will surely result in a declining ability to provide for the needs wants and of our people. When increased productivity is viewed as a generator of wealth, the importance of innovation is clear. Employment opportunities in many industries will increase tremendously as productivity increases. Indirect employment will be created as well.

Moves towards industrialization are scarce and hesitant in developing countries. This is as a result of the copy and paste policy syndrome from industrialized nations by developing nations, without knowledge that there is no general rule or prescriptions for industrialization change. Policies should be specifically tailored to the capabilities of the particular country with more selective options requiring the highest levels of capabilities.

Simply put, these two challenges namely; (1) limited knowledge and knowledge acquisition processes, and (2) the poor policy formulation process are the main causes of Africa's problems. They are both associated with our thinking process and it's been proven that our actions are fruits of thoughts. When these challenges are tackled, a smooth journey to industrialization for developing nations like ours would be ensured.

Historically, a large majority of the citizens of developing nations were denied the benefits of the industrial revolution. Many of them were cheap slaves and contractual servants; thus robbing them of their uniqueness, self-esteem, poise and confidence.

However, despite the change in state of affairs; with developing nations gaining a greater measure of freedom and independence, many of the citizens of developing countries are still struggling with their uniqueness and their sense of self-worth.

Many of the nations that progressed and developed through the industrial revolution have reinforced (by attitude, policies, and legislation) the notion that the citizens of developing nations do not possess the potential to develop the skills, intelligence and sophistication necessary to equal that of industrialized nations.

The developing nations in effect are led to still look to the industrially developed states for their measure of standard, quality and excellence. This in turn breeds a sense of disrespect and suspicion for their own products and a denial of the great potential that lies dormant in the citizens of developing nations everywhere. There is still the notion that the presence of a foreign element is necessary for the maintenance of excellence and quality. This is not true! Citizens of developing nations are great; they possess the intelligence for transformation and the sooner we realize this truth and believe in our ability to stimulate the industrialization process; only then will the journey to industrialization begin.

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This chapter would not have been possible without the keen interest of our friends and the crew who, all through our life, has experienced our little victories, defeats, and believed and held fast to the simple theories we emerged.

But most of all, this chapter is for our mentors, partners and protégés too numerous to mention. And to you reading this, we say thank you for supporting sustainable economic growth, development and industrialization.

Thank you for embracing performance enhancement principles.

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# Are African Stock Markets Inefficient or Adaptive? Empirical Literature

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## Abstract

This chapter reviews empirical studies on weak form of efficiency with the aim of establishing whether the African market is inefficient or adaptive. The reviewed studies are categorised based on their methodological approaches to compare the power of linear and non-linear models in testing for weak-form efficiency. The studies on calendar anomalies, an indication of weak-form inefficiency, are reviewed to assess whether these anomalies are adaptive as portrayed by the relatively recent theory of adaptive market hypothesis (AMH). The scope of reviewed studies is also extended to developed and emerging markets to gain a broad comparison of the findings. This review revealed that non-linear dependence has been revealed in stock returns suggesting that non-linear models are best fit to test for the stock market efficiency. Reviewed studies produced contradictory findings with some supporting and others rejecting weak-form efficiency. Thus, most studies support the AMH, which suggests that market efficiencies and anomalies are time changing. This chapter concludes that most of the existing studies on AMH have been carried out in markets other than Africa, and hence, further empirical studies on the evolving and changing nature of efficiency in African stock markets are recommended.

**Keywords:** African stock markets, AMH, EMH, calendar anomalies, market conditions

## 1. Introduction

From the 1980s, the argument has been whether the behaviour of stock market returns is random or independent and identically distributed and whether there are significant calendar anomalies in stock markets. Three types of efficient market exist, namely the weak-form, semi-strong-form and strong-form. Weak-form hypothesis implies that the price reflects all previous information; the semi-strong hypothesis means that prices incorporate all information available to the public while the strong-form, in addition to public information, also reflects the insiders' information [1]. The most debated of the three forms is the weak-form efficiency [2, 3] note that the violation of this least restricted form of efficient market hypothesis (EMH) is tantamount to the violation of other forms of EMH. Consequently, this study focuses on the examination of weak-form efficiency. The implication of EMH is that no one can earn a return above the market average return in a consistent manner, except if one is lucky [4]. Thus, no amount of security analysis

based on past information could result in consistent higher profit. Several deviations and various types of patterns have been discovered in asset returns, which are at variance with the EMH and, hence, are termed efficient market anomalies [5]. Lo, Blume and Durlauf [6] identified three main categories of anomalies, namely fundamental anomalies, technical anomalies and calendar anomalies. Fundamental anomalies are market anomalies (for example size and value effect), which cause security prices to depart from their intrinsic values [7], while a technical anomaly is one in which the study of past market data results in an estimate of anticipated price trends [6]. Alagidede [8] defines calendar anomalies as the likelihood that returns on financial securities would exhibit systematic patterns during a particular time of the day, week, month or year. The calendar anomalies are reviewed in this chapter because it is an indication of weak-form inefficiency. Vast numbers of empirical investigations have been conducted and they are inconclusive as to whether stock markets are efficient or inefficient. This gave rise to the Adaptive market hypothesis (AMH), which suggests that market efficiencies and anomalies are time changing due to changing market conditions [9].

The first section of this chapter presents a review of existing researches on the weak-form efficiency of financial markets from the absolute point of view. Having identified calendar anomaly as the most popular contradiction to market efficiency, the second section presents the empirical evidence on calendar anomalies, where it is viewed as all or nothing. Moreover, the third section shows the new submissions of the recent researches about efficiency and calendar anomalies from AMH point of view, in other words, taking time-variation and market conditions into consideration. Lastly, this chapter presents gaps in literature and has a summary and the concluding remarks.

## 2. Empirical studies on weak-form EMH

Large numbers of empirical studies have been carried out in testing the weak form of EMH or random walk in developed and developing stock markets. These studies focus on the relationship between successive price changes to determine whether they are dependent or predictable. Some studies examine linear dependence [1, 10–14] in stock returns, while others focus on non-linear dependence [15, 16]. The types of dependence and the development of the markets examined seem to impart the conclusion from these studies, hence, the empirical review is presented below taking cognisance of the two categories (linear and non-linear) of dependence.

### 2.1 Linear empirical studies from developed and emerging markets

The linear dependence tests constitute the earliest test of weak form of EMH and they are still in use today. There are four major linear tests employed in testing weak-form efficiency in the literature, namely the autocorrelation/partial autocorrelation tests, VR, run and unit root tests [2]. In most cases, studies of weak-form efficiency have combined various linear estimation tools. Hence, this study presents a general empirical review of linear test-based studies, since having to separate a single study where various linear tests are combined may be cumbersome.

The first set of researchers used the linear serial correlation tests, which test RM3[1] (i.e. the least restrictive hypothesis) to establish non-correlation of returns.

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[1] RWH1 implies independently and identically distributed successive price increments; RWH2 implies independent increments; while RWH3 implies dependent but uncorrelated increments.

The presence of serial correlation in return series implies weak-form inefficiency. Studies such as Working [17]; Kendall [18]; Osborne [19]; Samuelson [10] and Fama [1, 11] and Roberts [12] provide support for the efficiency of the developed stock markets due to insignificant magnitude of autocorrelation. Kendall [20] investigated weekly indices and the idea of serial correlation was debunked in the United State (US). Although serial correlation was found in the United Kingdom (UK), it was considered insignificant. Serial correlation was also found in the US share index by Moore [21] but it was adjudged to be insignificant. In addition, low serial correlation was found by Jennergren and Korsvold [22] whose study was based on the Swedish stock market. Where significant serial correlations were reported earlier, it was dismissed on the ground of spuriousity. Hence, most of the above studies do not really reject weak-form EMH. However, Niederhoffer and Osborne [23] debunk the notion that stock price changes are independent and identically distributed and state that investors are aware of the possibility of price reversal and exploit it for abnormal profits.

Additionally, some studies have employed runs[2] test as another popular serial correlation test of changes in stock prices with additional benefits of being a non-parametric test. Here, the actual and expected numbers of runs of a series are compared. Using this approach, Fama [1] provided minor support for return dependence in the US while Cooper [13], using different frequencies of stock return series from 36 countries, submitted that the UK and the US are efficient and in conformity with EMH. Apart from the autocorrelation and run test, another linear dependence test is the Variance ratio (VR) test, which has become the commonest test [25, 26] for determining whether price changes are not serially correlated. The test assumes that if changes in asset price are consistent with random walk hypothesis (RWH), the variance of the $p$-period change must be $p$ multiplied by the variance of $1$-period change. Applying their own VR test, Lo and MacKinlay [27] found that the RWH does not hold for weekly stock market returns. Also, Smith and Ryoo [28] used the multiple VR test to examine the randomness of European emerging stock markets and found significant violation of the weak form of market efficiency.

The fourth group of linear tests of weak-form efficiency are known as the unit root tests, which are used to examine the stationarity of stock returns, based on the argument that stock returns follow a random walk if they reject stationarity or have a unit root [25]. Unit root test and other linear tests are employed in a study of 16 developed markets, namely Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK and four emerging markets, namely Czech Republic, Hungary, Poland and Russia by Worthington and Higgs [29] in European equity markets using daily returns. Results of the emerging markets showed that only Hungary is characterised by a random walk and, hence, is weak-form efficient, while in the developed markets only Germany, Ireland, Portugal, Sweden and the UK conform to the strictest weak-form efficiency criteria.

In addition, autocorrelation test and the VR test were employed by Lovatt, Boswell and Noor [30] to test firm level and market-wide randomness in the UK from 1992 to 1998. Results from the two tests depict significant dependence of daily stock returns in the UK. On the basis of run test, Borges [14] showed that RWH cannot be rejected in UK (daily and monthly data), Spain, France and Germany (monthly data). Konak and Şeker [31] supported the efficiency of the UK FTSE 100 based on the findings of unit root tests. Drawing from many of the available studies [1, 10–14] in the developed economies, the notion of weak-form efficiency has

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[2] A run is 'a succession of identical symbols which are followed or preceded by different symbols' [24].

hardly been rejected [32]. In contrast, findings from the emerging economies are contradictory with some supporting and some rejecting weak-form efficiency. For instance, empirical evidences from Asian, Latin American and European emerging markets and the Middle-East are all contradictory [32]. Kim *et al.* [33] state that there is vast proof of predictable patterns from past price changes, particularly in the emerging financial markets.

## 2.2 Linear empirical studies from African markets

While the African region studies are not as much as others are, the Johannesburg Stock Exchange (JSE) seems to have received more attention than other African markets in the investigation of market efficiency. The JSE has been identified as the most developed in the league of African stock markets and it has been noted that the market behaves more like those in developed economies. A review of JSE studies by Thomson and Ward [34] indicates conflicting results with some studies supporting JSE efficiency while others do not. However, they submitted that there are more reasons to conclude that JSE is efficient in weak form. According to Vitali and Mollah [32], subsequent investigations on the JSE have maintained this submission [35–38] with the exception of Appiah-Kusi and Menyah [39] and Smith [40]. Conflicting findings, even when similar methodologies are used, may not be unconnected with differences in sample size or data frequencies but one would have expected similar results if markets were to be efficient at all times. Further, while Almudhaf and Alkulaib [41] employed unit root tests and VR and concluded that the JSE is consistent with RWH, Grater and Struweg [42], based on unit root test, discovered that JSE is not consistent with RWH. Sub-period analysis was considered by Fusthane and Kapingura [43] who employed all the popular linear tests except the run test in the pre-, post- and during global financial crisis and showed that the JSE, to a greater extent, is weak-form efficient.

In Nigeria, many investigations have been undertaken to test weak-form efficiency. A review of these studies reveals that the problems of efficiency in Nigerian stock market remain inconclusive. In Nigeria, Gimba [44] applied run, autocorrelation and VR tests; Nwosa and Oseni [45], Nwidobie [46] and Obayagbona and Igbinosa [47] employed autocorrelation, run test and unit root test. All these studies submitted that stock returns do not comply with weak-form efficiency (implying weak-form inefficiency). On the other hand, Ayadi [48], Olowe [49], Emeh and Obi [50], found that Nigerian stock market is weak-form efficient. The finding is supported by Godwin [51] and Ajao and Osayuwu [52] using autocorrelation test and runs test; Keyur [53] using run test; Arewa and Nwakanma [54] based on portmanteau autocorrelation and LM serial correlation. Apart from the full sample study, certain studies employed sub-sample analyses. For instance, Ezepue and Omar [55] employed daily and monthly indices and sub-sample analyses (2000–2004; 2005–2010) using financial reform as the basis for breaking the sample and found that the market is inefficient, based on run and autocorrelation test results. Similarly, Ikeora, Nneka and Andabai [56] showed that three out of the four sub-periods analyses are characterised with dependence and inefficiency using the runs and unit root test. Violation of EMH is also documented by Ogbulu [57] using the four linear tests and four frequencies of return index from 1999 to 2013.

There are some studies, which combine selected African stock markets. For instance, Magnusson and Wydick [35] studied efficiency in African stock markets from 1989 to 1998 using partial correlation. Botswana, Kenya, Cote d'Ivoire, Mauritius, South Africa and Nigeria markets are found to be weak-form efficient – the exceptions being Ghana and Zimbabwe. Smith et al. [36], using multiple VR test and weekly indices from 1990 to 1998, rejected weak-form efficiency of

Egypt, Morocco, Kenya, Zimbabwe, Nigeria, Botswana and Mauritius, with South Africa identified as the only efficient market in the sample. Appiah-Kusi and Menya [39] also employed EGARCH-M to analyse weekly indices and showed that Egypt, Morocco, Kenya, Zimbabwe, Mauritius are efficient while Ghana, Botswana, Ivory Coast, South Africa, Nigeria and Swaziland are not. In Mauritius, Fowdar, Subadar, Lampot, Sannassee and Fawsee [58] used the traditional linear tests except the VR test and found that returns from 1999 to 2004 are autocorrelated. Mlambo and Biekpe [59] analysed daily indices from 1997 to 2002 with the aid of run tests and submitted that stock returns in all African markets other than Namibia exhibit serial correlation and do not conform with RWH. They warned, however, that the rejection of the random walk, based on these tests, does not necessarily imply weak-form inefficiency but a presence of serial correlation.

Furthermore, Smith [40] used samples from 2000 to 2006 and various versions of VR tests and found that Egypt, Botswana, Ghana, Kenya, Ivory Coast, Mauritius, Nigeria, Morocco, South Africa, Zimbabwe and Tunisia are not efficient. Also, by employing (G)ARCH effects tests; GARCH family models, BDS tests and bicovariance test; Alagidede and Panagiotidis [60] showed that Zimbabwe, South Africa, Morocco, Egypt, Nigeria, Kenya and Tunisia are not efficient but the data are characterised with leverage effect, volatility clustering and leptokurtosis. Nwosu, Orji and Anagwu [61], also using various linear tests, found that the Egypt, Kenya, Nigeria and South African stock markets behave in a manner that is contradictory to weak efficiency while the US S&P500 complies with the notion of efficiency. Similarly, the combination of autocorrelation, run and unit root tests revealed that Kenya stock market is weak-form inefficient [62]. Gyamfi, Kyei and Kyei [63] employed non-linear ADF unit root test and the modified Wald and revealed that unit root is present in Nigeria, Egypt, Mauritius, Kenya, Mauritius, South Africa, Morocco and Tunisia returns except Botswana, hence, non-stationary and weak-form efficient. By and large, findings from stock markets other than developed markets have been mixed with the majority showing that African stock markets are not efficient in weak form.

## 2.3 Non-linear empirical studies from developed and emerging markets

It is noteworthy that the 'traditional' tests of efficiency, as discussed above, have been said to be of little or no use, in the recent literature. It is because such tools may fail to find evidence of linear structure in the data, but this would not necessarily imply that the same observations are independent of one another [64]. In other words, researchers have observed that markets sometimes exhibit non-linear dependence even when there is no linear dependence [65, 66]. Owing to the presence of non-linear structure in stock returns, which cannot possibly be captured by the study of linear dependence, weak-form efficiency studies have been broadened to cover the examination of non-linear dependence, since the latter portends the possibility of predictability. Thus, where non-linear dependence is observed, absence of linear dependence is not enough to adjudge the market efficient considering the non-normality of return series [65, 67]. This leads to the application of myriads of non-linear test to stock returns in recent times. Non-linear tests include portmanteau tests such as the BDS test [68], the bispectrum test [69], Tsay's test [70], the neural network test [71], the bicorrelation test [72], Ramsey's RESET test and the specific tests such as SETAR-type non-linearity [70], smooth transition autoregressive [73] and Engle Lagrange multiplier test [74].

The earliest evidence of non-linearity in a stock market was shown by Hinich and Patterson [75] who applied a bispectrum test to daily returns of stocks on the NYSE. In the same vein, De Gooijer [15] further found significant non-linear

dependence in daily returns of 27 stocks and monthly returns of S&P 500 respectively. Similar findings were later documented in the UK market by Abhyankar, Copeland and Wong, [76], Newell, Peat and Stevenson [77] and Opong, Mulholland, Fox and Farahmand, [78]. The results of bispectrum and BDS tests showed that all frequencies of all share indices possess high non-linear dependence that violates RWH. Examination of non-linear dependence is not limited to developed markets alone. Sewell, Stansell, Lee and Pan [79] found support for the presence of non-linear dependence in a sample of emerging markets. Other recognised studies reporting non-linear dependence in stock return include Afonso and Teixeira [80] in Portugal, Dorina and Simina [81] in Turkey, Hungary, Romania, Czech Republic, Slovenia, Poland, Slovakia and Lithuania, among others.

## 2.4 Non-linear empirical studies from African markets

The developed markets, especially the US, UK, Japan and Germany, have been highly focused when it comes to the examination of non-linear dependence [16, 68, 76, 82] while non-linear tests on African markets are limited. In African stock markets, Kruger [83] and Kruger, Toerien and MacDonald [84] examined 109 shares from JSE and showed that there is significant nonlinear dependence for all shares. They also explored sub-period analyses and discovered that the nonlinear dependence is episodic in nature. Similarly, Cheteni [85] employed LM test, BDS test and VR test in the investigation of chaotic and non-linear tendencies of all bond indices return in JSE. The presence of non-linear dependence was reported; hence, they concluded that the JSE is highly chaotic. In addition, Sarpong [86] examined chaos on JSE by testing JSE all share index, top 40 and small cap returns with the BDS test. The non-linear model revealed that the three indices negate the notion of RWH with the re-scaled range analysis further showing that JSE small cap index is not as efficient and risky as the rest.

Non-linear tests have also been extended to test the weak-form EMH in other African markets. For instance, the ARCH-LM and McLeod–Li portmanteau tests are combined with linear autocorrelation to investigate efficiency of five indices on the Nigerian stock exchange from 2010 to 2013. The models revealed that all the indices except banking sector are non-linearly dependent and not in support of RWH [87]. In the same vein, Saadi, Gandhi and Dutta [88] examined the efficiency of Tunisian stock market from the non-linear viewpoint using the BDS test. It was shown through the result of the BDS test that non-linear dependence is inherent in the stock return series and that the weak-form efficiency of the market should be rejected. By examining BDS, Mcleod-Li, Engle LM tests in Egyptian and Tunisian stock markets, Chkir, Chourou and Saadi [89] found significant non-linear dependence in stock indices return series and advocate for the rejection of RWH in the two African markets. Although this review may not have covered all the available studies, an important observation from the non-linear dependence tests in absolute form is that virtually all the markets (non-African and African) reviewed are culprits of the presence of non-linearity in stock return. While there is limited application of non-linear test in African market studies, JSE seems to have received more attention than others did.

## 3. Empirical studies on calendar anomaly

Although, the reviewed linear and non-linear tests provide some insight into testing for EMH, it has been observed that test of independence of stock returns is incomplete without testing for the presence of anomalies. One of the anomalies that

is relevant to the test of weak-form EMH is the calendar anomaly. Much attention has been paid to the examination of calendar anomalies in the literature, making it the most observed or studied of all the types of stock market anomalies. In line with the previous section on the review of empirical studies relating to EMH, empirical review on calendar anomalies is also presented in this section and attention is paid to the markets where the studies are carried out.

## 3.1 Calendar anomaly from developed and emerging markets

It is not surprising that the earliest empirical studies of calendar anomalies were carried out in developed countries since the theories also emanated from developed economies. In the New York Stock Exchange (NYSE), Rozeff and Kinney [90] studied the January effect from 1904 to 1974 and found that the January average return is significantly higher than other months. Keim [91], using the same set between 1963 and 1979, established that just about 50 percent of the average magnitude of risk-adjusted premium of small firms relative to large firms was caused by the January abnormal returns. Over 50 percent of the January excess return was traceable to the first week of January. Likewise, Gultekin and Gultekin [92] provide international evidence in 17 countries from a 1959 to 1970 sample. January and April effects are identified in all the countries including the UK. Further, Choudhry [93] evaluated month-of-the-year (MOY) anomalies in three developed countries between 1870 and 1913 using the GARCH [1, 1] model. It was concluded that MOY and January effects are found in the US and UK only and not in Germany. GARCH [1, 1] was also adopted by Wing-Keung, Aman and Nee-Tat [94] in the investigation of calendar anomalies in Singapore using a full period over 1993–2005 and sub-periods 1993–1997 and 1998–2005. Results showed that there is the January effect in the post-crisis period, weekend and holiday effects disappear in the post crisis, while turn of the month effect is present in both periods.

Apart from the MOY effects, day-of-the-week (DOW) effect is another prominent calendar anomaly. The earliest academic report on DOW effect was traceable to Cross [95] who found that Friday return is significantly higher than Monday return based on observation of the US stock market index returns over 1953 to 1970. In addition, Lakonishok and Smidt [96] investigated the presence of DOW calendar effect in the US from 1897 to 1986 and found high presence of a negative Monday return in the market. Hakan and Halil [97] also examined the DOW effect on stock market volatility by using the S&P 500 market index during the period of January 1973 and October 1997. The findings showed that the DOW effect is present in both volatility and return equations. While the highest and lowest returns are observed on Wednesday and Monday, the highest and the lowest volatility are observed on Friday and Wednesday, respectively. Further investigation of sub-periods reinforces the findings that the volatility pattern across the days of the week is statistically different. In addition, Shiok, Chong and Brian [98] used non-parametric test to study stock market calendar anomalies in Malaysia. This study was able to give clear view that Mondays are the only days with negative returns and represent the lowest stock return in a week and there was positive effect in Friday but not as high as the returns on Wednesday. Conversely, some international studies [99–103] have equally argued that both DOW and MOY have grown weaker.

Furthermore, both the MOW and DOW effects are combined in some studies. For instance, Lei and Gerhard [104] investigated calendar effects in the Chinese stock market, especially monthly and daily effects. Returns of the market index in Shanghai and Shenzhen stock exchanges were used to analyse the monthly and daily effects in stock returns. Results revealed that the highest returns could be achieved after the Chinese year-end in February while Mondays are seen to be

weak and Fridays showed significant positive average returns. Yet the daily effect has a minor magnitude and relevance for determining average returns compared to monthly effects. Similarly, Rossi [105] examined the calendar anomalies in stock returns in South America from 1997 to 2006, focusing on the existence of DOW effects and the monthly patterns in Argentina, Brazil, Chile and Mexico. In full period, it was concluded that there existed the traditional positive Friday effect in Brazil and in Chile; the returns had been lowest on Mondays. In addition, the study documented positive returns on Wednesdays and Fridays. In Mexico highest returns appeared on Wednesdays. For Argentina, there was no record of DOW anomaly. These results change when examined over two sub-periods. Overall, there is absence of monthly anomalies in full period and first sub-period, but January effect is found in Argentina in second sub-period. Additionally, Lukas [106] studied stock market seasonality with focus on DOW effect and January effect by analysing 30 stocks traded on the German Stock Exchange from 1995 to 2009. By adopting a dummy variable approach to investigate Monday effect and the September effect, it was confirmed that the DOW effect started disappearing in the second half of 1990s. Moreover, Martin [107] carried out a comprehensive review of the literature on calendar anomalies from 1915 to 2009. It was found that intraday, holiday and intra month effects still exist, the weekend effect seems to have disappeared and the January effect has halved.

With reference to part of the month anomalies, Ariel [108] discovered that average return in the first half of the month is significantly higher than the remaining half of the month. This finding is supported by Jaffe and Westerfield [109] in Australia, Arsad and Coutts [110] in the UK and Bildik, [111] in Istanbul. Similarly, Kohli and Kohers [112] found that first week in the month possesses average returns that are higher than other weeks using daily returns of the US composite index from 1962 to 1990. In addition, Lukas [113] investigated seasonality in the US stock exchange across six [6] major industrial sectors using descriptive statistics, GARCH(1,1) model and Wald-chi squared test. The study rejected the DOW and January effects in the US stock market but cannot reject the presence of the part of the month anomaly. In addition, Dragan, Martin and Igor [114] examined the DOW effect of stock returns in south eastern Europe, namely Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia and Serbia between 2006 and 2011. Results of dummy regression, analysis of variance and Wald test revealed that the mean daily return of all stock indices is negative on Monday in all markets; lesser and significant on Monday than the other days of the week in Croatia and Bulgaria but insignificant in Macedonia. Likewise, Guglielmo, Luis, Alex and Inna [115] investigated weekend anomalies in the US and Russian stock markets, FOREX market and gold market using the trading-boot approach and fractional integration technique. The study revealed that there is evidence of weekend effect characterised by lowest Monday returns. The evidence is weak in other markets but strong in foreign exchange market as the exploitable profit opportunities based on the weekend anomalies are significant in the FOREX market. Oprea and Țilică [116] also examined the DOW anomaly in 18 post-communist East European stock markets, namely Bosnia, Bulgaria, Croatia, Czech Republic, Estonia, former Yugoslav Republic of Macedonia, Hungary, Kazakhstan, Latvia, Lithuania, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia and Ukraine from January 2005 to March 2014. The results showed that there is presence of DOW effect in Bosnia, Bulgaria, Croatia, Latvia, Serbia and Slovenia while DOW effect is absent in other markets. More recently, Rossi and Gunardi, [117] studied monthly effect in Spain, France, Italy and Germany from 2001 to 2010. They reported a significant presence of positive April effect in Italy, January effect in Spain and a negative September effect in Germany. In addition, Aziz and Ansari [118] report the presence of the

turn-of-the-month (TOM) effect in 11 out of the 12 markets examined in Asia from 2000 to 2015. It can be seen that many studies confirmed significant presence of calendar anomalies in developed and emerging markets. On the other hand, some sub-period studies revealed different behaviour in different sub-periods, while others observed weakening and disappearing of calendar anomalies in some quarters. Overall, the evidence is mixed.

**3.2 Calendar anomaly from African markets**

The hype of calendar anomaly would mean that other emerging markets and developing African stock markets are not overlooked in the investigation of calendar effects. In the JSE, a negative Monday effect was documented by Bhana [119] who studied two market-wide JSE indices and Treasury bills from 1978 to 1983, using descriptive statistics and OLS regression. Other days were positive with Wednesday having the highest returns. Similarly, Alagidede and Panagiotidis [120] analysed the calendar effect of Ghana Stock Exchange using daily closing prices of all equities, dummy regression and asymmetric GARCH models. The study found the presence of April effect as opposed to the usual January effect and the weekend effects with lower Monday and higher Friday returns. On the other hand, Chukwuogor [121] in another study using Kruskal Wallis and descriptive statistic tests concluded that DOW effect is absent in African countries. The findings could be questioned based on the tests used. Further, Brishan [122] examined calendar anomalies in nine sectors of the Johannesburg stock market using descriptive statistics, OLS regression and two-sample Kolmogorov–Smirnov test. The study concluded that anomalies are a worldwide phenomenon present in developed and emerging markets; there is presence of daily and monthly effects, reducing pre-holiday effects and absence of weekend or January anomalies. In addition, Umar [123] used EGARCH model to estimate the DOW anomaly in mean and variance equations for Nigerian and South African equity markets over pre-liberalisation and post-liberalisation periods. After liberalisation, Nigerian stock market exhibits DOW effect on Fridays and Tuesdays/ Thursdays in the mean and variance equation respectively. South African market exhibits significant DOW effect on Mondays and Fridays in the pre-liberalisation and Thursdays and Fridays respectively in mean and variance equation in the post-liberalisation era.

In addition, Julio and Beatriz [124] evaluated six emerging markets (Colombia Indonesia, Vietmen, Egypt, Turkey and South Africa (CIVETS)) stock indices return from inception to 2012 using GARCH and IGARCH models. There is DOW effect in CIVETS; there is evidence of lags in the effect. Bundoo [125], in Mauritius, examined stock indices of 10 companies from 2004 to 2006. Dummy regression results found negative Tuesday returns but positive returns for other days of the week especially significant Friday and September effects. Similarly, dummy variables regression and GARCH models were also adopted by Alagidede [8] in an examination of calendar effect in African countries stock markets using data from inception of the markets to 2006. Holiday effect is reported in South Africa, February effect for Morocco, Kenya, Nigeria and South Africa and January effect in Egypt and Zimbabwe. However, skewness and kurtosis of daily index from 2004 to 2008 were estimated by Shakeel, Douglas and Chimwemwe [126] and it was submitted that Zambia, Botswana, Nigeria and Morocco displayed significantly different DOW effects in the pre and post financial crisis while South Africa did not exhibit such. Furthermore, Derbali and Hallara [127] showed through GARCH [1, 1] and asymmetry GARCH models that positive Thursdays effect is found in Tunisian market stock returns while negative Tuesday effects is present in both return and volatility. More recently, Du Toit, Hall and Pradhan [128] studied eight

sectors of JSE for DOW effect from 1995 to 2016 using GARCH model. The study found a significant positive Monday/Tuesday and negative Friday effect respectively and argued that the DOW effect is significantly influenced by the estimation techniques.

The review of empirical studies so far revealed that calendar anomalies have been documented in the literature. Although, some studies have observed that weekend/DOW and January/monthly effects are disappearing in recent times [107], especially from developed markets and little has been said regarding this in the emerging African markets. The question is whether these anomalies are disappearing from emerging markets too. It can also be observed from a few sub-periods (pre/post crisis for instance) studies that some calendar anomalies appear in one period (say pre crisis) and disappear in the other period (say post) and vice versa. Could calendar anomalies be disappearing and reappearing? It can also be observed that conflicts at times appear in the findings of different studies; for instance, Chukwuogor [121] rejected presence of calendar anomalies in African markets while others accepted it.

## 4. Empirical studies on AMH

The majority of the weak-form EMH and calendar anomaly literature largely applies tests and models on the full sample period, assuming that market efficiency is a fixed feature that remains the same, irrespective of stages of market development, or happenings in the market ecology. By so doing, they ended up addressing the issue of market efficiency and anomalies in absolute form and producing conflicting findings. Considering the inconclusiveness of the absolute efficiency tests, Campbell et al. [129] suggest the notion of relative efficiency, a new methodology that permits the level of market efficiency to be tested over time. This is akin to Lo's [130] argument in AMH, that market efficiency should be treated as a feature that changes over time and that is relative to market environment conditions. Available studies on the AMH, which considered alternative approaches to fixed state models; that is the possibility of time-varying efficiency/anomaly and market condition are presented in this section. Unlike the previous sections (2 and 3), where presentation takes market setting into consideration, this section presents a general review because African market studies on this topic seem to be limited.

### 4.1 Time varying efficiency studies

The formulation of AMH has ignited the reinvestigation of market efficiency in recent times. The most popular implication of the AMH is that market evolves over time in cyclical version. To examine this assumption, Anatolyev and Gerko [131] investigated AMH in the US stock market and documented that inefficiencies do alternate efficiencies. Similarly, Todea, Ulici and Silaghi [132], using daily indices and portmanteau and bi-correlation tests, revealed that there are sub-periods of non-linear and linear dependency in Australia, Hong Kong, Singapore, Japan, India and Malaysia with changes in degrees of dependencies over time. In another study, Ito, Noda and Wada [133] employed time-varying auto-regressive and moving average models as the estimation tools and concluded that stock market evolves through time and that there are cyclical movements in market efficiency in the US. In Austria and 12 other emerging markets, results of rolling window automatic, wild-bootstrap and joint-sign VR tests showed that developed markets are less predictable compared to less developed markets [134]. Likewise, Urquhart and Hudson [2] employed sub-sample methods to examine the evolution of linear and non-linear

dependence in the long run US, UK and Japanese stock markets data. The findings from the linear runs, autocorrelation and VR tests showed that all the markets undergo eras of dependence and independence, while findings from the non-linear tests revealed high dependence in all windows. In addition, Mobarek and Fiorante [135] tested the same hypothesis in the BRIC, Japan, UK, and US using autocorrelation, run and VR tests in five-year fixed length moving windows. It was submitted that the markets are trending towards higher levels of efficiency. In the same period, Dourad and Tabak [136] examined daily stock index return in Brazil over the 1991 to 2012 period using rolling wild bootstrap VR statistic and generalised spectral to test linear and non-linear dependencies respectively. It was found that RWH is present but varies in line with the AMH. Further, rolling automatic VR and generalised spectra tests are adopted by Shi, Jiang and Zhou [137] in China using daily and weekly data from 1990 to 2015. They found that the return predictability changes through time and high predictability were discovered around 2007 financial crisis.

It is noteworthy that the study of AMH has been introduced to markets other than stock markets. For instance, Charfeddine, et al. [138] employed state-space GARCH-M model, which revealed time-varying efficiency in the developed US and UK and emerging South Africa and India bond markets with the US market being the most efficient. Similarly, Kumar [139] validated the AMH in the Indian FOREX market using data from 1999 to 2017. Based on the application of non-overlapping sub-period and rolling automatic VR and Belaire-Franch and Contreras [140] rank-based tests, they found that though the market is not efficient in full sample, it varies in the level of efficiency over time depending on occasion of fundamental macroeconomic events. In addition, Urquhart [141] later studied the time-varying behaviour of precious metal returns via the application of rolling window Hurst exponent, VR and BDS tests and showed that the market is not static but time-varying, with the silver market being less predictable and platinum being most predictable. Shahid et al. [142] indicated that Bitcoin market is inefficient, rather than adaptive using a series of linear and nonlinear tests. Shahid et al. [142] confirms the applicability of AMH in the commodity markets while anomalies and efficiency are said to interchange on UK stock market according to Rosini and Shenai [143]. Almudhaf, Aroul and Hansz, [144] suggest that technical trading moving average are capable of exploiting changing predictability in the FTSE real estate markets.

In the case of emerging markets, Ahmad, Shahid, Ateeq, Zubair and Nazir [145] focus on Asia and used four popular linear tests and sub-period approaches. They established that the Indian and Pakistan stock markets are adaptive, fluctuating between inefficiency and efficiency. Kayani, Ayub, and Jadoon [146] also documented a repetitive pattern of efficiency and inefficiency in Pakistan stock exchange using a rolling nonlinear autoregressive neural network. Applying varying Hurst exponents in the Indian market, Patil and Rastogi [147] assert that arbitrage chances emerge from time to time in line with the AMH and a nonlinear cross-correlation exists in the price and volume series. In a sample of 384, Indian investors, Mushinada [148] provides a proof of existence of investors rationality and biases in an adaptive manner. Comparing developed and emerging markets, Jiang and Li [149] indicated that the Japanese and US stock exchanges are efficient in the normal market condition, while Chinese market was found to be generally inefficient. Conversely, Yang et al. [150] suggest that US and Chinese stock markets are adaptive.

It can be seen that most of the above studies concentrate on the developed markets while there are limited empirical studies on time-varying efficiency in emerging and African markets. One the first studies in the African stock market was carried out by Jefferis and Smith [37] who examined evolving efficiency and used daily indices from 1990 to 2001 and GARCH with time-varying factor. They submitted that South Africa is efficient right through the period; Egypt, Morocco and

Nigeria are moving towards efficiency while Zimbabwe, Mauritius and Kenya are inefficient all through. Likewise, Smith and Dyakova [151] applied linear VR tests to daily index between 1998 and 2011. Fixed-length rolling sub-period window analyses disclosed successive periods of inefficiency and efficiency with Egypt, South Africa and Tunisia found to be less predictable while Kenya, Zambia and Nigeria are the most predictable. Seetharam (1509) examined daily, weekly and monthly indices of 44 shares and six local indices of JSE from 1997 to 2014 using traditional linear tests, Hurst exponent, non-linear BDS and artificial neural network and sub-sample analysis. The outcome described the JSE as a market with changing levels of efficiency through time. In Egypt, Botswana, Morocco, Kenya, Nigeria, Mauritius, South Africa, Tunisia; Gyamfi, Kyei, Gill [63] provide support for AMH as markets, which were found to be inefficient in absolute forms revealed periods of unpredictability in rolling window generalised spectra test results. The same finding was reported in a separate study of Ghana stock market using rolling window VR and generalised spectra tests and index return data from 2011 to 2015 [152]. In addition, Heymans and Santana [153] used rolling window of the three versions of VR test to examine AMH in JSE ALSI and other smaller and sectoral indices. They found that the broad market index is ranked more efficient than the others, while the smaller and younger indices from communication, small cap, media and automobiles and parts are found to be most inefficient. However, all the indices exhibit cyclicality in the level of efficiency over time. It can be observed that most of the existing studies on AMH were carried out in markets other than Africa, although there are few studies covering African markets. In this context, Obalade and Muzindutsi [154] asserted that three African stock markets are adaptive from linear and nonlinear point of view. At this stage, an investigation of an evolving and changing nature of efficiency in African stock markets has not received adequate attention within the framework of AMH. In addition, there is need to compare and exploit linear and non-linear tests because Lim and Hooy [155], among others, affirmed that non-linear dependence has been revealed in stock returns where linear tests showed absence of dependence. In the presence of non-linear dependence, markets cannot be said to be efficient.

## 4.2 Return predictability and market condition studies

Another inference of the new AMH is that the fluctuation in efficiency arises from changes in market conditions, although the hypothesis did not itemise the exact makeup of market conditions or its expected relation with return predictability. Researchers, however, have relied on the literature in determining what constitutes market conditions. For instance, where the stock market price or return behaviour or trend is considered, the market conditions may be defined as up or down or bull, bear and normal [156, 157]. Lo [158] also mentioned external environments such as political, economic, financial, cultural environments and so on. One of the foremost attempts in the direction of changing efficiency cum market condition is the study by Kim et al. [33], which applied automatic VR and portmanteau tests to generate predictability and OLS regression to examine the effect of market conditions. In consonance with the AMH, they concluded that predictability varies over time and that market conditions such as bubbles, normal, political and economic crises influence return predictability in the US stock market using index return from 1900 to 2009.

In addition, the application of VR and portmanteau test by Zhou and Lee [159] revealed declining predictability over time. The dummy OLS regression further showed that the US real estate market efficiency is influenced by market development, inflation, volatility and regulatory changes from 1980 to 2009. In a similar study, Urquhart and McGroarty [160] used the VR and BDS tests, in 2-year fixed length moving window and dummy regression to analyse daily indices in the US,

UK, Japan, and Europe. Changing return predictability is reported in different markets overtime; a behaviour, which can be explained by up, down, bull, bear, normal and volatile conditions. These findings are supported by Soteriou and Svenssion [161] in the Swedish market using joint rank and sign tests, dummy regression, BDS test, autoregressive-generalised autoregressive conditional heteroscedasticity (AR-GARCH) filter and OLS. It can be seen from the review in this section that studies on the effect of market conditions on market efficiency have largely been a developed market affair. Thus, there is a need for further study on other emerging markets such as the African stock markets. In this context, Obalade and Muzindutsi [162, 163] found that certain market conditions are responsible for changing efficiency of selected African markets.

## 4.3 Time-varying calendar anomalies studies

Owing to its dominance in the determination of weak-form inefficiency, calendar anomalies are now also being evaluated within the time-varying approach of AMH. Although some of the studies [60, 164] have applied the rolling window approach out of curiosity to question the persistence of the calendar anomalies without mentioning of the AMH. Coincidentally, their approach is in line with the AMH. Alagidede and Panagiotidis [60] seem to be the earliest recognised African stock market calendar anomaly study where a rolling window analysis was mentioned to examine the persistence of DOW effect in Ghana. The study employed OLS, GARCH, EGARCH and TGARCH and submitted that there is significant Friday effect in the Ghana stock exchange in absolute form, however, they concluded that April and DOW effect evaporates with rolling window estimation. Additionally, Borges [164] employed GARCH [1, 1] to investigate 17 European stock market indices and documented evidence of cross-country rather than across-the-board calendar anomalies, especially in August and September. He submitted that the identified anomalies vary with time and could be more as a result of data mining due to high instability in the behaviours of the anomalies over time. Based on Borges' finding, Ching [165] states, "the calendar effects may only be a 'chimera' delivered by intensive data mining as they are country-specific results and may not be stable over time" (p. 1). Similarly, Urquhart [166] employed sub-period analyses to evaluate calendar anomalies within the AMH framework and found that January and Monday effects all change over time while TOM effect remains at all times. Further, Urquhart and McGroarty [167] also showed in the US that the behaviour of the Monday, January, Halloween and the TOM calendar anomalies change over time using rolling window estimation for the S&P 500 index. This study confirmed that AMH provides better descriptions of the behaviour of the studied calendar anomalies.

Additionally, Bampinas, Fountas and Panagiotidis [168] used daily data and GARCH [1, 1], TGARCH and EGARCH to check the DOW effect in global, European and country-specific real estate indices from 1990 to 2010. The full sample analysis indicates the presence of the effect while about 75 percent of the rolling windows reject the presence of the anomaly. Hence, they submit that the effect could be due to data mining and sample selection bias criticism. This conclusion supported Borges' [164] study in European markets. Similarly, various GARCH family models are analysed in rolling windows by Bampinas, Fountas and Panagiotidis [168] to establish that the DOW effect, found in two regional and six national indices and Monday effect found in three national indices, all experienced significant reduction in power when rolling window analyses were carried out. Also, eight Dow Jones Islamic indices were studied by Osamah and Ali [169] using sub-period mean–variance and stochastic dominance analyses and the findings

supported varying behaviour of calendar effects in line with the AMH. In addition, Zhang, Yongzen and Jianghong [170], via the application of GARCH model, established the presence of DOW effect in 25 countries (made up of 13 developed and 15 developing markets), the anomalies, which disappear with rolling windows in all except six countries. Moreover, Evanthia [171] showed that DOW is present in all the sectors and the general S&P500 indices using non-linear models (EGARCH and TGARCH) in full sample but only one-fifth of the total number of regressions/windows are associated with the anomaly. Hence, the study concluded that the anomalies are weak and time-variant as opposed to being persistent. Similarly, Obalade and Muzindutsi [172] provided supports for time-varying calendar anomalies in African stock markets by applying GARCH family models. Overall, the studies of time-varying AMH are not only few, but many of them (apart from [166, 167, 169, 171, 172] who supported AMH), have not supported the presence of calendar anomaly because only a small proportion of the estimated windows or sub-periods confirms the identified anomaly.

### 4.4 Calendar anomalies and market condition studies

By inference, AMH also portends that variation in calendar anomaly would emanate from changing market conditions. In line with the reasoning, Agnani and Aray [173] applied two state Markov-switching models (MSMs) and documented time-changing January effect in the US. The effect is found to be pronounced during the period of high volatility. Similarly, Urquhart and McGroarty [167] investigated time-varying calendar anomaly in the US market using daily and monthly index from 1900 to 2013. Results of GARCH (1,1) and Kruskal–Wallis test in 19-years equal length sub-samples and 5-year fixed length rolling window disclosed that calendar anomalies vary over time. When market conditions were taken into consideration, the study further showed that calendar anomalies are influenced by conditions such as the up, down bull, bear, normal, expansionary and contractionary, republican and democrat's dispensation. These findings were supported by Shahid and Sattar [174] in Pakistan who documented that the behaviour of calendar anomalies (Monday, January, TOM, Holiday and Ramadan) change through time and under different market conditions, using similar methodology. Evanthia [171] further examined the presence of DOW effect in relation to recession, uncertainty, liquidity and bearish sentiment. The study submitted that both the positive and negative DOW effect are more likely in the boom than in recession, Monday effect is highly correlated with the uncertainty index, weak relationships exist between DOW effect and liquidity/trading volume and negative DOW effect is associated with an increase in bearish investors. Recently, Rich [175] in JSE applied MSMs and showed that there is no clear evidence of DOW effect under any market condition, but found a negative January effect in bull, negative July effect in bear and positive August effect in bull regimes. It must be noted that studies reviewed in this subsection are not linked with AMH except the Urquhart and McGroarty [167] and Shahid and Sattar [174]. In support of responsiveness of calendar anomalies to changing regimes of AMH, Obalade and Muzindutsi [176, 177] applied Markov-Switching Models in selected African markets. In essence, there is a dearth of study of calendar anomalies cum market condition and only a few studies seem to support AMH.

### 4.5 Gap in AMH empirical studies

The gaps in the subject under review are depicted by the fact that while the empirical investigations of market efficiency and calendar anomalies under AMH are limited, African market studies are rare, the contributions in the last two years,

notwithstanding. It can also be seen that recognised studies on the effect of market conditions on market efficiency or return predictability in other markets, other than US, UK, Japan and Germany and Sweden, are needed, thereby creating a need for further studies in emerging and African markets. Further, the review shows that the consideration of time-changing calendar anomaly is new and the investigation is limited to a few markets. Just as the EMH, which has taken many years of investigation, there are still a lot of markets to cover in the examination of calendar anomalies within the AMH framework. Lastly, calendar anomalies could also be investigated vis-à-vis market conditions. Obviously, there is a dearth of empirical study on the explanatory power of market conditions on the behaviour of calendar anomalies globally, especially in the small and so-called inefficient markets like African stock markets. The identified gaps suggest that further investigation of AMH in smaller markets can shed more light on the topic. At this stage, an investigation of changing nature of efficiency and anomalies in response to market conditions in African stock markets has not received adequate attention under AMH. An attempt in this direction will make meaningful contribution to the existing body of knowledge on AMH and bridge the empirical literature gaps between developed markets and African Markets.

## 5. Summary and concluding remarks

This chapter presents the review of empirical studies on weak-form EMH and calendar anomalies, both in absolute form and under AMH. It can be seen from the review that evaluation of market efficiency is a controversial subject in the literature. While there is preponderance of linear dependency tests in the early periods (believed to be unable to capture non-linear dependency), there has also been an upsurge in the adoption of non-linear testing tools later. In the same manner, investigation of calendar anomalies has evolved from the linear OLS test to the non-linear types of GARCH family models. The rationale for the influx of non-linear tests and models is due to the realisation of the fact that many aspects of economic behaviour may not be linear. Since the existence of non-linearity also disagrees with the EMH and gives market participants an occasion to earn surplus profits, reliance on linear testing tools alone, to determine predictability, may lead to wrong inferences. Thus, reviewed studies revealed that (i) combining both the linear and non-linear testing tools or one that is able to pick both non-linear and linear dependence will ensure the avoidance of possible wrong inferences. Generally, the linear tests of EMH have produced conflicting findings, although developed markets have been found to be more efficient than other markets. On the other hand, non-linear tests, in most cases found non-linear dependence, whether the market is developed or developing. Hence, (ii) the issue of weak-form efficiency has remained inconclusive and its problem has been traced to the approach of evaluating EMH and calendar anomalies in absolute form. Thus, a market when investigated for dependency and predictability can be found to be either efficient or inefficient. This assumption can be described as viewing efficiency as absolute or all-or-nothing. In other words, the EMH can be described as a fixed or final state model [178].

Due to the defect of the absolute efficiency and calendar anomaly studies, Campbell et al. [129] and Lo [9] have advocated evolving efficiency and time-varying efficiency respectively as the alternatives to the traditional EMH methods. Consequently, there are a gradually increasing number of investigations of time-varying efficiency and calendar anomaly in recent times. Some efficiencies/anomalies found in one sub-period sometimes change/disappear in another sub-period; seasonal effects such as weekend/DOW and January/monthly effects are said to

be disappearing or weaker in some markets. This observation suggests that AMH approach could be more appropriate but this will require investigation of several sub-samples. Rolling analyses has so far been pointed out as the best-developed class of alternative tests to the absolute approach, while researchers are still facing the task of identifying models best suited to capture cycles or dynamics inherent in the AMH. While the investigation started from developed markets like the US, other emerging markets are now receiving a fair share of interest from researchers. Obviously, there is now a shift from absolute framework to time-varying frameworks. Recent empirical evidences are suggesting that AMH could be a more appropriate approach to describe the stock returns patterns. Consequently, stock market efficiencies and anomalies are now being linked to market conditions. However, very few studies have tested this in the developing markets. Thus, there is a need for further studies from African stock markets that are often considered to be illiquid and inefficient.

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## Chapter 5

# "Pandemic" in a Stateless Society

*Chee-Heong Quah*

## Abstract

This chapter debunks the myth that only the state is capable of handling a pandemic. Instead, without the state, private individuals and entities, when given the full freedom, can better ameliorate the risk and harm of a virus outbreak and at the same time maximize the well-being of the entire society. In particular, this chapter discusses what would have happened in a world without a state and how would the economic laws in the Austrian tradition drive individuals to act in ways that maximize the net benefits not only to themselves but ultimately to every member of the society.

**Keywords:** pandemic, state, virus outbreak, society

## 1. Introduction

In response to the coronavirus pandemic that began in China, most governments have resorted to shutting down cities, communities, businesses, and almost every human activity that are deemed to be too dangerous and risky, possibly proliferating the spread of the virus. States and governments have heavy-handedly expanded their powers on civil societies to levels that are hardly imaginable in peacetime. Individuals are stripped of their freedom of movement, and in many places, their freedom of expression too is taken away. Arrests, fines, and severe punishments on ordinary citizens are made for carrying out their daily life activities that nobody could have imagined would constitute crimes. In countries where basic freedoms have always been suppressed, harmless activity such as jogging alone on the road is treated as high crime where so-called offenders are locked up, fined, or even jailed.

Amid these draconian actions by governments, the fundamental question that remains is whether harsh ruling is the only and the best way to respond to an outbreak of a highly contagious disease. Must coercion, force, and threat be used by the state on the civil society? Are there no better alternatives to contain the plague? Would private individuals, led by the invisible hand, better handle and resolve the crisis or would have they avoided the plague totally? The objective of this chapter is to find out what could have happened in a society without the state, also known to some people as anarchy. While the literature contains myriad definitions and conceptions of anarchy, anarchism, and statelessness, for this exercise the stateless society is governed by private institutions and agents that include private courts, security firms, defense agencies, and so forth to ensure that law and order is maintained and preserved. For detailed discussions on the functioning of a stateless society and its legal system, see, for example, Block [1], Chartier [2], Hoppe [3], Murphy [4], Rothbard [5, 6], and Stringham [7]. In the tradition of classical liberalism and Austrian economics, the remaining discussion walks through the logic of what might have happened in a world where virtually, if not all of the lands, premises, properties, and waters are owned by genuine private persons or entities.

It is widely accepted that the novel coronavirus originated in Wuhan, China, in late 2019, either from a wet market selling exotic animals as raw food or from a not-far-away laboratory that carries out virological research. In either case, in the authoritarian China, both entities are owned and managed by the government, probably the former by the municipal authority and the latter by one of the agencies under the purview of the central government. Since no election of government officials exists in this regime governed by a single communist party, the owners and managers of both entities are likely to be government bureaucrats who need not satisfy the needs of voters or answer to the wants of the people. Also, since only government-run markets are allowed to operate and only in selected locations permissible by local authorities, the local populace have limited options if they want to purchase goods that are available for sale at this type of wet market. In other words, a wholesale market like this can easily be a monopoly in a locality. Even if privately owned markets are allowed, they are likely to be linked to the interests of high officials since operating licenses and other permits are monopolized by the officials. Therefore, the local bureaucrats have little to worry about the business and the revenues from rental and other sources. But even if the market does fail in luring sufficient customers, the government which is not driven by profit and loss, will not ever go bankrupt and the officials in charge will still keep their job. The same can be deduced for the research institute of virology in which, if things go awry, the managers who are likely closely linked to the officials of the authoritarian regime are unlikely to be held accountable. By and large, bureaucrats and officials will hardly lose their job or be brought to justice for reasons of negligence and incompetence in a country where the state overpoweringly controls the media, the police force, and the judicial system. Instead, more likely they will lose their job for reasons of politics and relationships. Following this, it is extremely improbable that the operations of the market and the laboratory can be as effective and efficient in serving their customers, stakeholders, and the local community with the highest quality, a dimension that includes also hygiene and safety.

Quite the opposite, a privately owned wholesale wet market that operates in a stateless society faces totally different circumstances. Driven by nothing but profit and loss and passion in serving their fellow men and women, the entrepreneurs behind the business must not only meet the needs and preferences of customers but, at the same time, appease the demands of other stakeholders which include the local community. In this society of competing private courts, enforcement agencies, and security firms, no one single authority or entity has absolute power in a specific area as to grant anyone or any business with privileges and protection against any lawsuit from anyone. No business or entity will be granted monopoly privileges. There are no licensures and barriers against new entrants into the market. Competition, either current or potential, even for the locality market will be stiff. Thus, the owners and managers of the wet market must ensure that every food item sold and every service rendered at their premises are absolutely safe and hygienic.

In the face of stiff competition, the management might even have to obtain certain certification or endorsement from certain private agencies specializing in evaluating, testing, and endorsing food suppliers and markets with ranks and ratings of safeness and hygiene. Even in our current world, various ratings are available for various businesses and services, either online or brick and mortar. However, agencies, services, and businesses owned or run directly and indirectly by the government are either immune or not really dependent on such quality check. Their existence and the taxpayer money that funds them are not subject to any market test and quality check, whatsoever. Quite the reverse, since the privately owned wet market in a competitive stateless world needs to promote and market its goods and services, it has no choice but to accept the scrutiny of private media and rating with

open arms. Only businesses that are competent and transparent in their operations will survive the test of the market. No consumers will patronize businesses that are associated with suspicious or questionable practices. Remember also that in this stateless world, every media company must compete for audience and customers so that the media too are not exempted from the market test.

Along this line of reasoning, in the stateless society, it is almost impossible that any live exotic animal that is sold for consumption at any market poses any infection threat to consumers, not to mention the transmission of virus from animal to human. In this world where media are extremely competitive, any trader that appears to pose any threat to consumers would have instantaneously been exposed to the public. Hence, if such a dangerous animal is indeed up for sale or if such an infection does in fact occur, the public and the media would have quickly disseminated such a news because the quicker they are, the greater the satisfaction a private individual can get and the more profits the media companies can make from spreading the news. It does not matter if the news eventually turns out to be a false alarm because in the long run only the news provider that produces good news will sustain. If some audience prefers fake news, there is a niche for it. If most people prefer valid news, then the vast majority of news providers would provide valid news. Ultimately, those who want fake news will turn to fake news providers, while those who want genuine truths will turn to genuine news providers. In a free society, no one has the right of denying anyone from receiving any news that he or she wants to hear.

In a stateless society, the freedom of expression and media is likely to be high or completely absolute since private courts that rule out such freedom will be put out of business by consumers if most consumers prefer to have such freedom. Rational persons would prefer the freedom of expression and media because naturally human beings want to know more than less, possess more than less information, particularly when making crucial decisions. It is natural for individuals to prefer to have more choices even in the sphere of information, data, and knowledge. Only complete freedom of expression and media can provide the public and every individual with the most information and data possible, without any censorship and filtering by any authorities. Individuals too would like to freely express themselves, be it, satisfaction, dissatisfaction, criticism, compliment, happiness, or unhappiness toward something. For the above reasons, the freedom of expression and media is preserved in the stateless society.

Back to the origin of the virus, the same line of logic for the wet market can be applied to the laboratory if it operates in a stateless society. The owners and managers of the laboratory have to satisfy their customers, most likely pharmaceutical companies and drug makers, and at the same time boost the research firm's reputation and status in the community. Nobody would want to deal with a research institute or laboratory that undeliberately or deliberately does harm or leaks any virus to the public. In addition, this private entity is subject to lawsuits and its rivals would want it to close down or acquire it. Furthermore, it is extremely hard if not impossible for the research laboratory to bribe and silence the media, the enforcement officers, and the private courts because these service providers too must compete in their respective markets for customers or be driven out of business. Thus, any leakage accident and lawsuit can lead to great losses and probably bankruptcy for the private research firm. As that in any other private business, the owners would not want to suffer losses on investments and the managers and personnel would not want to lose their job. Incentives matter. Without any protection from the omnipotent state, the managers and employees have no choice but to be as airtight as possible in quality and safety control. Hence, akin to the wet market, the chances of a deadly mistake such as a virus leakage from the laboratory are essentially zero in a stateless society.

Despite the above, in the unfortunate and rare event that either an animal-to-human transmission or a virus leakage does indeed occur in a stateless world, how would the society react to it? First, we must begin our logical analysis by understanding that a society is nothing but a group consisting of many different individuals with diverse needs, preferences, and goals who face different circumstances over their lifetimes. It must not be misunderstood, as what communism or socialism suggests that a society or community is a whole under which the so-called common interests and needs of the whole are more important to those of the individuals. While individuals certainly share some common characteristics and interests, because circumstances surrounding each person through his or her lifetime are different from each other's since the person is born, even if all persons are born identical in every aspect, they are bound to be different in needs, tastes, preferences, desires, and life goals.

Simply by knowing this, in our current world, a one-size-fits-all response by many governments to the viral outbreak will certainly either overdo or underdo in preventing transmission among pockets of individuals in the society. An across-the-board ruling necessitates coercion, overreach, and intrusion into individual rights of liberty by enforcement officers even in perfectly safe situations where transmission is impossible. Meantime, tougher penalties on supposed offenders will only open up opportunities for enforcement officers to solicit bribes. Even if state leaders and officials are genuinely sincere in trying to eradicate the plague, they do not and will never possess the vital localized information pertinent to an individual, which enables that person to avoid getting infection and at the same carry on with his or her life as close to usual as possible.

Second, in the world without the state, all lands, waters, premises, and properties will be privately owned. Hence, all dwellings, cities, townships, roads, railways, airports, ports, train stations, walkways, rivers, beaches, hospitals, schools, playgrounds, parks, hills, mountains, forests, and everything that is usually owned or managed by the state will be owned, in one way or another, by private individuals or groups. Since there is no state to protect them, all these private entities operate in a competitive environment. They face constant threats from direct rivals and indirect substitutes. The structure and arrangement of these private ownerships and how they work are beyond the present discussion (for details, see references). The objectives of these private owners, though, can be profit- or charity-maximizing or both. Unquestionably, people work for pecuniary income and profits but also for various reasons, passions, and interests, and among others, the passion to help the needy and unfortunate.

## 2. Reactions of a stateless society

Given the above first and second conditions, how would a stateless society handle and resolve a contagion or initial outbreak? Certainly, most rational individuals will try their best to avoid infection, given the latest and most complete information provided by various media platforms which enjoy complete freedom in disseminating all information. In this regard, it is up to rational individuals to choose the right information and act upon it. If certain mentally sound individuals wish to risk their lives or intentionally contract the virus, they are allowed to do so because they have all the rights to their own bodies and lives. Members of society may persuade and advice but ultimately the choice is theirs. Nonetheless, their actions should in no way harm or inconvenience other persons. If they contract the virus and need treatment, they should pay all by themselves or they can get funding

from willing persons, certainly not from taxpayers as what exists in our current system. If all private health-care suppliers and even charitable organizations refuse or are unable to help, these rational people should face all the consequences including death which may result from their intentional actions.

Nonetheless, it can be safely assumed that most people will act rationally and accordingly to their best interests, and if there are certain outliers, their eccentric behaviors should not prevent other persons to pursue their objectives of safeguarding their health. The standard libertarian principle applies in which everyone is free to exercise his rights provided that he does not prevent others to exercise their equivalent rights. Those harming others who have not consented to be harmed will be brought to justice by the private judicial system.

If most people in the society prefer not to be infected, the risk of infection can be minimized or eliminated and this can be executed in the best ever manner, certainly more effective, precise, and efficient through voluntary private incentives than what governments have done today. This is possible and will certainly be done because virtually everything is privately owned. Let us begin with a simple case. When one owns a house and perhaps also the surrounding area, in this stateless society, he has the absolute right to allow or prevent anyone from entering his premises. If he suspects someone has an infection or that he just wants to be perfectly safe and therefore isolate himself, he can just prohibit a particular person or just anyone from accessing his premises. To safeguard his borders, he may hire private security. Similarly, when shops, eateries, malls, townships, roads, housing estates, airports, trains, planes, and all other transportations and premises are owned by private owners, it is up to the owners or managers to decide whether to take precautionary measures, prohibit any suspicious persons from accessing, or completely close their borders.

To profit-maximizing owners, they have to weigh the benefits against the costs of every option. Since most people do not want to contract the virus, owners of these businesses have no choice but to meet this new need of their customers and other stakeholders but at the same time also meet customers' demands for goods and services. If some entrepreneurs predict most of their customers will not purchase anything, they may choose to just suspend their businesses. However, if certain businesses predict that customers will still demand for their goods or services despite the risk of infection, they will carry on with their operations. Knowing that their customers and other stakeholders are fearful of infection, the business managers will now find ways of delivering goods and services and at the same time meet their additional need of prevention of infection. This additional need now becomes part of the service the businesses have to deliver.

This is no surprise because entrepreneurs have to constantly adapt and meet the changing demands, needs, tastes, and preferences of customers and other stakeholders, including in the period of fear of infection. Unlike the state, they operate in a competitive environment and during a period of panic and distress, only businesses that can innovate and alleviate the fear can sustain their sales and reputation. Accordingly, in this stateless world, one will find different businesses and organizations, incentivized by profits or passion or both, will employ innovative ways to ensure the safety and well-being of customers, associates, members, and other stakeholders. It is then up to the rational individuals to choose which sellers they want to patronize or whom they want to associate with. In fact, even in our current world with the state, various voluntary cooperations and initiatives to tackle the coronavirus pandemic have been carried out despite the counterproductive, obstructionist, and harmful actions of the state.

## 3. Who cares for the workers?

The next question one may ask is, while customers and the general public are taken care of by themselves and by the owners and managers of private properties and enterprises, who shall protect the working class? Will they not be subject to infection risk by their cruel and mean employers? First and foremost, in this world without the state, private enterprises are owned or run by people who are incentivized by pecuniary profits or by passion or a combination of both. Entrepreneurs, businesspersons, and managers hire employees for their services of which the value created is expected to outweigh the cost of hiring an additional employee. Hence, no sound-minded bosses would want their employees to fall sick and become unproductive. In this highly competitive world, every worker counts and every productive hour of the worker is highly valuable. No one is going to subsidize any employer for hiring certain group of people or penalize any employer for not hiring certain people. The labor market too is completely free and competitive. To meet the demand of customers, businesses must ensure smooth operations of the production process. In this regard, employers too would take precautionary measures to prevent their workers from contracting the disease. To put in perspective, keeping workers from any danger at the workplace is just a rational practice for profit-maximizing businesses even in this current world with the state. This is more so in a stateless world. Maltreatments by employers will not only undermine profitability but also damage the brand, image, and reputation of private enterprises and employers since the media industry is highly efficient and effective in the stateless world.

The same line of reasoning can be applied for enterprises and organizations that are driven by passionate individuals who do not prioritize economic reward. To keep their cause and activity going, employees, members, and associates must be healthy and productive. Not to mention viral infection, every risk of workplace accident, hazard, and stress will also be minimized. Every organization has goals to achieve, and without any financing by taxpayer money, every private organization has to treat workers and associates the best they can if they ever need them to achieve those goals. If workers are not really important, they would not have been employed in the first place. In this world without the state and taxation, every decision and action of private firms is completely rational, given the circumstances and limitations of decision makers. There will be no distortion in decisions due to arbitrary state regulations. Remember that there will still be private law and order and hence no rational firms will purposely expose non-consenting rational workers to danger or infection since harming others (or even negligence) is still a crime in this libertarian society. In short, as individuals, workers can take care of themselves in the face of infection danger, and on top of that, when working or at the workplace, employers will make sure they are as safe and as healthy as possible.

## 4. The unhealthy health-care industry

The common reason for lockdown given by governments is to prevent patients from overwhelming hospital capacity in their respective countries. This narrative implies that the state has always exerted an overbearing control over the supply and quality of medical services in general and hospital beds and equipment in particular. Ironically, no one would have ever heard of impending overload of hotel capacity so that the state must step in to reduce the influx of guests and tourists from abroad or within. Also, no one will ever imagine a possible overload of foodservice, cinema, or stadium capacity so that the authorities must help to chase away by force excessive guests from patronizing all these business premises. Only

in state-owned or -controlled sectors one can find that the rising demand for a product or service is a bad thing so that harsh measures must be taken to curtail the increase in demand or to limit the amount one can purchase at a time. In a competitive private economy, no business and certainly no industry will ever grumble of too high sales or too much demand from customers. Two main reasons account for the peculiarity in the health-care sector.

First, the health-care sector has always been restrained or suppressed by the state from fully unleashing its potential. This is done through direct or indirect state ownership and management of health-care facilities and through various regulations and bureaucracies on private players that produce health-care workforce, drugs, equipment, devices, methods, and so forth. Regulations stifle innovation and risk-taking that is essential even in the health-care service. Specifically, occupational licensing enforced by the state restricts new entrants into the industry, directly reduces supply, and suppresses competition. Regulations and licensing laws are often set or crafted by elected politicians and unelected bureaucrats together with existing dominant players that seek to shield current suppliers from competitors and substitutes. Consequently, incomes of current players are propped up, not to mention the corruption, rent-seeking, and kickback that may be involved. This barrier to entry not only limits the quantity and quality but also the breadth of choice that consumers can choose legally. Hence, it is of no surprise that health-care service providers in many countries find it difficult to cope with the surge in demand amid the coronavirus outbreak. As a result, quantity supplied has to be rationed or quality has to be compromised or a combination of both has to happen in the treatment of all patients.

Second, the price mechanism has always been restrained, inhibited, or held back by the state from being fully operational in many sectors including also health care. In some countries, the health-care provider is none other than the state, and in many countries, the government and the private sector co-provide health-care services. In the latter regime, the state crowds out resources available in the economy and competes unfairly with the private health-care providers by undercutting private suppliers in price. Government providers can afford lower prices because they are funded in whole or partially by taxpayer funds. The reliance on cheaper priced services offered by government providers would grow over time because the state restricts total supply through regulations, causing long-term undersupply and hence higher prices of health care. This is on top of the general price inflation that is also created by the state. These conditions perpetuate a vicious cycle in which the public will keep on relying on the state for cheaper health-care services.

The financing of health care by the state gives the illusion to the general public, especially the low-income group, that health care is more affordable than otherwise and hence this tends to disincentivize them to act rationally. In the wake of viral outbreak, knowing that the government is always there to take care of them, the general public will be less cautious and careful than otherwise if they had to finance the medical expenses all by themselves when they fall sick.

Quite the opposite, this moral hazard does not arise in the stateless society. Individuals must finance medical expenses using funds of themselves, relatives, friends, other willing persons, philanthropists, and/or charitable organizations. Consequently, when demand for health care surges, price will tend to go up accordingly, and this increase in price will discourage more demand. Individuals will be more cautious about their health knowing that they have to pay the full expenses of medical services. Health-care capacity can hence be allocated properly since in the short run, total capacity can be rigid or constant. The deterrence to demand more health care buys time for entrepreneurs and businesses along the value chain to increase supply. This is true for all health-care services, not just that

for pandemic. Incentivized by the higher marginal market price, suppliers of all goods including capital goods through the value chain will find ways to increase production at fastest speeds possible. Entrepreneurs know that speed is important to enable them to capture the higher marginal profit. In the event of viral outbreak, if masks are in shortage, the rise in the marginal price of masks will signal the suppliers to increase output as efficiently as possible. Scarce resources such as trees, paper, string, and rubber will now be directed more to the production of masks instead of other production, given the higher price of mask relative to other goods in the market. More labor hours too can be directed to producing masks than producing other goods. More mask-making machineries are produced. The same goes for machines to make the ingredients to mask-making machineries. All these actions are coordinated voluntarily and seamlessly by multitude market suppliers and participants as led by the higher price of the final consumption good, namely, mask.

How about in our present world having the government command producers to manufacture more masks and at the same time retain the previous lower retail price? How about the state also distributing the additional supply of masks? On human grounds, any form of coercion is not only immoral but certainly a crime and should be denounced. Having the state mandate production of certain goods is just like pointing guns to a person forcing him to work involuntarily, an act no different from enslavement. On economic grounds, coercion does not incentivize a person to act in the most productive, effective, and efficient manner. If the state were to force mask producers to increase production but at the previous lower selling price despite the overwhelming demand and scarcity of supply and resources, entrepreneurs and managers would not act with their best efforts and certainly not with their best knowledge in assembling the factors of production through the best method to produce more masks. Matters are even worse if the government forces non-mask-making manufacturers to produce masks.

Specifically, managers would not select the best materials and workers to produce the additional output and also would not deploy the best method of production that could produce most effectively and efficiently. Even if managers were willing to employ the best workers, the quality workers too would need additional compensation for working more. If more quality workers are needed, higher rates of wages are involved. All these require greater marginal profits to finance. Similarly for the best materials and so forth. Only with market prices, will best materials be delivered to the mask manufacturers at the right time and place. The same applies to machinery and other resources, inputs, and complementary products and services provided by other suppliers through the value chain before the finished masks are packaged and displayed on retail shelves or delivered to hospitals. Without additional profits from higher prices of masks, the resources, materials, inputs, and services would not be shipped or delivered accordingly at the right quality, time, and place. Instead, these items and services would be used in current or other production or other uses that would be more profitable. For example, without additional rewards, logistic companies would rather ship other goods or delay shipping the masks, if shipping those other goods yields greater payoffs. In addition, greater marginal profits would attract more competitors to the marketplace at a much faster speed.

Without having the essential local knowledge and specific information through the value chain, the government would not be able to effect prompt supply of quality masks at the right places because the actors through the value chain would not be incentivized to do so even if the state were to coerce all involved actors. The result of coercion on production will be inferior quality, quantity, or both. In addition, without the lead given by the higher prices and differences of price across places, the government also does not know how much to produce and how

to allocate the supply. Under this authoritarian regime, the state would certainly oversupply or undersupply, using up exorbitantly more resources than otherwise, and harass more individuals in the society because more and more people in different jobs and sectors must be coerced to give up their freedoms, rights, and properties so as to produce the amount required by the state and distribute the supply of masks to those of whom, according to the bureaucrats, are most in need of the masks.

On the supply side, without the price system to allocate scarce resources, misallocation of resources in both quality and quantity will be put into production and elsewhere at the wrong time or at the wrong place or both. On the demand side, without the functioning price signal to direct the allocation to consumers of different needs and preferences, at different times and locations, certain consumers will be given more than demanded and others will be given less. Besides mismatch of quantity supplied and actual need, those who require higher quality masks will get lower quality ones, while those who want lower quality ones will get higher quality, and on top of that, delivery will tend to take place at the wrong place and time.

In conclusion, the government has done more harm than good in imposing one-size-fits-all curfew-like measures through coercion. Akin to any other kind of intervention in the free society, the seen and unseen costs of government actions in tackling the viral outbreak and consequently the pandemic far outweigh the benefits. By stark contrast, in a society without the state, every private actor would act to his or her best interests in minimizing the risks and costs of such plague and simultaneously maximizing freedom and happiness. While not perfect, individuals with local and specific knowledge can make better decisions than what bureaucrats can. Hence, in our current world with the "omnipotent" state, instead of seizing more control from the private sector, more and more freedoms, rights, and powers should be returned to the private actors not only during a crisis but at all times. Had the state not meddled in every facet of society in the first place, any societal problem would have been a much milder one if not prevented. The word "pandemic" as appears in the title of this writing would have been "an infection" in a stateless society if it must happen.

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Section 2

# Country Case-Studies

# The Influence of Economic Activity of Women in Malaysia and Guatemala on National Development

*Verena Habrich, Vito Bobek and Tatjana Horvat*

## Abstract

Emerging markets are amongst some of the fastest-growing economies on the globe. However, it is necessary to enhance human capital to enable the long-term development of a nation. The theory states that the increase in workforce participation favorably impacts GDP per capita. Additionally, developing markets can grow even further if they increase women's rates in the labor market. The authors' desire is to determine the main obstacles for women in the job market and identify the impact of female participation on national development. The authors applied the following methods of work: description and compilation of different literature and deduction method to show which relevant factors are recommended to make higher women's economic activity to impacts the economy in a broader sense. The results show that Emerging markets must overcome gender inequalities, properly enforce female-related regulations, and invest in human development. The results also point out the relevance of a country's level of development, culture, education, female-related laws, and their influence on women's decision or ability to work. The discussion demonstrates that the rate of women in the workforce is increasing, but it is still severely lower than the men's rate. The main issues are cultural stereotypes, limited access to the job market, and difficulties with combining work and childcare. When it comes to infrastructure and educational possibilities, remote areas are still underdeveloped. Furthermore, gender bias is still deeply rooted in rural society. The elimination of these stereotypes and the improvement (and enforcement) of women-related policies will contribute to higher female workforce participation in the future.

**Keywords:** Female labor force participation, impact on economic growth, economic development, human development, gender and development, human capital, gender gap, gender equality

## 1. Introduction

Emerging markets are amongst the fastest growing markets on the globe. Investment in infrastructure and human development are necessary to enable this growth process. Improving human capital has a positive impact on a nation's economy and eliminates certain hurdles for a country to prosper.

In most emerging markets, the female labor force participation (FLFP) is lower than in developed countries. The lowest rates of FLFP are seen mostly in the

Middle East and North Africa. This is followed closely by South Asia and Central America. However, in underdeveloped countries, the empowerment of women would boost economic growth [1]. Women have long been a new source of talent. They are an untapped resource that has enormous potential for the labor market and economy [2]. The act of fostering female human capital is one of the highest-return investments a developing economy can generate. The enhancement of girls' education leads to society's following indicators: (a) higher workforce participation of women and (b) a decrease in gender gap issues. In the future, this will be even more crucial since the workforce demand is growing, especially in sectors where female participation is currently low [3].

Even if awareness of the importance of gender equality has been raised, there are still many obstacles for females to enter the job market. Women make out half of the world's population, but they currently only create 37% of the global GDP. If females would reach their full potential in the labor market, forecasters say that this would lead to global GDP growth of 26% by 2025 [4].

The high growth in emerging markets leads to higher demand in the labor force. On the other hand, there is often unused workforce potential within a country because many females are not part of the labor force. Therefore, the increase in women's economic activity is necessary to enable human development and long-term economic growth. To achieve this unrealized potential, there is an urgency in analyzing existing obstacles for women and the impact of female empowerment.

Gender disparity is the most prevalent form of inequality on the globe and hinders human development. According to the United Nations' (UN) current Human Development Report, the global gender gap is more deeply rooted than initially thought [5]. This fact supports the idea of this chapter. It increases the authors' motivation to identify hurdles for women and to present the obstacles faced by the global community for future growth.

## 2. The research question and methods of work

The main research question in this research is:
"Which are relevant factors that influence women's economic activity and how this impacts the economy in a broader sense?"

The authors aim at shedding light on this relation and the importance of policies, markets, and institutions within this concept. The authors will then produce suggestions for improvement on this pressing issue.

Based on the problem statement, the authors came to some personal theories. The following are the authors' selected assumptions for this research:

- The rate of female labor force participation impacts economic development in emerging markets.

- The female workforce participation is influenced by certain external factors, such as education, culture, regulations, and overall development.

- If more women would enter the labor market, the economy will prosper.

Different sources underline the link between gender inequality and national development. However, when it comes to female workforce participation and its impact on the economy, there is still a literature gap. This has created obstacles for many researchers in conducting a proper analysis of women's role in the economy

[6]. The literature lacks detailed information about the reasons for gender disparities across the globe, i.e., how culture and education affect inequality [7]. The UN confirms that there is more data available about men-related than female-related topics. This Gender Data Gap creates a problem in research because women's progress cannot easily be observed [8].

The majority of literature states that gender inequality and economic development are correlated in a two-way relation. There are two main factors in this type of relationship. First, the level of development of a country determines the number of economically active women. Second, the rate of female workforce participation impacts the economic growth of a country [9]. This chapter will elaborate on economic development and growth, gender roles within this concept, and the main factors influencing the female labor force participation rate.

We will use these methods of work: description and compilation of different literature and deduction method to show which relevant factors are recommended to make higher women's economic activity to impacts the economy in a broader sense.

## 3. Economic development

The economy is an important topic to discuss for both emerging and developed markets. Two terms are mentioned frequently: (a) economic growth and (b) economic development. Economic growth is known as the increase in a country's output. It is usually linked to an increase in income and is measured with quantitative indicators, i.e., GDP per capita. Economic development describes the combination of economic growth and a shift in national structure. This might include a positive change in education, income distribution, technological progress, and the ability to lift the population out of poverty [10]. The following subsections provide an overview of modern economic growth theories and one specific economic development driver: human development. Additionally, there will be an elaborated discussion over the role of gender within the development concept.

### 3.1 Modern economic growth theories

During the Industrial Revolution, there were several views on economic success and from this rose the role of labor. This social mindset change produced renowned classic growth theories written by Adam Smith, Karl Marx, or Max Weber [11]. In combination with the Malthusian concept, these economic theories argue that an increase in population eliminates efficiency and economic growth. However, they have omitted factors such as technology and modernization [12]. These theories have long been considered outdated and have been replaced or adapted by modern growth theories.

One of the first neoclassical growth theories is the Solow Growth Model, established in the 1950s. It states that exogenous (external) factors lead to economic growth. In Solow's point of view, a high rate of income saved by individuals leads to capital accumulation. This enables higher investment rates, a higher GDP per capita, and higher wealth within a country. Solow stated that population growth could negatively impact GDP per capita because more investment is needed to employ additional workers.

Another modern economic model is Rostow's manifesto of 1960. It explains the five stages of growth. Rostow was convinced that economic growth is driven by both demand and supply. He extended on Solow's view by believing that economic changes are based on entrepreneurship and society's consumption level. Rostow described the transition from a traditional society into a modernized society.

This provided a method of clustering countries into developing, emerging, and developed markets [13]. The five stages of growth, according to Rostow, are the following [13]:

1. The traditional society - with limited or unsteady growth conditions,

2. The pre-conditions for take-off - where a foundation for growth is created,

3. The take-off - where hurdles for long-term growth are finally left behind,

4. The drive to maturity - with constant growth and technological progress,

5. The age of high-mass consumption.

When establishing his Endogenous Growth Theory in the 1980s, Romer disagreed with Solow and Rostow's perspectives. He was convinced that economic growth derives from within an economic system. The crucial determinant for growth is the behavior of the economy. Romer claimed that external factors, such as technological progress, are available to all countries globally. Nevertheless, some countries progress economically faster than others. Therefore, he concluded that endogenous (internal) factors, such as labor force and rise in productivity, have an increased impact on income per capita, and therefore the standard of living. This is echoed in Romer's presumptions that state investment in workers' knowledge leads to capital accumulation and long-term economic growth [14].

When it comes to capital accumulation, the Lucas Model from 1988 agrees with Romer's opinion. Lucas was convinced that education and learning have a significant impact on labor productivity and economic growth [15]. Romer [14] considered Lucas's opinion as incredibly powerful. Lucas's statement's most notable opinion is that workers migrate to places where human capital is existent to a greater extent. This is seen as a crucial perspective on national development.

According to more recent literature, a combination of the following factors is pivotal for the long-term economic success of a country [10]:

• Human population, fertility rate, workforce participation, and labor skills,

• Employment/unemployment, migration, and urbanization,

• Human capital, education, and health,

• Capital formation, investment choice, and technological progress,

• Entrepreneurship, organization, and innovation,

• Natural resources and the environment.

Information provided by major global consulting firms gives further meaningful insights into the topic of economic development. The Boston Consulting Group claims that economic growth and society's well-being are tightly linked to each other. In the course of their last surveys, the agency identified that the ability of a country to transfer wealth into societal welfare has a significant influence on the level of long-term economic success. To achieve that, developing and emerging countries must invest in the improvement of education, health, infrastructure, and governmental institutions [16].

Consultants from McKinsey & Company agree, particularly when it comes to the importance of governance and education. Their surveys confirm that labor productivity and talent seeking are crucial steps for a country's economy [17]. Bain & Company state that people are the most basic form of capital a country has at its disposal. The investment in employees helps companies and countries to improve their long-term economic performance [18].

The majority of growth theories acknowledge human capital as a highly influential driver for a country's economic progress [19]. The author considers this a crucial fact for this research. It underlines the impact of increasing labor activity on the economic development of an emerging market. The mentioned theories and surveys display different views on how economic growth arises. Nevertheless, the overall consensus is an increase in workforce participation, together with a rise in efficiency, leads to long-term economic success. This is an essential ideology for this research because countries with low (female) labor force participation possess many unused potentials. Subsection 3.2 elaborates on human development and its relation to economic prosperity.

## 3.2 Human development

Human capital determines the level of knowledge of a nation's workers. It is a meaningful dimension to describe a country's economic, political, and social situation. Investing in human capital can be undertaken through education and training. If executed correctly, it can increase the nation's output and efficiency in the long-term. Human capital is perceived as an exceedingly necessary form of capital a country possesses [20].

Schultz [21] highlighted the importance of labor and the impact of social investment on a country's wealth. Alternative human development theories arising in the 1970s underlined the connection between economic prosperity and human development. In theory, the shift led to the understanding of particular areas of the field revolving around sustainable goals. The four relevant subtopics are: (a) social relations and networks, (b) diversity, (c) environment, and (d) gender equality and empowerment [22].

Becker [23] expanded with these concepts by underlining the correlation between a worker's knowledge and economic growth. He concluded that countries with a high education level usually experience more efficiency and higher income per capita. According to Inglehart et al. [24], modernization and social change are forms of human development. These aspects correlate with a change in people's values. The increase in human development is linked to a higher level of democracy and gender equality. This provides a fundamental finding for this research.

An often-used measurement to indicate that the well-being of a country is the GDP. However, GDP could be insufficient in providing a broad picture of a nation's economic situation. There are other forms of measurement that are more adequate in the measurement of human development. The Human Development Index (HDI) is one of these measurement techniques. This index analyses the level of education, health, and welfare within a country [10]. It contributes an in-detail insight into a society's living conditions. HDI accomplishes this through the combination of three dimensions (**Figure 1**) [5].

As mentioned at the beginning of this section, economic growth has a significant impact on the level of income and society's well-being. It can lift people out of poverty and raise the standard of living. However, economic growth does not automatically decrease poverty due to existing income inequalities in many countries [19]. When it comes to education, health, life satisfaction, income, and labor force participation, emerging markets show a greater inequality rate than developed countries [25]. HDI
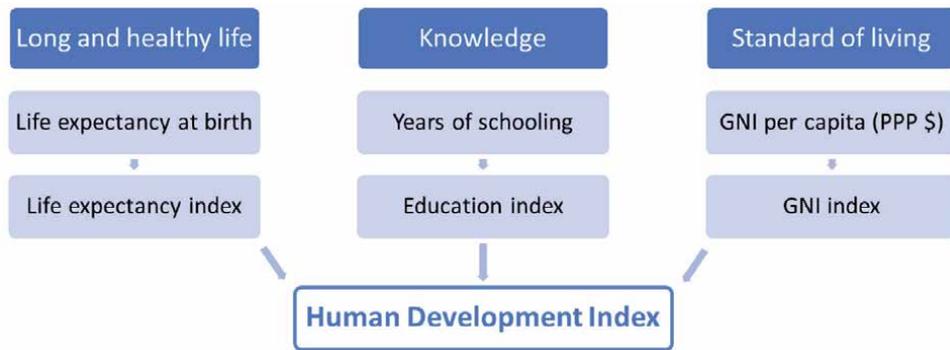
**Figure 1.**
*Dimensions of the human development index (own illustration, based on [5]).*

does not include indications about inequality, poverty, or gender disparity. Therefore HDI might not be a sufficient measure to analyze the welfare of a society [5].

There is a necessity to deliberate on the subject of gender disparity. The issues that ensue due to gender disparity are the most prevalent in explaining inequality on the globe. Gender disparity creates a significant hurdle for human development in the short- and long-term. According to the UN's Human Development Report, the global gender gap is more deeply rooted than initially thought. The UN set forth a goal to achieve global gender equality by the year 2030. Unfortunately, the signs of this being achieved within this timeframe seems intangible [5].

The issue of gender equality is highly relevant for (a) the economy and (b) development-related research. The discovery of this issue was one of the main reasons for the authors to focus on this topic. This research expects to provide further insights into its complexity. Gender disparity favorably impacts human and economic development. Subsection 3.3 elaborates on the role of gender within the development concept.

## 3.3 Gender and development

Women contribute to the wealth of an economy to a great extent [26]. If females are economically active in the official workforce, they stimulate improved living conditions for other women and girls. This translates into an enhanced health system, a reduction in domestic violence, a rise in their social status, and an overall economic development [27]. However, many women are employed in the informal sectors. This alludes to their wages and regulations not being appropriate. Their increased participation in the official workforce is essential for women's well-being and overall development [1]. If women cannot use their full potential in the labor market, the economic gender gap is created. This has negative impacts on income per capita, particularly in developing countries. **Figure 2** displays the twenty countries with the highest economic losses globally, resulting from labor-force-related gender gaps [28].

Even if awareness for gender-related topics is existent, the causes for gender gaps and their impacts are still not fully realized. This is seen even more so in emerging markets. The data in these markets are insufficient in many cases [29]. Development theories have often been criticized for analyzing women's role and their living conditions solely in a qualitative matter. This led to the implementation of gender-related indices, i.e., the Gender Development Index (GDI). It outlines the gender gap across countries and includes decisive factors regarding female life expectancy, literacy rates, school enrolment, and income [30]. This index is an
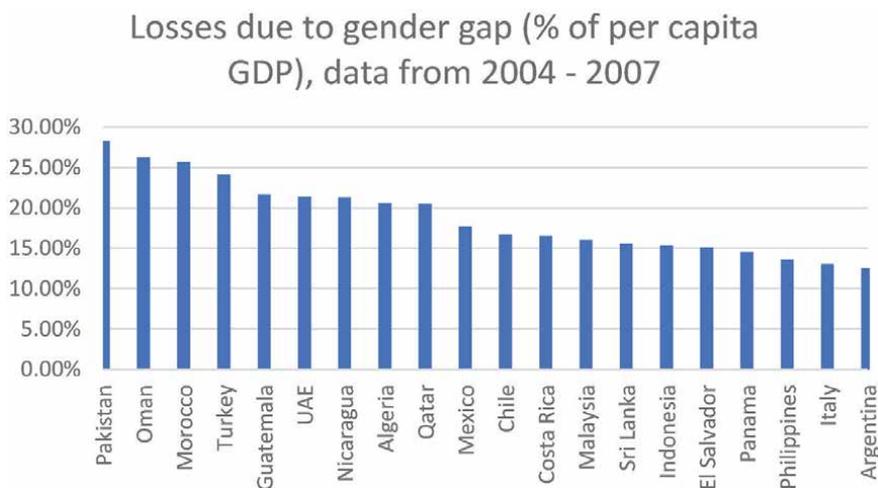
**Figure 2.**
*GDP losses resulting from labor-force-related gender gaps (own illustration, based on data provided by [28].*

additional indicator of human development under consideration of gender disparity. It displays the ratio between female HDI and male HDI [5]. Countries with a high level of human development usually have higher rates of gender equality [5].

The Global Gender Gap Index is another measure established by the World Economic Forum (WEF). This index analyses 144 countries and considers men's and women's labor participation, job opportunities, health, education, and political empowerment. It allows for a global comparison of gender disparity. The research focuses on output rather than input and analyses the actual living conditions worldwide [3].

The World Bank's Index of Women, Business and the Law measures the economic outcome concerning female empowerment with the help of eight indicators: mobility, workplace, income, marriage, parenthood, entrepreneurship, assets, pension. This index provides a broad picture of gender-related laws [31]. All three indices provide a detailed insight into women's situation and will be used for further analysis.

Two approaches should be examined to comprehend the importance of the relationship between gender and development: (a) Women in Development (WID) and (b) Gender and Development (GAD) [32]. These approaches have provided an essential basis for global female empowerment. The overall assumptions will be expanded on in the following paragraphs to grasp the importance of this topic.

The concept of WID established itself between the 1950s and 1960s due to feminist movements created in the US and Europe [33]. This movement's goal was to lift the sexes out of poverty, in turn, enabling them to equally benefit from improvements in their society and economy [34]. The main goal was to include women in the development process by improving their access to education, work, and property [32].

The WID movement set the foundation for female-related studies. Boserup's publication "Woman's role in economic development" from 1970 was the first work that analyzed female workers' impact on a country's economic growth, especially in underdeveloped countries. She knew that hindering women from being economically active creates obstacles for a nation and its growth process. This statement coincides with the theories mentioned in Sections 3.1 and 3.2. It points out how an increasing FLFP can enhance economic development and is a crucial finding for this research. The next approach has a contrasting ideology on the matter of gender and development.

The GAD approach focuses on the underlying causes of gender inequality. GAD categorizes aspects of race, culture, history, patriarchal behavior, and economic or social status together in relationship with one another [32]. Economic, social, and political changes impact the sexes in different ways. The approach of GAD investigates those effects on each gender group. Gender identities are not necessarily based on a person's sexuality presented at birth since gender roles can be flexible in today's society. This topic brings up the notion that it might not be sufficient to only address women within the framework of equality and development [30].

The WID and GAD approaches compete with each other, whereas WID has been criticized for being suitable only for the Western world, relying too much on modernization and government. Especially for less developed countries with weak institutions, it might not be an appropriate concept [32]. This resulted in the GAD concept now being more widely used. On the one hand, feminists have criticized this since the concept of women cannot be replaced by that of gender [34]. However, GAD considers a broader range of factors than the initial WID approach. Making a clear statement regarding gender-related issues usually requires the comparison of both sexes [32].

According to The World Bank, enhancing gender equality increases the efficiency and productivity of a country. It can be seen as a way of doing Smart Economics [5]. The Smart Economics approach provides oversight on how to analyze common issues of today's economy. This is accomplished logically and straightforwardly with long-term solutions in mind. This approach has an inclusion of gender-specific issues.

Smart Economics examines the economic activity of both women and men within a household. This approach points out the importance of education for a household's prosperity. It is easier for families with a higher level of education to keep up on the job market. Furthermore, those families have higher chances of increasing their household income in the short- and long-term [35]. The Smart Economics approach additionally investigates the chances for women in the business world and their potential wages. In the past decades, women received more access to business areas that were previously dominated by males. Women were, therefore, able to increase their income. However, there is still a gap in specific sectors. Combining childcare and work is still a considerable obstacle for many women [35]. On average, women are still the primary caretakers of children, elderlies, disabled people, and households [32]. Institutions have to provide an appropriate framework to enable females to be economically active and combine work and other responsibilities. Increasing the number of active women in the labor market is a crucial step for female development. It increases women's skills and long-term opportunities [27].

Findings from all three approaches (WID, GAD, and Smart Economics) evoke policies that foster gender equality within the governmental and labor markets. The main drivers the approaches contemplate for gender-related outcomes are education, economic development, laws, and political empowerment [36]. This is a crucial finding for this research. The authors decided to investigate these drivers more and analyze their impact on female workforce participation in the following Section 4.

## 4. Female labor force participation (FLFP)

The labor participation rate (or employment rate) gives an indication of the level of income and well-being of people within a country. It is defined as the proportion of the labor force compared to the number of people working age and who can work [20]. A country requires workers to produce a specific output level, leading to the

labor force participation within a nation directly linked to its real GDP. However, the labor force participation rate omits factors like productivity and discrimination in the job market [6]. The rise in labor productivity is crucial for consumption and long-term growth, especially in emerging markets [4].

The main drivers that boost the FLFP are legal policies and demographic factors, i.e., education [37]. The overall level of development of a country and cultural aspects play a significant role as well. The impact of these factors on FLFP will be explained in the following subsections.

## 4.1 Level of development

Economic development and female empowerment influence each other in a two-way relation. Economic development increases equality and enables women to benefit from opportunities that come with growth. The empowerment of women boosts economic prosperity and decreases poverty [38]. There can be a push- and pull-causes for women to decide to enter the labor market. Either the job market pulls in women due to their level of education. Alternatively, women are pushed into the labor force because they have to increase the household income or keep the current standard of living, i.e., if prices for necessities have risen [35].

The link between income and economic activity can be observed in a global comparison. The rate of women in the labor force is exceptionally low in the Middle East and Northern Africa, followed by South Asia and Central America [1]. In underdeveloped countries, women suffer from poverty more than man, since income disparity is more prevalent [38]. However, developing countries that display a high level of poverty usually experience a higher rate of FLFP, since women are forced to contribute to the household income. In times of economic shocks, the labor activity of women often rises. An international overview demonstrates a U-shaped relationship between economic development and female workforce participation. The rate of FLFP in middle-income countries is usually lower than in low-income countries since more men work in industrial jobs. In high-income countries, the curve rises due to a high level of female education and empowerment [6].

McKinsey's research from 2015 supports this U-shaped theory (see **Figure 3**). It demonstrates the link between FLFP and GDP per capita between 2004 and 2014,
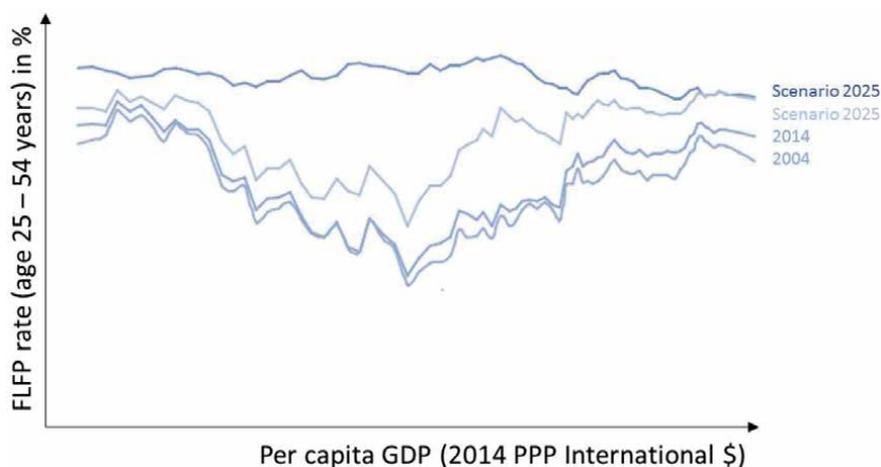


**Figure 3.**
*U-shaped relation between FLFP rate and GDP per capita (own illustration, based on [4]).*

with an average global FLFP rate of 64%. Furthermore, it shows the best-in-region scenario 2025, assuming an average global FLFP rate of 74%. In addition to that, it indicates the full-potential scenario 2025, assuming full female employment with an average global FLFP rate of 95%. As can be seen in the figure, the latter pushes the U-curve upwards, meaning that the FLFP rate would be more or less constant throughout all income levels [4].

The study further indicates that a rise in FLFP would not automatically lead to men dropping out of the workforce since its overall economic growth is pushed. New opportunities arise from that [4]. An analysis of within-country levels provides a detailed insight into this complex topic. The FLFP rates in rural areas differ tremendously from those in urban areas. Rural areas are usually less developed, translating into inadequate infrastructure and limited job opportunities, especially for women [39].

It can be stated that economic and social development usually leads to a higher FLFP rate. This decreases poverty and lowers the vulnerability of females [38]. Besides, it translates into a positive change of gender bias [30]. However, perspectives on gender are influenced by several other factors besides economic development, one of them being culture, which will be explained in the upcoming Section 4.2.

## 4.2 Cultural aspects

Culture, which is defined as a set of individual beliefs and values embedded within a society, significantly influences economic activity and development [11]. Rostow [13] mentioned that social motives and human beliefs drive economic changes. Culture and ethnicity are essential factors that form people's behavior and attitude. They induce different perspectives on gender-related topics [26]. Inglehart et al. [24] share this view and state that society's values impact governmental behavior and the enforcement of gender equality.

Historical events have formed the attitude regarding gender roles within a cultural group to a great extent [40]. In cultures with strong family ties and traditional gender roles, the unequal distribution of work in a household or the job market is instead accepted. These societies tend to have a higher level of gender inequality and a lower rate of FLFP [40]. Increasing a woman's authority can change her status within the family and society and, therefore, the overall perspective on gender roles [41]. Religion, as part of a society's culture, influences the economic activity of women also. Research indicates that in patriarchal societies (i.e., in Catholic and Muslim countries), the female labor force participation is usually lower [27].

Geert Hofstede is one of the pioneers in clustering national values and culture. He established six dimensions (see **Figure 4**) that compare cultural aspects in different countries. This is a primary method for academic purposes and management strategies [42]. Thus, this approach is widely used amongst researchers [7].

The author considers one cultural dimension as specifically relevant for this research: power distance. The level of power distance indicates to which extent the unequal distribution of power is accepted in society and how inequality is handled [42]. It is linked to strong hierarchies [7] and the perspective on gender-related roles within society [43].

Females are more sensitive to the execution of power. They tend to fulfill tasks that are expected by society and stick to traditional roles [44]. However, if power is more equally allocated amongst people, women can develop themselves, make political decisions, and contribute to the economy [7].

The dimension of masculinity vs. femininity, other than the terms might suggest, is not linked to gender-related issues. It is a synonym for "tough vs. tender"

| Power Distance | Individualism vs. Collectivism | Masculinity vs. Femininity |
| --- | --- | --- |
| Uncertainty Avoidance | Long- vs. Short-term Orientation | Indulgence vs. Restraint |
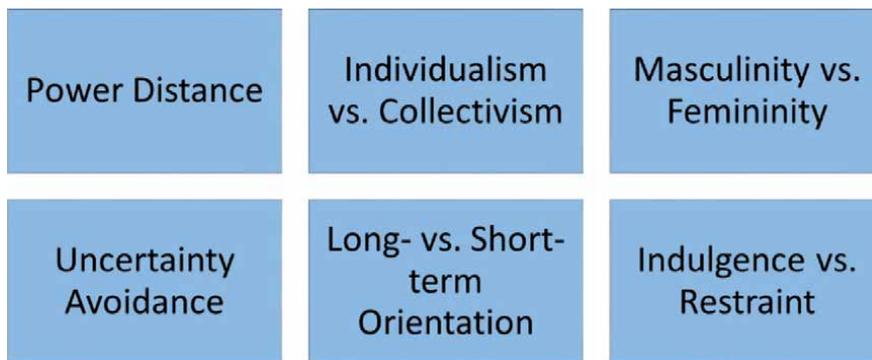
**Figure 4.**
*Hofstede's cultural dimensions (own illustration, based on [42]).*

behavior in society and describes the level of competitiveness and consensus-orientation [42]. Therefore, this dimension and the other four dimensions are not used for further analysis in this research.

The authors also used the World Values Survey (WVS) data, a research project founded by Ronald Inglehart. With the help of their surveys, WVS analyses the cultural attitude of people across countries. Results prove that social beliefs impact overall development and perspectives on gender roles [40]. A representative sample of residents within a country (under consideration of equal gender and age distribution from urban and rural areas) is asked a set of questions during a specific period. Amongst others, it includes the following gender-related questions [45]:

- If jobs are scarce, should men have more right to a job than women?

- Is being a housewife as fulfilling than working in a paid job?

- Is university education more important for a boy than for a girl?

- Do men make better business executives than women?

Cultural beliefs impact gender-related perspectives and society's behavior. Culture links economic, political, and legal views. Thus, a country's laws reflect its culture and are based on society's values.

## 4.3 Policies

Even if the development level can push female economic activity, this is only possible in combination with specific policies [38]. Deficient policies are amongst the most pervasive reasons for gender inequalities. Improving them leads to higher female labor participation [46]. In many countries, economic access for women is limited—regulations constraint their participation in specific sectors and their access to financial capital. Unwritten rules, based on tradition and culture, hinder women from entering the job market [1].

However, governments have realized how crucial female empowerment is for economic stability. They invest in childcare facilities and family-friendly policies. Regulations regarding parental leave are another influential factor for a woman's choice or ability to enter the labor market [27]. There is criticism regarding a high rate of FLFP and its negative impact on the fertility rate. History shows that a significant increase in women entering the labor market might lead to a sinking

birth rate. In the long-run, this results in a decrease in population, which negatively impacts the economy [33]. Nonetheless, several pieces of literature claim that fertility does not automatically decrease when FLFP rises provided that there are adequate policies that support family-work balance [46].

Tax policies are a way of boosting the FLFP. When family taxation is applied, the household's secondary earner (often the woman) is disadvantaged. Individual taxation eliminates this tax burden and translates into financial relief for many women. Additionally, the retirement system should be created so that women are not disadvantaged than men, i.e., through lower pensions due to maternity leave [1].

Labour market policies are crucial for the rate of FLFP as well. They are established by the government to provide equality of male and female workers. This includes equal treatment, wages, and promotion opportunities, without any gender-related discrimination [27]. Policies that enable women to be part of the workforce are accepted by government and society to a greater extent than other policies that aim at increasing the workforce, such as raising the retirement age or immigration of workers [46].

Not only governments but also employers can create regulations that foster FLFP, i.e., flexible working hours or a home-office option for parents [27]. Furthermore, quotas are a way to enhance female activity in the workforce. This can be in the form of a minimum percentage of women in leadership, management boards, or political positions. This fosters female empowerment and eliminates gender stereotypes [37].

Divorce laws are another issue. In underdeveloped countries, women have significant disadvantages compared to men in case of a divorce, often losing their assets. This results in a significant financial and social burden and decreases a woman's capital that might be spent on health care or education [38].

Specific policies that are beneficial for society or the economy might also negatively impact women and their labor force activity. For instance, child benefits provided by the government support a family to afford childcare. On the other hand, those benefits lead to a lower FLFP rate since additional income might not be needed. Part-time allows parents to combine work and childcare, whereas, at the same time, part-time employees are more likely to leave the labor force [46]. Part-time workers are often disadvantages compared to their full-time colleagues. They have less access to training or job benefits and receive lower average wages per hour [46]. Regulations that enable extended parental leave might negatively impact female human capital because women's time or education is reduced. Additionally, due to family-friendly solutions, companies might avoid employing female workers, especially for top positions. If firms are forced to provide flexible working hours and maternity leave, it might be more costly for them to hire women than men [27].

A high retirement age also negatively impacts the FLFP rate. If elderlies retire late, they might not care for their grandchildren, which forces mothers (especially those who cannot afford childcare) to stay home and do not enter (or re-enter) the labor market. Welfare-friendly regulations might influence a woman's decision to work, as well. This is especially the case for low-educated women, whose expected wages on the labor market are not high compared to the welfare payments [46]. This again points out the significance of education for women and their choice or ability to be part of the workforce.

## 4.4 Education

In his work on human capital, Schultz [21] identified that education and the rate of labor force participation are tightly linked to each other. He underlined the

positive influence of social investment on a country's development. Some claim that in times of globalization and digitalization, the need for human capital decreases. However, the economy needs skilled and educated workers to develop and handle new technologies [47]. Even if technological progress has reduced specific job opportunities for women (i.e., in the service sector), it also creates new chances for them in other sectors, given that they have the required knowledge [30].

Education positively impacts female economic activity. Well-educated women are more likely to be pulled in by the job market since it would economically not make sense to give up on the additional household income [35]. The education level determines women's wages; in other words, their value in the job market. This influences their decision to be economically active [27].

However, access to educational attainment is still limited for many girls and women around the globe. It can be stated that in developing countries, these gender-related gaps in education are more prevalent compared to developed countries [47]. Nevertheless, statistics show that low-income nations are catching up with developed countries regarding female school enrollment. At the primary and secondary school level, girls' enrollment rates are almost at the same level as the ones of boys in an average global comparison [1].

East Asia and Latin America have been outperformers in increasing enrolment rates and literacy levels for both genders and were, therefore, able to boost human capital. However, those two regions' results show different effects of education on economic development due to the differing quality of institutions [48].

Furthermore, when looking at within-country comparisons, there is often a significant gap between urban and rural areas [49]. In rural areas, many girls do not get the chance to attend secondary school and beyond. The reasons are poor infrastructure and gender-related stereotypes. Many girls are expected to stay home and help in the household, whereas boys can attend school. Another cause is the lack of financial resources within a family [50]. Studies prove that years of schooling often depend on the number of remittances. Especially in developing and emerging countries, this additional form of income is necessary for families to afford their children's education [50].

When it comes to the tertiary educational level, the rate of female students in colleges and universities is usually higher than males' rate. This is not only true for developed but also for emerging or developing countries [27]. There is a significant difference between education levels. Primary and secondary school enrolment rates are higher for boys than for girls across continents. However, at the primary level, the rates are close to gender parity. The tertiary level shows that women are more likely to participate in higher education than men [5].

Nevertheless, a high female education level does not always lead to a higher FLFP [27]. Even if tertiary education is a decisive factor for women to join the labor force [6], there is often a cultural gender bias about the kind of work women are supposed to do. This limits their opportunities in the job market [38]. In some societies, women's marital status has an impact on their path of education or career. Early marriage decreases females' access to school or work. They are pushed into the stereotype of being a wife and caretaker, and this gender gap lowers the talent pool of a country [36]. Thus, educational attainment is linked to culture to a certain extent. Schools are a channel of communicating social values and forming people's attitudes [48].

Another reason for low FLFP is the lack of work. A country must create jobs that match the opportunities which emerge through education [6]. From the author's perspective, it creates significant problems if a country invests in education but does not get the potential return. If a well-educated workforce cannot enter the job market, they might migrate to other countries and, therefore, will not contribute to their home country's economy.

Fostering entrepreneurship is another way of creating new job opportunities for women. This can be done by providing female entrepreneurs with technical and administrative assistance, capital, information, and the necessary network [51]. Entrepreneurial activity of women can be considered a response to gender discrimination and is crucial for economic development globally [52].

The increase in workforce participation positively impacts GDP per capita. Several economic theories prove that the enhancement of human capital influences the long-term development of a nation. Especially countries with a low rate of FLFP have lots of unused workforce potential. Developing markets can grow further if they increase women's chances to enter the labor market. However, this requires investment in education, improvement of policies, and elimination of gender bias. From the author's point of view, it poses a significant problem for a country if jobs are not made available for women, especially for well-educated women. Individuals and governments invest in knowledge but do not get the full potential return.

## 5. Conclusion

This chapter has demonstrated how the level of development, culture, policies, and education can directly or indirectly shape an emerging market's economic growth.

Increasing female human capital and raising women's participation in the workforce leads to a rise in economic growth and overall development in Emerging markets. In order to achieve that, Emerging markets must (a) overcome gender inequalities, (b) properly enforce female-related regulations, (c) and invest in human development. This points out the relevance of a country's level of development, culture, education, female-related laws, and their influence on women's decision or ability to work. In the authors' point of view, the following actions are recommended:

- Based on these conclusions, practitioners should consider raising awareness about the importance of the female labor force in emerging markets and their impacts on economic growth and overall development.

- Governments must try to control and ban informal work. Furthermore, female-related policies and anti-discrimination laws must be adequately enforced, and penalties should be established in case of violation.

- Political empowerment and job opportunities must be raised. The binding of female quotas should be introduced in politics and companies' management. The government could offer tax reductions to companies to promote these female quotas. Firms should be forced to integrate gender equality into their compliance policy.

- A method to overcome a lack in the job market is to foster female entrepreneurship. This could be accomplished by offering capital, network, and assistance to the female population. Additionally, there should be a ban on complex or bureaucratic steps that come with starting a business.

- In order to urge more mothers into the labor market, infrastructure in remote areas must be improved. Besides, formal childcare facilities must be established and made available for these working mothers. Foreign investment is necessary for this issue to be resolved. Investors should be actively involved, i.e., by promoting the high rate of a young workforce the country will have in the future.

- Gender bias, power distance, and patriarchal attitudes must be eliminated to overcome inequality, especially in male-dominated industries and remote areas. This can be done through the means of education and female role models who empower other women.

- School enrolment in low-developed emerging markets for girls on primary and secondary levels should be increased. Female students should be pushed into a diversity of study fields. Tuition fees must be made affordable for public and private schools, i.e., by offering scholarships for female students.

The findings of this research meet the authors' expectation and assumption that women's economic activity impacts national development in emerging markets to a great extent. An increase in the FLFP rate would translate into economic prosperity.

The problem statement must be stated that women only create 37% of the global GDP even though they make up half of the world's population. The authors sought to address this issue by raising awareness for this complex topic and underline the importance of women within the concept of development.

In providing an insight into this gender-related issue within emerging markets, the authors attempted to reduce the research gap. Furthermore, the authors paid particular attention to the effects of culture and education. This is due to prior researchers claiming that there is a lack in literature when it comes to the impact of these two factors on global gender disparities.

Economic development in Emerging markets requires investment in education, improvement of policies, and gender bias elimination. From the authors' point of view, a country must offer jobs for well-educated women and promote female entrepreneurship. Otherwise, valuable workforce potential might be lost due to migration.

Besides, a country should not be dependent on a high amount of remittances. A country should create development within its economy and foster its human capital in the long-term. This corresponds to well-known economic growth theories and human development concepts mentioned throughout this chapter.

The research was conducted with some limitations. The authors were dependent on meaningful and reliable secondary sources. However, the authors found during the process that certain in-depth data was not available, especially in case of multi-cultural countries with several ethnic groups. It was not possible to provide a deeper insight into statistics for all the different groups of society.

Additionally, when it comes to the impact of education on labour force participation, statistical data usually only includes primary, secondary, and tertiary education. This means that the effects of job trainings and life-long learning on economic activity can hardly be traced by a researcher. Therefore, the authors only examined primary, secondary, and tertiary educational levels in the course of analyzing the influence that education has on the rate of female workforce participation.

Furthermore, the persistent Gender Data Gap has led to difficulties in this research. The authors identified that a lack in literature decreases the chances to examine the reasons for gender disparities across the globe. In numerous scientific articles and publications, the hurdles for women in the labour market are discussed. However, the sources lack in adequate recommendations how the gender disparities can be minimized in practice and how the rate of FLFP can be increased in emerging markets.

In order to better understand the implications of these problems, future studies could address the difference in culture and ethnicity within the countries. This would contribute to the realization of the impact of cultural attitudes on gender-related perspectives to a greater extent. Additionally, future research might explain the gap between rural and urban areas when it comes to gender-roles,

education, and workforce participation. Supplementary research is needed to determine the exact relationship between GDP and women's economic activity in emerging markets.

Besides, future research could study the effects of education, culture, regulations, and political empowerment on female labor force participation to a greater extent. The analysis of these factors from a quantitative viewpoint might provide a more profound comprehension of their correlation or causation. The authors recommend conducting a multiple-case analysis, including more than two cases for future research, to provide an enhanced comparison of the results.

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**Chapter 7**

# Digital and Digitalized Economy in EMs: A Focus on Turkey

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## Abstract

Covid-19 still pressures global economies. Pandemic has seriously damaged both macro and micro indicators of countries. Economies try to accelerate their efforts towards a digital new normal in order to preserve their activities. Decreasing trust in monetary authorities and tools as a side effect of global financial crisis, decreasing demand for cash as a precaution towards virus, increasing demand for fast payment, increasing search for yield, search for a trustless, cost saving, peer to peer financial system accelerates the progress of creative destructors. The way to leapfrog developed countries requires benefiting more from digitalization. Governments, central banks, financial institutions and corporations that are aware of this swift transformation are in an effort to adapt the system to take the lead. This study aims to explore leading game changers, potential use cases and their potential impacts on EMs with a special focus on Turkey.

## 1. Introduction

World economies are struggling with an ambiguous challenge, Covid-19, till the first quarter of 2020. Governments have locked down a majority of their economic activities in order to control and prevent the spread of virus in their economies. Countries have closed their borders and minimized their trade activities as precautions. They have simultaneously implemented several quarantine measures to their citizens.

In a few months, pandemic has brought the global economy to a catastrophic halt by introducing a wall between supply and demand. Still, world economies try to fight this invisible enemy while trying to adapt new conditions under several limitations which is referred to as "new normal".

Uncertainty, which is the basic outcome of the pandemic is still a crucial problem. According to World Uncertainty Index [1], global uncertainty has increased significantly since 2012 for all 143 countries covered by the Index. Though it has unwinded by the second quarter of 2020, after a sky-high reached by the first quarter, it seems to stay as a serious threat for global economies for the coming quarters unless a widely used effective treatment and/or a vaccine is found.

Almost every sector has affected from Covid-19 negatively. In order to support economies on the fiscal side, governments have implemented several measures such as subsidizing corporations, forbidding layoffs, deferring debt and tax payments for a specific period. Simultaneously central banks employed

conventional and nonconventional policies to prevent spillover effect of the crisis from real sector to the financial sector. For this reason, United States Fed has continued monetary easing and reached a balance sheet of almost 7 trillion dollars as of August 2020, from a level of almost 4. 3 trillion dollars of March 2020. Likewise, European Central Bank has announced a €1,350 billion pandemic emergency purchase programme (PEPP) to lower borrowing cost and increase lending in the euro zone [2].

Physical distancing and testing, tracing and isolating are the main instruments to fight the spread of the virus. However, these instruments create additional costs to economies. While waiting for good news, OECD published an economic outlook covering a potential single-hit and a double-hit scenario for the coming period. According to both scenarios, global economic activity seems not to turn back to pre-Covid-19 level in the short-run. Moreover, by the end of 2021, loss of income is expected to exceed that of any previous recessions over the last 100 years excluding wartimes. Restrictions in terms of mobilization, production, trade and investment have started to re-rotate the globalized world economies towards nationalization and reshape the way of doing business.

EMs deserve a closer look since they have several acute problems that have recurred during this period. Declining commodity prices, capital outflows, weaker consumer demand, decreasing investment, import and export, decreasing resources to fight Covid-19, decreasing consumer and business confidence, increasing government and corporate debt ratios and eventually, as a reflection of all these factors negative or low growth rates are the major challenges that EMs should confront.

During lockdowns some corporations benefit from teleworking which has made employment considerably sustainable especially for some sectors. For some others, lockdowns have deteriorated inequality among workers especially in EMs. Governments have tried to find solutions to the problem in the short-run with limited resources which seems impossible to sustain in the medium and long run. Monetary and fiscal policies are coordinated carefully as they would harm macro indicators more which are already fragile for some time.

Economic agents use alternative ways to fulfill their responsibilities such as teleworking, distance education, online meetings, increased e-commerce and telehealth. Since hygiene has turned out to be a very critical factor, countries like China has started to quarantine paper money as a way to fight the virus. Additionally, people have opted to use less money but more online banking to carry out their financial transactions. Some of the central banks like Central Bank of China have accelerated their preparations to shift digital money as this is a good time for rerailing. Observing the decreasing demand for cash, European Central Bank put digital money on its agenda and try to make a decision whether it is time to introduce digital Euro as a complement to cash in order to keep up with the digital transformation [3].

During the past two quarters with Covid-19, corporations have discovered that works can be done without being in an office. Moreover, they have seen that there is a crucial saving dimension of teleworking in terms of decreasing general expenditures and several cost items. Corporate meetings are started to be held online. Periodical meetings in terms of planning, budget, marketing, monitoring etc. have started to be held as digital meetings. Financial institutions have confronted with the necessity of further digitalization in lending activities. Manufacturing and trade finance corporations have found that supply-chain could be vulnerable as it depends overwhelmingly on human force. So, they have realized the importance of moving activities to digital which can make them more independent but which also requires

considerable amount of investment to technology. Governments have found that there are several areas that could be moved to digital for non-stop functioning of economies under crisis environments.

In brief, we can state that in today's fast-moving world there is no reversal to pre-Covid-19 environment so the only way is to adapt "digital new normal". The more countries shift their activities to digital the more they will perform without interruption. It should be expected that there are pros and cons of this change. In this study, we will try to shed light to game changers such as cryptocurrency, blockchain and distributed ledger technology. We try to explore impacts of this game-changers on the economic development of EMs with a special focus on Turkey. Study proceeds as follows: Section 2 presents digital economy. Section 3 introduces blockchain implementations in business. Section 4 analyzes literature on digitalization and growth nexus. Section 5 focuses on Turkey. Concluding remarks are presented in Section 6.

## 2. Digital economy

Digital economy refers to a broad range of economic activities that use digitized information as key factors of production. Interconnectedness between individuals, businesses, data, processes and machines that arise from internet, mobile technology and internet of things (IoT) compose the backbone of digital economy [4]. Bukht and Heeks [5] highlight several definitions of digital economy as a reflection of the times and practices that this concept has emerged. They define digital economy as the part of economic output derived only from digital technologies with a business model based on digital goods and services. Due to the measurement problem of digital economy they suggest to use digitalized economy on a widest scale, which comprise use of Information and Telecommunication Technologies (ICTs) in all economic fields. In the study, when it's difficult to separate these two concepts we opt to use digitalized economy to see the big picture.

Digitalized economy has started to change traditional approaches and processes in terms of business structures, firm interactions, consumer behaviors, information and goods and services especially since the onset of industry 4.0. which refers to technological transformation from embedded systems to cyber physical systems. Bitcoin is one of the financial instruments of the digital economy. It is a private, decentralized digital currency. It has first developed in 2008 and has become operational by 2009 [6]. Bitcoin is not backed by a government decree. There is no authority that is in charge of its supply. Bitcoin has a network that consists of computers covering the entire system. As a section of data in a massive database, it is just like a computer file that is assigned to a certain owner's digital address. It operates using peer-to-peer networking that eliminates the intermediary so that the exchange can be realized directly between parties. Users have digital wallets so they can trade between themselves. System employs cryptography to maintain the anonymity of its users to secure the transactions and to control the creation of additional units of currency, namely the "cryptocurrency" [7]. Game theory is another factor that ensures the security of the process by mathematically modeling behaviors of strategic decision maker units.

There are thousands of cryptocurrencies with different marketcaps. Yet, majority of cryptocurrencies are almost clones of bitcoin and referred to as 'altcoins'. On the other side, there are a number of cryptocurrencies that share common features of bitcoin but also have innovative features that provide substantial differences [8] such as stablecoins.

In one sense, blockchain is the underlying technology of bitcoin. We can call it as a public ledger that keeps the history of each transaction. Blockchain is sustained by participating computers which verify transactions in chunks called "blocks" and relay them across the network [9]. Validation process relies on data being encrypted using algorithmic hashing. Encrypted value is a series of numbers and letters that does not share similarity with the original data, and is called "hash". Cryptocurrency mining involves working with this hash. Proof-of-work is a distributed consensus algorithm that Bitcoin's blockchain network participants use to agree on the contents of a blockchain to create and hash blocks together. When the computer in a network employs proof-of-work for mining, it needs to solve a challenging mathematical problem. If the computer which is also named as node, successfully solves the problem, it must then be verified by other nodes in the network. Following this step, the transaction is deemed to be verified and completed, and the miner that solved the problem is rewarded by bitcoins. Mining requires a considerable computational power so to ease this difficulty, another consensus algorithm named proof-of-stake is employed by validators for minting but not for mining to determine valid transactions. In proof of stake, cryptocurrency amount in wallets are crucial to create blocks. The amount of cryptocurrency in wallets determines power of validators and the shares of validators within the system. So, cryptocurrencies are held not to make transactions but to get the right to create blocks in the system.

Proof of work and proof of stake are the leading consensus algorithms that are used. Yet, there are almost 80 other consensus mechanisms with different features such as proof of space, proof of burn and proof of activity. Most important functions of consensus algorithms are their prevention of double blockchain creation and double expenditure.

Blockchain, being the first and most popular example of distributed ledger technology is also a subsection of distributed database. Major difference between blockchain and distributed ledger technology is the way they form data.

Blockchain has some characteristics such as decentralization, persistency, anonymity and auditability. Being decentralized, blockchain does not require a third party. As a persistent system it is almost impossible to delete a transaction from the system when it is added to the chain. Besides, system quickly detects invalid transactions. Though there is no 100% anonymity, users interact via their generated addresses. If it is required, system may enable tracking transactions, as each transaction is dependent to one another [10].

There are different blockchain systems that can be listed as; public blockchain, private blockchain and consortium blockchain. In public blockchain, all records are open to public and anyone could join the consensus process. Consortium blockchain enables participation of just a group of nodes in the consensus process. Finally, private blockchain allows only nodes of a specific organization to participate the consensus mechanism [11].

Public blockchain attract interest of communities and users since it is open to everyone's participation. Though, consortium blockchain is generally used for businesses [10].

## 3. Blockchain implementations in business

Like agricultural revolution, industrial revolution was also backed by technology which enabled economic agents to produce more efficiently and made manufacturers more productive.

Transformation of industrial production can be divided into periods. The first period, where machines were operated by power of steam and water instead of human labor was defined as Industry 1.0. The second period where electricity, motors and invention of assembly line enabled producers to produce more efficiently was defined as Industry 2.0. Industry 3.0. was backed by computers, electronics so by automated production systems which raised significant cost saving and Industry 4.0. of today, denotes an integrated system of automation, internet of things and digital services that enables efficiency and flexibility in working processes. Developed as a multi-functional technology in 2008, blockchain has a big creative destruction potential that seems to reconfigure almost all aspects of society and way of doing things. Evolution of this technology can also be examined in periods. Namely, blockchain 1.0 presents currency and digital payment systems of cryptocurrencies. Blockchain 2.0 presents contracts for extensive transactions such as bonds, derivative products, smart property and smart contracts. Finally, Blockchain 3.0 introduces blockchain implementations especially in the areas of government, health, science, agriculture and culture [12].

A survey made by Cambridge University in 2017 covering data from over 200 companies, central banks and public sector organizations reveals the fact that much of the blockchain use cases are related to banking and finance which is followed by government, insurance and healthcare [13]. This result is quite understandable since jurisdictions and financial institutions are well aware the place of this creative destructors in global competition. In the current environment, blockchain technology offers solutions in a wide range of fields such as digital currency and tokens, digital identity verification, Know Your Customer (KYC), payment and cross-border payment, stock exchange transactions, trade finance, tax collection and management, microfinance, syndicated loans, crowd-funding, accounting, audit, reporting, hedge funds, voting, supply chain and all other fields that require trust between parties [14]. In a survey covered over 800 executives, World Economic Forum recorded that 58% of respondents expect 10% of GDP to be stored on the blockchain by 2025; and 73% of those surveyed expect tax to be first collected by a government via blockchain in 2023 [15]. Development of blockchain suggests a growth path that is far from linear and it signals the possibility to reach the stage of mainstream adoption by 2025 [16].

During the global financial crisis, a considerable number of economic agents have lost their trust in global financial system, its actors and its tools. On the other side, expectations for a fast, transparent, pseudonymous and cost-effective peer-peer payment system which would be processed 24/7 have raised significantly. Investors, in search for yield, have looked for alternative investment vehicles. Moreover, under Covid-19, economic agents have started to decrease their demand for cash because of the concern that cash may transmit the virus. These concerns and expectations have accelerated the intent to move towards digital payments [17].

Based on the ideas of Tobin [18], the concept of central bank digital currency has developed and discussed by a group of central banks. The idea of general purpose or retail central bank digital money is presented as a central bank liability, for the use of individuals and for non-financial corporations in less developed economies. On the contrary, wholesale central bank digital money concept is developed for the settlement between financial institutions of more advanced economies. Nevertheless, central bank digital currency project is still in the experimentation phase and no jurisdiction is announced to issue a central bank digital currency at the moment. Although there are several ongoing projects like E-dollar of Canada, E-euro of ECB, E-ringgit of Malaysia, E-rouble of Russia and E-rupiah of Indonesia we should note that China is at the most advanced stage of its project, Digital

Currency Electronic Payments (DC/EP). Several countries declared their intent to use central bank digital currency as a complement to cash if they would realize the project [19]. Implementation of the process is expected to differ across countries according to their economic readiness, expectations and technical platforms. Apart from central bank digital currency project, central banks closely follow the developments on cryptocurrencies and underlying technologies in order to fasten and improve their transaction processes to preserve their roles in the digital new normal. Capital markets and wholesale banks globally cooperate with financial technology companies in experimenting distributed ledger technologies to eliminate expensive processes so to increase efficiency and transparency and to reduce costs. They also focus to the potential of smart contracts to increase automation in several areas. Cong and He [20], designed a trade finance transaction diagram covering all sides of the transaction. They suggest that smart contracts can shrink informational asymmetry and may add welfare and customer surplus through increased entry and competition.

Syndicated loan facility is another field that may benefit from blockchain technology. As an international financing method with a transaction volume of almost 5 trillion dollars globally [21], a large group of lenders work together to provide funds to a borrower. Participants act according to terms and conditions of the loan agreement. At maturity, parties of the agreement may agree to roll over the loan. So, blockchain may add value to the process by increasing transparency, speed, and by decreasing bureaucracy and cost. Smart contracts can be included to the system since participants act according to loan contracts with specific terms and conditions.

Microfinance institutions may replace conventional banking institutions in underdeveloped regions when customers deem ineligible for banking services. In Nigeria, an open-source platform, Stellar and a microfinancing software provider, Oradian built a platform for providing financial products and services to the users. With a user profile of over 90% female customers, the project reveals the potential of blockchain technology in the development of rural systems and economic empowerment of women in developing countries [22]. According to World Bank estimates, almost one billion people over the world do not have any legally recognized identification. Besides, almost 3.5 billion people have some kind of legally recognized identification but have limited ability to use it. While the remaining 3.2 billion have a legally recognized identity and participate in the digital economy they may have problems in online. Technology may increase financial inclusion of those who do not have a legally recognized identification and increase these groups' access to financial services, government benefits, and labor markets which will lead to a saving of time and money. From institutions and government's perspective, an increasing digital footprint of users means saved cost and time, increased GDP, increased labor productivity, expanded tax base, decreased fraud and further steps to a formal and deeper financial system [23].

Increasing digitalization in finance is expected to create some positive effects for emerging countries. According to the estimates, almost 1.5 billion people is expected to access financial services. Governments are expected to save almost 100 billion dollars from the decreasing leakage and increasing tax revenue. Financial institutions are expected to save almost 400 billion dollars annually from direct costs. Emerging economies are expected to reach an annual increase in their GDP by almost 4 trillion dollars by 2025. Almost two thirds of the increase is expected from productivity of businesses and government due to digital payments. One third would arise from financial inclusion of individuals and SMEs and the rest would stem from saved time that would enable increasing hours of work. Increased GDP is expected to create 95 million jobs across all sectors [24].

Jurisdictions and leading technology companies enhance their investments on this technology as they have already discovered the potential and have anticipated to share in its future. Although global patent filings remained limited during the first years of blockchain, they have considerably increased as of 2016. By the third quarter of 2019, number of patents filed globally has reached almost 6.000. Leading countries in the patent race are China with 3.200 patent applications and USA with 1.300 applications. These countries are followed by United Kingdom, Germany, Japan and Canada [25].

## 4. Literature on digitalization and growth nexus

Since developing and emerging countries lag behind the developed ones, the way for developing and emerging counties to leapfrog the developed nations is reaching advanced technology. Yet in our case, it is quite difficult to analyze the specific effects of blockchain and digital economy on growth indicators. As highlighted by Bukht and Heeks [5], measuring proceeds of digital economy and separating it from ICT is quite impossible across countries and between different periods. So, we opt to focus ICT and growth nexus and use the concept of digitalization instead of ICT.

Burlamaqui and Kattel [26], defines technology leapfrogging as the adaption of advanced technology in a specific area. This concept overwhelmingly addresses the developing and emerging countries and it has been suggested that developing countries do not have any alternative in technology adoption, except to leapfrog to new and advanced technologies [27–29]. Literature on the relationship between ICT diffusion and economic growth is recent and it goes back to 1980s. Though theories predict a positive effect of digitalization on growth across countries, empirical studies produced mixed results.

Dewan and Kraemer [30] suggest a positive relation between digitalization and growth according to the data of 14 developing and 22 developed countries collected for years 1985–1993. However, results differ between developed and developing countries with respect to structure of returns from technological capital investments. While there is positive effect of capital stock on GDP growth in developed countries it is insignificant for the developing ones. Pohjola [31], performs his study based on an expectation that benefits from digitalization accrue as an improvement in productivity and economic growth. Based on a data of 42 countries for the period of 1985–1999, he finds that results differ between USA and the rest. While use of technology significantly impact the performance of the USA economy, evidence for other countries is reported as weak. Another interesting finding is that relationship is not statistically significant for the subsamples of industrial or high-income countries. Papaioannou and Dimelis [32] in their study comprising 42 developed and developing countries for 1993–2001 analyze the impact of digitalization on labor productivity growth. Findings of the study present high impact for developed countries than developing ones. Commander, Harrison and Filho [33] work with around 1000 manufacturing firms from Brazil and India with data of 2005 and they report a significant relation of technology and productivity in both countries. In India specific analysis, results suggest that poor infrastructure quality and labor market policy are associated with low return on investment and low levels of technology adoption. Dedrick, Kraemer, and Shih [34] work with a data set consists of 45 upper-income developing and developed countries for the period 1994–2007. They find that upper-income developing countries have significantly positive gains from technology in the recent period as they increase their investment more and as they gain more experience in the use of information technologies. They suggest

that productivity effects of digitalization are bound to country specific factors which comprise human capital, foreign direct investment and quality and cost of technological infrastructure. Sassi and Goaied [35], analyze both the impact of financial development and digitalization on economic growth in Middle East and North Africa (MENA) countries for years, 1960–2009. The interaction between digital penetration and financial development is found positive and significant in the empirical study. This implies that economies in MENA region can benefit from financial development only when a specific level of digitalization is reached. Cirera, Lage, and Sabetti [36] examine the firm-level data for a sample of six Sub-Saharan African countries. Although there is a huge gap in terms of digitalization between these group of countries and developed ones, results of the study point a considerable heterogeneity among samples. Findings reveal that digitalization has an important impact on production and innovation for all these countries but final impact depends on the degree of the novelty that is introduced in firm base. Luo and Bu [37] study how digitalization improves the productivity of emerging economies by analyzing 6236 firms from 27 emerging economies. They argue that technology enhances productivity since it leads to effective knowledge sharing and integration. They further argue that emerging economies' level of economic development, institutionalization and qualified infrastructure would affect the level digitalization that contributes to knowledge management and thus to firm performance. Authors suggest that technology would enhance productivity in an emerging economy when the said economy is less economically developed. Niebel [38], in a recent research based on a sample of 59 countries for the period of 1995–2010 indicates that developing and emerging countries are not gained more from investments in digitalization than developed ones.

Some studies [39–42] provide that digitalization could impose negative impacts on employment and labor market in developing countries. This literature argues that the rapid digitalization eliminates unskilled workers and exclude poor since they are not qualified, so it will increase poverty and income inequalities. Besides, they argue that digitalization provides more advantages to developed countries to compete with developing countries in their local markets.

There are few empirical studies on digitalization and growth nexus for Turkey. Yaprakli and Saglam [43] examine this relationship for the period of 1980–2008. According to results, economic growth is positively affected by digitalization in the short and long run. However, contribution to economic growth from this channel is less than that of other product factors in Turkey. Kılıçaslan et al. [44] examine the impact of digitalization on labor productivity growth in Turkish manufacturing industry for the period of 2003–2012. They report that the impact of digitalization on productivity is larger by about 25 to 50% than that of conventional capital. In a recent study, Sarıdogan and Kaya [45], find a positive relation between digitalization and economic performance for years 1998–2017 for 28 EU members and Turkey.

Empirical studies across countries reveal heterogeneous results. From our standpoint, this could be the result of differing countries, samples, time periods and measurement techniques.

## 5. A focus on Turkey

Turkey is a dynamic emerging country with an average growth rate of around 4–5%. Though banking sector has an overwhelming share in the financial system, capital markets are progressing to reach a well-deserved place. Search for yield in a negative real interest environment, especially under Covid-19, leads local investors to alternative investment tools. Results from an international survey conducted with

1000 respondents in 2019 reveal the enthusiasm of Turkey towards cryptocurrencies and its underlying technologies. Index of positive attitudes towards cryptocurrencies is reported as 62% for Turkey while it is 20% for Germany, 24% for France and 24% for United Kingdom. 46% of Turkish respondents states their preference for a cashless society when the ratio is 22% in total Europe. 55% of Turkish respondents denote their personal efforts to learn the mechanism of cryptocurrency while it is 26% in Germany, 20% in France and 22% in United Kingdom [46]. Turkish authorities have a positive attitude towards cryptocurrency and blockchain technology, as well. For the time being there is no specific regulation about the use of cryptocurrencies. In order to make clear the difference, it is stated that cryptocurrency cannot be deem as an electronic money under The Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions numbered 6493 [47].

Yet, in the Eleventh Development Plan, Turkish authorities declared their intent to introduce a blockchain based central bank digital currency within four years. Blockchain technology is planned to be used especially on transportation and custom services. Improving technological infrastructure and processes to benefit more from digitalization for the improvement of government services is aimed in the medium-run [48]. To synchronize the flow of information among Borsa Istanbul, Istanbul Settlement and Custody Bank and Central Securities Depository of the Turkish capital markets, Borsa Istanbul has developed Turkey's first financial blockchain based project in 2018. The project that was designed under Know Your Customer concept enables addition of new customers, editing of information and management of documentation in the blockchain network [49]. Istanbul Settlement and Custody Bank developed a blockchain based "BiGA Digital Gold" Project, in 2019. It was established as the first known blockchain network with the contribution of participating banks in Turkey. In this project, gold that is physically stored in Borsa Istanbul is converted to BiGA and transferred to the BiGA Platform by issuing method. With this method, the transformation and reconciliation between the digital asset and the physical asset is possible. Gold balances can be transferred between participating banks 24/7 through the platform provided by Istanbul Settlement and Custody Bank via their own systems [50]. As another example of milestone to the increasing efforts on blockchain, Isbank, a major Turkish bank, joined a global blockchain platform, R3's Corda, and completed an international trade finance transaction with Commerzbank based on distributed ledger technology. Trade transaction data was distributed only to the parties along the workflow of trade, making the settlement process much quicker and more efficient. It is also possible to integrate third parties into the data flow where required by banks and trade partners. All parties involved were able to communicate and view trading data simultaneously [51].

Akbank, another leading Turkish bank entered a business partnership with Ripple in 2017 to benefit from the transparency and low-cost provided by Ripple in international money transfers [52]. Aktif Bank, a large investment bank in Turkey has incorporated Attivo Bilisim to invest in the crypto-asset service industry. As the second bank-backed exchange around the world and structured by Attivo, Bitmatrix Crypto-Assets Trading Platform provides the crypto-assets custody service as of 2019 [53].

## 6. Conclusion

In this study we try to shed light to the transformation of economies and the role of creative destructors in this change. Covid-19 has served as a catalyst and accelerated the transition towards digital new normal. Central banks' digital currency

project, cryptocurrencies and distributed ledger technologies take the lead in this period. We have focused on the use cases of blockchain in business. Emerging countries try to benefit from digitalization to leapfrog the developed countries and to take their positions in the digital race. Yet, there are still issues to be solved such as defining new technologies, structuring regulations, tax collection, cyber security, fraud and energy consumption in digitalization. Besides, cooperation among countries would help developing common directives, regulations and implementations which could boost benefits from digitalization.

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**Chapter 8**

# Rise of Hindutva Politics, Demonetisation, and Its Impact on Micro, Small and Medium Enterprises in India

*Geeta Sinha and Bhabani Shankar Nayak*

**Abstract**

In India, different political regimes have introduced varied policies for the economic and social development of the nation. Within the context of industrial sector development, MSMEs contribute and play a pivotal role in the growth of Indian economy. These enterprises nurture local entrepreneurship and generate large employment opportunities that are comparatively less capital intensive and stands next to agriculture. This paper examines the relationship between the rise of Hindutva politics and MSMEs in India and argues that the rise of Hindutva politics and its demonetisation policies have adversely impacted the MSME sector. The demonetisation policies proved to be fatal and laden with complexities for the MSME sector to cope that mostly overlaps with the informal sector. The paper explores the impacts of demonetisation on MSMEs that proved detrimental and unfavourably affected the lives of the people, hence, rendering to its decline in the country.

**Keywords:** Hindutva politics, MSMEs, demonetisation, India

## 1. Introduction

In India, people witness varied schemes and policies introduced by different reigning political regimes for the economic and social development of the country. However, this paper attempts to examine the rise of right-wing politics also referred as Hindutva politics and its impact on MSMEs in the country. With the parliamentary elections in the year 2014, Bhartiya Janata Party (BJP) came into power and the Congress party was reduced to nearly forty-four seats. It is important to note that BJP and its allied parties have their roots in an organisation called Rastriya Sevak Sangh (RSS) that epitomises the philosophies, ideas and ideologies of Hindutva. Hence, BJP is considered as the political front of RSS and an upsurge of right-wing narrative can be observed nationwide. The Hindutva ideology ingrained in parties and organisations like Bharatiya Janata Party (BJP) and its allies including Shiv Sena, Bajrang Dal, Akali Dal are inclined towards hard core philosophy of the right-wing politics. This inclination towards Hindutva or right-wing politics allows them to favour capitalism and privatisation and believe in the policy of laissez-faire and free trade [1]. Against the backdrop of national interest, the policies and programs

are so designed that they are lop-sided and tend to defend the profit-making big corporations and businesses instead of overall development of the nation and people.

The rise of BJP politics has even given rise to communalism, insecurities amongst religious minorities and their vulnerability has been further strengthened by the government ministers and members of parliament who openly air communalist, divisive and reactionary sentiments while making hate speeches and inciting violence against minorities [2]. Communalism is very much the tool of the ruling class politics and in the words of Singh [3], "Communalism in contemporary India, as ideology and practice, is above all an aspect of the politics of the ruling classes in a society with a massive feudal colonial inheritance, deep religious divisions, and undergoing its own, historically specific form of capitalist development". Besides favouring capitalist mode of development, they have also disrupted the enabling environment of doing business and start-ups by promoting communalism, violence and insecurities amongst people and societies.

MSMEs considered as "growth engines" play pivotal role of providing industrialisation opportunities in rural and backward areas coupled with employment generation, thereby contributing to reduction of regional imbalance and equitable distribution of national income [4]. MSMEs are also considered as ancillary units or supplementary units to large industries as they provide raw materials and backward linkages, which adds to socio economic development. It consists of 633.88 lakhs (63.388 million) of units and provides employment to nearly 11.10 crores (11.1 million) of people in the country as per the National Sample Survey (NSS) 73rd round, conducted by National Sample Survey Office, Ministry of Statistics & Programme Implementation during the period 2015–2016 [5, 6]. Some of the important programmes and policies to drive economic and social development in India by BJP government included abrupt demonetisation, introduction of GST, campaigns for "Make in India", "Skills India", "Incredible India" and "sab ka saath sab ka vikas (together with all, development for all)". However, these initiatives by the government did not assist the MSME sector to leverage growth but on the contrary turned disadvantageous for their growth.

According to Karani and Panda [7], the need for employment generation is crucial to the nation as the youth occupy the highest share in the pie of the demographic profile of India. The authors further explain that the various employment challenges include relevant skills development and large-scale job creation, coping capacity of employers with turbulent global manufacturing ecosystem and social security initiatives to address the needs of the employees [7]. However, it becomes imperative for the ruling government to introduce such policies and programmes that cater to the needs of the local employers, employees and create new entrepreneurs. On the contrary, with an increasingly intolerant Hindutva political climate in India, the initiatives of BJP government have been more towards creating ideal national identity (Hindutva) that interconnects with liberalisation and globalisation of the economy.

Additionally, the policies of the BJP government have been precarious and more instrumental in promoting big profit-making giants, multinationals and corporations while local enterprises remain neglected. In the words of Banaji [8], a new narrative of forward thinking has emerged where wealth and national pride would be delivered to Indians and business opportunities to industrialists by the leadership. Hence, the key objective of this study is to explore the encounters and impact of BJP governments policies including demonetisation and GST on MSMEs that proved detrimental and unfavourably affected the lives of the people, hence, rendering to its decline. The methodology adopted for this study is the analysis of secondary data and content analysis.

The paper focuses on the demonetisation policy thrusted upon the people of the country on 8th of November 2016 where in the BJP government demonetised the 500 and 1000 banknotes. The objective behind demonetisation process was to curtail the shadow economy and reduce the use of illicit and counterfeit cash to fund illegal activities and terrorism, that witnessed mixed reactions from the economists and people of the country. This move directed to eliminate "black money" and corruption failed to achieve its intended outcomes.

## 2. Hindutva politics and its economic policies

The independence from colonial rule coupled with partisan of British India during 1947 witnessed the making of Muslim-majority Pakistan and Hindu-majority India, a result of two nation-theory based on two distinct religious identities. The then leaders of independent India including Jawaharlal Nehru, Mahatma Gandhi, Baba Ambedkar and many more scholars envisioned secular nationalism that formed the basis of India's constitutional democracy. But, on the contrary the birth of RSS, BJP as political party and its allies emphasised on communal identity and reiterates the narrative of Hindu nationalism/ Hindutva. This discourse/ narrative has been gaining momentum in the recent years since the BJP came into power with full majority in the year 2014. Their focus has been to create Hindu Rashtra (Hindu nation), rattle against Pakistan and critique in what they believe is the advantaged status of the religious minorities in the country [9]. According to Banaji ([8], p. 334), "this narrative positions Adivasis, Muslims, Christians and atheists as outsiders, a threat to the nation and the state, citizens only in a "minority" sense: on sufferance". The contemporary populism in India has changed the nature of political discourses or rather introduced new set of practices and narratives by giving new meanings. According to Gudavarthy [10], the focus of current populism has been on the larger narrative of "us" versus "them" where they are fragmenting the polity on the one hand and conjoining them with a unified Hindutva narrative on the other. However, this current mode of populism is not restricted merely to electoral purposes but has strategically dictated the policy frame as witnessed during some of the instances like demonetisation and GST.

The roots and ideology of BJP are so ingrained in Hindutva that their economic policies are reflective of the same. The ruling party argues for aggressive economic development in the form of increased privatisation, technology and digitisation [8]. The "Make in India" movement is one such example that was launched by this government in September 2014, to convert India into a new global manufacturing hub and attract investments. The same commitment has been reiterated at various international forums by the Prime Minister Narendra Modi. The three major tactics focussed to administer it included reviving domestic investment, ensuring ease of doing business and attracting FDI for fostering the manufacturing sector [11]. Correspondingly, the ruling party has been proactive in branding the nation as the Incredible India to which Edwards and Ramamurthy suggest that this campaign "frames India as a hybrid nation, open to global capital but distinctively Hindu in nature. It can be understood as an extension of cultural chauvinism, justified through the economic imperative to engage with global markets" ([12], p. 325). Gudavarthy further describes that this party "allows for a discourse that is pro-corporate but anti-modernity; it helps to push for high-end capitalist growth marked by bullet trains and urbanisation and also address the community anxieties that capitalist modernity introduces; it allows to claim a legacy of a pure past to be enjoined with claims for a radically altered future; it sympathises with preserving of community identities, including control of their women and property, yet it can lay a claim to a politics that is beyond caste and religious considerations" ([10], p. 7).

Another obscure initiative that took the nation to stagger was the demonetisation on 8 November 2016 when the Prime Minister of India scrapped Indian banknotes of 500 and 1000 to weed-out black money and fake currency in the system. The government believe that this currency ban would address four issues and they are to control inflation, to bar corruption, to abolish the use of illicit and counterfeit currency to fund illegal activities and terrorism and to discourage the cash transaction [13, 14]. Several economists, industrialists, political leaders and research scholars have divergent views over its impact on the economy. This is not the first time that demonetisation had happened but had witnessed the same in the in the year 1978 where the Indian banknotes of 500, 1000 and 10,000 had been scrapped. The objective then too was to eliminate "the possible use of such notes for financing illegal transactions" ([15], p. 77). According to Rajakumar & Shetty [16], the demonetisation then witnessed limited attention and had miniscule impact on the daily lives of common people as the demonetised banknotes were of high value and were of little use for common people. The author further states that the high denomination notes demonetised then, formed just about 0.6% of the total currency in circulation as compared to the 2014 where the demonetised ₹500 and ₹1000 notes constitute over 85% of total notes in circulation by value. Demonetisation for a short term reduced demand and hampered production, especially in the informal sector that transacts mainly in cash [5, 6]. Another justification of demonetisation prompted by the BJP government was advancement towards financial inclusion and transition to Digital India. However, according to the findings of Daya and Mader [17], the uptake of digital transactions among the banked poor remained minimal, and changes in savings behaviour were negligible. They concluded that in a country where many people still worry about their family's next meal and cannot afford education or sanitation, using government policy to expand financial, rather than other services, misses the mark. Cash shortage in the economy due to demonetisation ravaged the informal economy to which many of the MSMEs belong. The study by Shankar and Sahni [18] investigates the effects of demonetisation in the informal economy including waste chains where the initiative triggered its own set of adverse consequences in a segment of the informal markets, much to the detriment of the labouring poor. It ended up in disturbing the delicate balance of trust in the informal economy and upheavals in the economy, resulting in mistrust in the government and its institutions.

## 3. Overview of MSME economy in India

The Micro, Small and Medium Scale Enterprises (MSMEs) play a pivotal role and contributes to the economic and social development of the developing countries. They are often considered as "engines of economic growth" in India [19]. These MSMEs play a significant role in creating large employment opportunities, wealth creation, develop entrepreneurship and innovation, social cohesion and augment local and regional development in [20]. After agriculture, these MSMEs are the second largest in generating large employment opportunities that are comparatively less capital intensive in nature. According to Annual Report of MSME 2017–2018, MSMEs are considered as ancillary units and are supplements to large industries that significantly contributes to the inclusive industrial growth [21]. According to the same report, during the period 2015–2016, there were 633.88 lakh unincorporated non-agriculture MSMEs in the country engaged in different economic activities including 196.64 lakh in Manufacturing, 230.35 lakh in Trade and 206.84 lakh in Other Services. It is seen that 31% MSMEs were found to be engaged in manufacturing activities, while 36% were in trade and 33% in other services.

Again, out of 633.88 estimated number of MSMEs, 324.88 lakh MSMEs (51.25%) were in rural areas and 309 lakh MSMEs (48.75%) were in the urban areas. The Micro sector with 630.52 lakh estimated enterprises accounts for more than 99% of total estimated number of MSMEs. Small sector with 3.31 lakh and Medium sector with 0.05 lakh estimated MSMEs accounts for 0.52% and 0.01% of total estimated MSME. As per the National Sample Survey (NSS) 73rd round conducted during the period 2015–2016, MSME sector has been creating 11.10 crore jobs (360.41 lakh in Manufacturing, 387.18 lakh in Trade and 362.82 lakh in Other Services and 0.07 lakh in Non-captive Electricity Generation and Transmission) in the rural and the urban areas across the country.

MSMEs constitute more than 80% of the total number of industrial enterprises and support industrial development. Indian MSMEs have moved up from the manufacture of traditional goods including leather, gems and jewellery, agricultural goods to much more value addition in the manufacturing sector to its entry in the value-added services as well [22].

## 4. Relationship between business and Hindutva politics in India

The economic liberalisation in India took place in the year 1991, when India opened doors for foreign and private investment and thrusted upon market and service-oriented initiatives. With the advent of neoliberalism, the means to approach, study and measure country's growth and development parameters have changed. The era of neoliberals if often identified and linked with globalisation, capitalism and financialisation. According to Epstein [23], in the era of neoliberalism, capitalism is reflected in the "increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of domestic and international economies". The advocates of neoliberalism focusses more on the GDP growth rates while the human developmental and other social, economic and environmental indicators remain ignored and neglected. According to Siddiqui [24], the state plays a minimal role while the private property and free market are dominant and favoured in neoliberalism regime. Siddiqui ([2], p. 150), further adds that "neoliberal and corporate-led growth, with a heavy reliance on market forces for employment and welfare, have displaced the earlier policies of state-sponsored equity and created increased insecurities and tensions that scapegoat vulnerable minorities, tribal peoples and Dalit, all of whom have become easy targets for collective violence." The author further adds that it focuses excessively on growth and overlooks other crucial elements like inequality, unemployment and poverty and hence development is synonymous to increase in growth rates achieved by the inflow of foreign capital by multinational companies [2].

The advent of neoliberalism in India is considered in the sphere of economy while the rise of Hindutva is investigated in the cultural domain. This emerging new narrative/ regime led by the BJP government and its allies is a fusion of neoliberalism and Hindutva representing economic policy and identity politics respectively. According to Kaul [25], neoliberalism is deterritorialises capital, disrupts traditional communitarian affiliations of identity and weakens the nation-state foundation by shifting power toward the globally mobile transnational corporate entities and away from the governments with greater constrains and limited power to regulate, what, how and to what extent. Such pro-foreign business policy and strategies of governance facilitates corporate to takeover domestic businesses, lands and mineral resources from rural people [26], thus leading to large-scale dispossessions and displacements of rural and marginalised communities and their migration to the cities [27]. In recent years, the take-over of the nationalist space by fascist forces (Hindutva politics) has left the Indian constitution and the judiciary vulnerable

to cynical distortion and manipulation. However, the fusion of neo-liberalism and Hindutva by the fascist forces is being cemented with more support from big business [2]. Unlike the previous government, these pro-business rhetoric and capitalist competition stands against policies to provide public and social sector goods to backward communities while they garner significant backing from major financial conglomerates [28]. Most recently, the sudden scrapping of Rs. 500 and Rs. 1000 badly affected those in MSME and informal sector due to cash shortage while this act boosted the electronic trade for the corporates. Similarly, the introduction of GST again proved unfavourable and damaging for the businesses in the informal sector. In the name of economic reforms, Modi's government strategy seems to be to cut subsidies, increase regressive taxes and capital expenditure and privatise public sector banks and state-owned enterprises such as the Indian Railways [2]. However, the calculated invisibility of new forms of imperialism has rendered the whole economy and political space ambiguous and utterly chaotic.

The current Prime Minister of India (Modi) is represented as an icon and leader of both Hindus and of business by his followers, media and party members. Kaul [25] argues that the Modi-led BJP government generates contradictions and ambiguities in terms of competing/contradictory focus while spanning its interests of Hindutva, business and development. The author cites an instance that "those voted for Modi solely or primarily for "development" expect access to infrastructure and a better quality of life, those who see him as a muscular "Hindutva" leader expect him to promote the traditional conservative religious values along the lines of "make India a Hindu nation," the "business" interests expect him to be a deregulating free-market reformer. In order to cope with incongruent interests, a strategy of using different idioms that present the interests as uniform for both big business and poor is termed as "speaking with a forked tongue" by Kaul ([25], p. 523). She further explains how the propagation of a neoliberal subjectivity and high-technology capital intensive solutions favoured by corporates remain vital and becomes essential while they laud people who provide for themselves what the government should provide as public goods, hence minimising their role in providing services.

## 5. Hindutva and decline of MSMEs in India

The policies and programmes of the contemporary government of BJP ushered with Hindutva philosophy have impacted the MSME sector that mostly overlaps with the informal economy in India. According to FICCI [29], the census of Micro, Small & Medium Enterprises (2006–2007) depicts that nearly 95.7% of the 361 lakh MSMEs in India are unregistered and many of them operate in the unorganised/informal sector. The micro and small businesses mostly from the informal economy in India are highly fragmented and heterogeneous in nature [30]. This section investigates how the policy decisions taken by the government including demonetisation and GST affects the MSMEs in the country and has led to its decline.

According to some of the scholar's money being "essential"— because the total set of transactions achievable with money is much larger, than the one's achievable without money ([31, 32], p. 47). More than eighty percent of the transactions take place in cash in India and this make it a heavily cash reliant country (cited in [33]). Hence, the shocking decision to demonetise Rs. 500 and Rs.1000 banknotes immediately constrained the MSME sector and unfavourably impacted the economic wellbeing of the people across the country. This abrupt reduction in monetary transactions in the economy came relatively hard-hitting on informal economy including businesses and enterprise in the MSME sector, hence, impacting the economic wellbeing of the people involved in it. The reason being that many such

businesses operate in the shadow of the formal economy, generate funds through informal channels such as friends, relatives, money lenders or micro-finance institutions, who do not maintain proper accounts, often buy and sell in cash, employ casual workers, or rely on family labour [30]. Furthermore, Mankar and Shekhar [33] adds on that this sector depends on cash for making payments to employees, availing raw materials from suppliers and collecting revenue from customers. Waknis [34], describes this step of demonetisation as a pervasive reduction in liquidity that is bound to adversely affect both current and future consumption and investment decisions. The effect of demonetisation was pronounced in this sector as these small businesses largely operated in the cash-based economy, heavily affected the purchasing power and hence, failed to keep afloat [34]. Besides the consumers and businesses owners being impacted, the financial institutions too had their set back that resulted in low growth and poor portfolio performance. Chandrashekhar [35] states that this move was weak, poorly designed followed by unplanned implementation as the government was slow in replacing the new notes against the withdrawn ones in the economy. The author further elaborates that the disruption of production and shrinking of demand came at a time when the economy was already facing recession and deflation and this sudden cash shortage further aggravated the earlier slowdown and depressed prices [35]. It would be important to see the impact of demonetisation on the GDP of India.

The existing informal sector accounts for a large chunk of the Indian economy and its high dependence on cash transactions led Mankar & Shekhar [33] to believe that demonetisation affected the growth of India's GDP too. Due to demonetisation the thriving businesses faced several issues and some of them withered off due to cash crunch. The most damaging effects have been on jobs and that too jobs from the informal sector including MSMEs. India's micro, small and medium (MSMEs) have seen dramatic job losses of 35 lakh in the last four-and-half years, according to a survey by the All India Manufacturers' Organisation (AIMO). According to Waknis, some of the firms and businesses in this sector that shut down due to lack of cash supply would not revive even after the restoration and supply of new currency. However, La Porta and Shleifer [36] opines that such informal businesses are mostly less productive than their formal counterparts and hence would not have drastic impact on output or real GDP. The Economic survey 2016–2017 explains that "the national income accounts estimate informal activity on the basis of formal sector indicators, which have not suffered to the same extent [34]. But the costs have nonetheless been real and significant" [37]. The same report recognises that the short-term costs caused hardships and inconvenience for those in the cash intensive sector and informal sectors who lost income, employment and livelihood. However, these costs are considered transitory and is minimised in recorded GDP as the national income accounts estimate informal activity based on formal sector (mostly big and international corporations) indicators, which have not suffered to the same extent. The percentage share of MSME in GDP has declined from 29.57% in the year 2011–2012 to 28.77% in the year 2015–2016 as per the Annual Report-2017-2018 on MSME. The growth rate too has declined from 15.27% (2012–2013) to 7.62% for the year 2015–2016. It would be interesting to analyse data for last two years 2016-2017-18 (currently unavailable) to get a clear picture of the impact of the economic policies posed by the BJP government. However, there is a declining trend that depicts the repercussions of the pro-foreign business policies of the government.

The Economic survey 2017–2018 report highlights the shock of demonetisation to have largely faded away by mid-2017, when the cash-GDP ratio stabilized. But the BJP government was non-stoppable and during the same year when the so-called stabilisation was taking place, they introduced another policy namely Goods and Services Tax (GST). This was launched in July 2017 as an initiative to make uniform

tax system and to centralise capital, further pushed out the small traders and manufacturers in the MSME from the economy. According to Banerjee and Prasad [38], the main aim of GST was "to create a uniform market by removing existing distortions, barriers, and complicated multi-tiered tax structures. The Indian version of GST that has three layers-state GST, central GST, and integrated GST-with multiple rates, however, does not look simple". This policy decision demonstrates the fascist and aggressive capitalist nature of their inbuilt Hindutva politics where the formal sector or the multinational corporations are favoured while the MSME and the informal sector remains neglected. This policy decision due to its scale and complexity encountered challenges of policy, law and information technology systems that largely affected the informal sector. According to Chandrashekhar [35], the shift to the GST regime is more towards FDI friendly environment that is conducive for big corporations, catalysing privatisation, encouraging cashless economy through digital transactions and fiscal consolidation. GST came with increased compliances and paper that coping with it became very difficult for small businessmen and traders in the MSME sector. This largely disrupted the functioning of supply chains involving small traders that supplied intermediaries to large manufacturing companies mostly belonging to formal sector. This highlights the unpreparedness of the government in a heterogeneous Indian nation where disparities are evident and holds a legacy of disconnect between policymaking and implementation [38].

The Economic Survey 2017–2018 report mentions about the improved economic growth in the later phase of the year where corrective actions were taken and the global economic recovery boosted exports were synchronised. The report further reflects on the cumulative actions to improve the business climate, India jumped 30 spots on the World Bank's Ease of Doing Business rankings, while similar actions to liberalize the foreign direct investment (FDI) regime helped increase flows by 20 percent. However, the purpose of the government is well served as they were lauded by the India's big capitalist lobby and harnessed goodwill from big financial global bodies including IMF and World Bank, all representing the interests of global finance capital. As demonstrated by the government, the objective to plug the informal economy into formal set-up may have benefits theoretically but not in praxis. However, the cost can outweigh the benefits if done forcefully through radical reforms [38]. But the most damning thing is this: there is no rethinking on GST after its all-round damaging impact on the small traders and manufacturers has been revealed in all its dimensions.

## 6. Conclusion

The government has been proactive in satisfying the global needs of the international corporations rather than addressing the domestic needs of the informal sector including MSME. The formal sector, equipped with resources and access to information, is somehow coping with this disruption, but the first shock wave of demonetisation has swept small businesses off their feet. It is clear that the rise of Hindutva right wing politics and their policy of demonetisation coupled with GST led to the fall of MSME in India. The Hindutva led demonetisation policies were disruptive and severely affected the cash driven small, micro and medium enterprises due to shortage of cash flow and decreased demand. It led to the growth of unemployment in the MSMEs sector. The entire MSMEs sector faced disruption in their normal operations in India. The negative transition of economy due to demonetisation has pushed the entire sector into an uncharted territory of uncertainty and crisis. Therefore, it can be said that Hindutva led demonetisation is a thoughtless policy that had huge negative implications for MSMEs in India.

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# The Simplification of Customs Formalities: The Role of the Authorized Economic Operator (AEO) in Vietnam and in the EU

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## Abstract

Customs clearance operations of goods can be facilitated if importers, forwarders, or logistics operators have obtained the status of Authorized Economic Operator (AEO). The simplification of customs formalities, as well as a lower number of document-based customs controls and of physical inspections, speed up the international trade flows and reduce the delivery time of goods. The World Customs Organization (WCO) has promoted the implementation of standardized procedures since 1970s. On this matter, the WCO adopted the Kyoto Convention in 1974 and the Revised Kyoto Convention (RKC) in 1999. The article analyzes the role of the AEO status in Vietnam and in the European Union, and the opportunities of customs cooperation between Vietnam and the European Union, taking into consideration the Free Trade Agreement (EVFTA) which entered into force on August 1, 2020.

**Keywords:** AEO, customs, EVFTA, Kyoto Convention, MRA, pre-clearing, RKC, SAFE, Vietnam, WCO

## 1. Introduction

The transport of goods has been revolutionized since the end of the Second World War. Nowadays buying products in any part of the world thanks to the e-commerce or shipping spare parts of cars or machines from Asia to Europe in less than 24 hours by air transport, or in almost 2 weeks by train, is possible.

Until November 1989, because of the two-block division of the world, a large number of communist and planned-economy states had no chance to develop an international-trade-oriented economy and a modern system of transport and infrastructures.

As a result of the end of the Cold War and the economic boom of Asian economies (like the Vietnamese economy since the 1990s), the number of stakeholders and international trade players dealing with customs procedures as well as customs compliance rules has increased remarkably. International flows of goods have been progressively influenced by features pertaining to customs legislation.

In the current global trade scenario, it is useful to bear in mind that the simplification of customs-related operations is an important feature, as *de facto* it influences positively the global value chains and the opportunity of cost savings thanks to delivery time reduction, and it increases the level of efficiency of the supply chains. On this matter, the AEO (Authorized Economic Operator) is an instrument that has been designed for offering advantages and preferential treatment to economic operators and business integrated in the international supply chains, principally in terms of reduced numbers of customs administrative controls and physical inspections.

## 2. Containerized transport in Asian harbors

The containerization has played a central role in the international transport dynamics over the last 40 years. The volume of container traffic has risen remarkably since the fall of the Berlin Wall, particularly in Asia. In 1989, no Chinese ports were included in the list of the main transshipment hubs in the world, apart from Hong Kong, which was the most important international harbor for the traffic of containers (4.5 millions of TEUs—Twenty-foot Equivalent Units). In reality, in 1989 Hong Kong was still part of the territory of the United Kingdom. In fact, Hong Kong passed under the Chinese sovereignty in July 1997, becoming the Special Administrative Region of Hong Kong (HKSAR) on the basis of "the one country, two system" principle.

With the new millennium, the situation changed completely: East and Southeast Asian harbors soared. In 2018, the first nine busiest transshipment ports in the world were located in China (including HKSAR), Singapore, and South Korea: Shanghai (42 millions of TEUs), Singapore (36.6), Ningbo-Zhoushan (26.3), Shenzhen (25.7), Guangzhou (21.9), Busan (21.6), Hong Kong (19.6), Qingdao (19.3), and Tianjin (16) [1].

It is also interesting to consider the growth of volumes from 2010 to 2018 in certain Asian ports. For instance, in 2010 in the harbors of Shanghai and Singapore, the throughput was 29 and 28.4 million TEUs, respectively, which means about three-quarters of the container volume measured in 2018. A significant increase of transshipped containers was observed in the Chinese port of Ningbo-Zhoushan during 2010–2018: the 2010 throughput (13.14 million TEUs) was exactly half of the volume reached in 2018 (source: Journal of Commerce—JOC).

Several factors have allowed to reduce the costs of transport and the transit time to ship goods from Asia to other continents:

- the modernization of containerization;

- the economies of scale;

- the formation of strategic alliances, despite the establishment of an ever-increasing concentrated container sector (the Gini coefficient rose from 0.53 in 2006 to 0.59 in 2019) leading to an oligopoly consisting of three container liner shipping groups (2M Alliance, Ocean Alliance, and The Alliance) [2];

- the economic boom of BRICS (Brazil, Russia, India, China, and South Africa);

- the expansion of Suez Canal (2015) and of Panama Canal (2016);

- the use of Information and Communication Technologies (ITC);

- paperless trading, dematerialization of documents, and exchange of documents electronically (e.g. e-customs, e-documents, digital signature) [3];

- the investments in upgrading harbors and their infrastructures, especially in the majority of the Eastern Asian Countries (China and HKSAR, South Korea, and Singapore).

Regarding the modernization of ports, the gigantic size of containerships like ultra-large container vessels (ULCVs) has required the expansion of several harbors and modern systems of cranes for loading and unloading containers. In fact, during the 1990s, Panamax and Post-Panamax vessels could load 4000–8000 TEUs, while currently the ULCVs can store over 23,000 TEUs.

Concerning Vietnam, in terms of transshipment, two of the main Vietnamese ports are Ho Chi Minh City, which is located in Southern Vietnam, and Hai Phong in the North. In 2018, the harbor of Ho Chi Minh City was the 28th busiest international harbor with 6.33 millions of TEUs transshipped. The volume of containers in the port of Hai Phong was 4.76 million TEUs (source: JOC).

As far as the whole container cargo throughput in Vietnamese harbors is concerned, in 2000 the volume was equal to 1.18 million TEUs. Ten years later (2010), the container traffic was more than five times that of 2000: 5.96 million TEUs. In 2018, the total container port throughput reached 16.37 million TEUs, which represented 3.7% of the total container cargo throughput of East Asia and Pacific region (437.8 million TEUs), and 2% of the world-wide container volume (792.6 million TEUs) [4, 5].

## 3. Vietnam accessing the global trade scenario

In the first half of the 1980s Vietnam was one of the poorest Asian countries in the world: Vietnamese per capita income was estimated less than 100 USD a year in 1981 by the UN, and 160 USD in 1985 by the IMF [6]. The domestic policies implemented in Vietnam at the end of the 1970s and at the beginning of the 1980s were ineffective to overcome the problem of poverty. The Soviet-type centrally planned economic system resulted inadequate to struggle macroeconomic instability, malnutrition, and scarcity of essential consumer goods, especially medicines.

More to the point, the Vietnamese development plans mainly depended on economic aid and assistance of the Soviet Union and of European socialist countries. In fact, in 1975 Vietnam reached an aid agreement with the USSR pertaining to the five-year economic plan of 1976–1980. Three years later, in 1978, Vietnam became officially the tenth member of the Council for Mutual Economic Assistance (COMECON). As a consequence of the COMECON membership, Vietnam was absorbed in the sphere of influence of Soviet Union and obtained both the economic support and military protection of the USSR and of its satellite countries [7].

It is worth to note that during the second half of the 1970s, Vietnam was still paying the socio-economic and environmental consequences of the Second Indochina War, also known as the Vietnam's War. Bombings and chemical defoliant used during the war had caused devastating effects on civilians, agriculture, and production sites. The end of the Vietnam's War in April 1975 allowed to reunite North and South Vietnam, giving birth to the Socialist Republic of Vietnam on 2 July 1976—after the First Indochina War, in 1954 the Vietnamese territory had been divided into two zones along the 17th Parallel by the Geneva Accords.

Furthermore, the Sino-Vietnamese border conflict of February to March 1979 opened a phase of regional disequilibrium which lasted until the full normalization of the bilateral relations between China and Vietnam in November 1991 [8].

A sign of a restored stability in the Indochinese region was the launch of the Greater Mekong Subregion (GMS) economic cooperation program in 1992. With the support of the Asian Development Bank (ADB), Vietnam and China, together with other four Asian countries sharing the Mekong River (Cambodia, Laos, Myanmar, and Thailand), implemented the GMS in order to facilitate trade and regional collaboration, and to stimulate investments in agriculture, energy and infrastructures [9].

During the Sixth National Party Congress in 1986, the Communist Party decided to implement a program of economic reforms ("Doi Moi") to transform the centrally planned economy into an experimental economic system having a lot of similarities with the Chinese socialist market economy [10]. Indeed, in China, at the end of the 1970s, Deng Xiaoping had focused on the transition from a fully socialist economy to a "partially" market-oriented economy under socialist ideology [11].

Since 1979, China has incorporated the concept of market inside a socialist and planned economy undergoing a continuous and gradual process essentially based on economic experiments such as the establishment of free-market oriented areas— the first special economic zones (SEZs) were Shenzhen, Shantou, and Zhuhai in Guangdong Province and Xiamen in Fujian Province. Deng Xiaoping used the metaphor of "crossing the river by feeling the stones under the feet."

Likewise, the Vietnamese socialist-oriented market economy was based on the application of principles of a market-based economy in a state having a socialist-oriented political apparatus and administration. During the 1990s, the model adopted by Vietnam to integrate its economy in global markets was strictly correlated with the development of export processing zones (EPZs) and the establishment of industrial zones (IZs) to support export-oriented manufacturing enterprises. Since the end of the 1990s, mainly after the Asian financial crisis which started in Thailand in 1997, Vietnam has invested in high-tech IZs [12].

Despite the high level of indigence measured during the first years of the 1980s, Vietnam was able to grow quickly and to reduce poverty during the 1990s. Correlating the poverty reduction and the growth rate in Vietnam and China in the period 1992–1998, even though the average rate of Vietnamese development and growth was lower than that of China (6.4% in Vietnam and 9.2% in China), the rate of poverty reduction was almost the same: 7.5% in Vietnam and 8.4% in China (source: World Bank) [13].

In order to be part of the international context, Vietnam, along with the "Doi Moi" program, gradually diversified its external relations, paying special attention to multilateralization and to the creation of strategic partnerships both with Asian emerging countries (China and India) and with consolidated global powers (USA, Japan, and Russia, after the dissolution of the Soviet Union in December 1991) [14].

In this regard, 1995 represented an important year for the admittance of Vietnam to the international scenario. Firstly, bilateral relations between Vietnam and the United States were normalized. Secondly, Vietnam became part of an intergovernmental organization in Southeast Asia: ASEAN. Three years later, Vietnam was also incorporated in the regional economic forum of the Asian-Pacific Economic Cooperation (APEC). Joining the WTO in January 2007, Vietnam was fully integrated into the international trade scheme.

## 4. The impressive growth of Vietnamese economy

From 2000 to 2019, despite phases of macroeconomic instability, such as the 2012 turmoil (soaring unemployment rate, high inflation, budget deficit, foreign exchange reserve reduction, mismanagement of fiscal and monetary policies) [15], Vietnamese economy experienced regular and remarkable GDP growth levels.

Since 2000 the GDP has risen by an average of about 6% per year—with a peak of 7.5% in 2004 and 2005. In particular, in 2000 the GDP was 31 billion USD (GDP per capita was 390 USD yearly). Ten years later (2010), GDP was almost four times that of 2000: 115 billion USD. In 7 years, from 2010 to 2017, Vietnamese GDP almost doubled: in 2017 it reached 223 billion USD. In 2019, GDP was 261.9 billion USD and GDP per capita was 2715 USD (i.e. seven times that of 2000) [16]. Because of the Covid-19 pandemic, as foreseen for the majority of the worldwide economies, in 2020 the Vietnamese GDP is expected to plummet.

Regarding the growth of export, in 1986 the total merchandize exported by Vietnam represented only 6% of GDP. In 10 years that ratio soared up to a third of GDP and the volume of export in 1995 reached 6.5 billion USD. After 6 years, in 2001, the export of goods was almost three times that of 1995 (around 18 billion USD), representing 55% of the GDP. From 2007 (year of the WTO membership) to 2010, the Vietnamese export climbed from 54.5 billion USD (70.5% of GDP) to 83.4 billion USD (72% of GDP). In 2019 export represented 106.8% of GDP, which means over 279 billion USD [17].

Currently, the main Vietnamese export includes both goods produced by labor-intensive industries (food and seafood processing, rubber, footwear, and garments) and high-tech products (automotive components, electronics, and computers).

## 5. The World Customs Organization and customs procedures simplification

Since the 1970s, the Customs Cooperation Council, then World Customs Organization (WCO), has encouraged global customs integration, especially in terms of customs procedures harmonization and simplification.

The International Convention on the Simplification and Harmonization of Customs procedures, also known as Kyoto Convention, entered into force in 1974. In line with the provision of Article 2 of the Kyoto Convention, "each Contracting Party undertakes to promote the simplification and harmonization of Customs procedures and, to that end, to conform, in accordance with the provisions of this Convention, to the Standards, Transitional Standards and Recommended Practices in the Annexes to this Convention."

In 1999, the WCO Council adopted the revised Kyoto Convention (RKC), which entered into force in 2006, in order to modernize customs operations by making use of customs guidelines, and to facilitate international trade procedures. The RKC body consists of five principal chapters and a group of annexes: a General Annex, which is split into 10 chapters, and the Special Annexes (A–K).

Both the first Kyoto Convention and the RKC stressed the necessity of transparency of customs actions and the need of simplifying customs-related operations. As indicated in the Preamble and in Article 2 of the RKC, both the Kyoto Conventions aim to eliminate the customs practices that hamper international trade and other international exchanges, as well as to promote the simplification and harmonization of customs procedures.

Along with the simplification of customs operations, the WCO has also paid attention to the level of security of the international supply chain. In 2005, the WCO Council adopted the SAFE Framework of Standards to Secure and Facilitate Global Trade in order to improve the supply chain security standards. The SAFE Framework is updated every 3 years. In line with the 2018 version provisions, the SAFE Framework identifies four core elements.

The first issue deals with the harmonization of the advance electronic cargo information requirements on inbound, outbound, and transit shipments.

The second point refers to the purpose of reduction of security threats through accurate risk analysis.

The issue of the third core element is the application of a methodology based on non-intrusive detection equipment to inspect high-risk cargo and transport conveyances, such as X-ray machines and radiation detectors. According to the definitions provided by the WCO in Annex I of the SAFE Framework of Standards, high risk cargo is considered "that for which there is inadequate information or reason to deem it as low-risk, that tactical intelligence indicates as high risk, or that a risk-scoring assessment methodology based on security-related data elements identifies as high risk."

On this matter, it is also useful to mention the Container Weight Verification Requirement discipline of SOLAS (International Convention for the Safety of Life at Sea of 1974) pertaining to the risk-based analyses and the verification of gross mass (VGM) of packed containers before loading them onto vessels [amendments to SOLAS Regulation VI/2 of Resolution MSC.380(94) of 21 November 2014], as well as the three declarations (effective since January 2018) that were added to the standardized declaration forms of the Convention on Facilitation of International Maritime Traffic of 1965, also known as FAL Forms: security-related information as required under SOLAS Regulation XI-2/9.2.2; advance electronic cargo information for customs risk assessment purposes; advanced notification form for waste delivery to port reception facilities.

The fourth core element of the SAFE Framework underlines the significance of conferring tangible benefits to those businesses and economic operators who are able to comply with supply chain security standards and best practices.

Furthermore, in order to improve the cooperation between customs authorities, and the opportunities to create a dialog between customs administrations and economic operators, the SAFE Framework identifies a three-pillar configuration.

Pillar 1 underscores the need of customs-to-customs cooperation, Pillars 2 and 3 emphasize the cooperation among customs authorities, governmental and inter-governmental agencies, and business and economic operators. In this respect, the AEO is a key issue, especially in terms of customs-to-business cooperation outline. In fact, economic operators and businesses, if rated as safe and reliable international commercial partners by customs administrations, benefit from a reduced number of customs controls. That makes the supply chain more efficient thanks to a faster flow of goods.

Focusing on Pillar 1, as indicated in the SAFE Framework (2018 version), customs administrations "must work co-operatively with common and accepted standards to maximize the security and facilitation of the international trade supply chain as cargo shipments and transport conveyances move along the nodes of the global trading system". In effect, as part of the cooperation between customs administrations, in order to improve the level of security of supply chains and the harmonization of customs procedures, customs authorities are required to agree on mutual recognition of inspection results and on AEO programs which are implemented in different countries, or inside a customs union like the EU [18].

In addition, Pillar 1 takes into consideration the opportunity of inspecting and screening cargoes before the arrival of vessels at harbors, instead of clearing goods that are loaded onto vessels only when ships have arrived at ports. In this respect, the declaration at sea (i.e. pre-clearing) is a valid opportunity for importers, shipping companies, terminal operators, and intermodal operators. Clearing goods before vessels enter the harbor improves the efficiency of the international supply chains and reduces the storage time of containers. Also, a regimented pre-clearing mechanism speeds up the handling operations and lessens the transit time of containers inside harbors, avoiding the risks of container congestion at ports and

of demurrage charges for importers. Specifically, demurrage charges are levied by shipping lines to importers when containers are stored in the harbor terminal without meeting the deadline indicated by shipping lines.

On this subject, the first paragraph of Article 7 of the WTO Trade Facilitation Agreement (TFA), also known as the Bali Package, stresses the need of implementing the pre-clearing, stating that "each member shall adopt or maintain procedures allowing for the submission of import documentation and other required information, including manifests, in order to begin processing prior to the arrival of goods with a view to expediting the release of goods upon arrival." In order to implement the TFA, developing and least-developed countries (LDCs) are supported by the WTO's Trade Facilitation Agreement Facility (TFAF) grant and assistance program [19].

## 6. An overview of the AEO

The AEO is a central part of the SAFE Framework. In relation to the main purposes of the AEO program, enterprises and economic operators are encouraged to cooperate with customs authorities in order to establish a functioning mechanism of collaboration pertaining to customs procedures simplification.

The enterprises that are able to meet AEO legal discipline and criteria, gain several advantages, primarily a reduced number of inspections and a lower document-based customs controls. The AEO status can be obtained by economic operators and businesses actively involved in the principal stages of the global supply chain (e.g. importers; exporters; manufacturers; freight forwarders and carriers; warehouse keepers; terminal operators; logistic operators; and customs agents).

The WCO provides a general definition of AEO in the first Annex of the SAFE Framework: "a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards."

In connection with the SAFE Framework, the WCO has put emphasis on the Mutual Recognition Agreement (MRA) strategy in order to reinforce the security of global supply chains and to avoid safety controls being replicated. In particular, AEOs have to be mutually recognized by customs administrations of different countries in terms of reciprocal benefits. As indicated by the WCO, the MRA "is a broad concept embodied within SAFE, whereby two countries close an agreement or arrangement to mutually recognize AEO authorizations that has been properly granted by one customs administration" [20].

The EU reached MRAs with a group of countries: Norway and Switzerland (two EFTA Members) in 2009; Japan in 2010; the United States in 2012; and China in 2014. Vietnam has been negotiating an MRA with South Korea. It is worth pointing out that in 2015 Vietnam and South Korea signed a bilateral free trade agreement (VKFTA).

## 7. The AEO in Vietnam and in the EU

In Vietnam the AEO pilot project was launched in May 2011. The official program started in June 2013. The Vietnamese AEO status is granted for 3 years to customs brokers and import-export enterprises demonstrating an elevated yearly turnover (generally at least 100 million USD). Thus, the turnover is a very selective criterion to grant the AEO status in Vietnam. In this respect, the General Department of Vietnam Customs estimated that in 2017 and 2018 the AEOs

accounted for almost 35% of the total import-export trade [21]. Exporter enterprises are also categorized according to three macro-sectors: agri-food, seafood, and high-tech. As of March 2019, the number of Vietnamese AEOs was 68—in 2013 there were only 11 AEOs (source: General Department of Vietnam Customs).

Thanks to Law on Customs No. 54/2014/QH13 of 23 June 2014 and Decree No. 08/2015/ND-CP of 21 January 2015, Vietnamese legislator has facilitated customs operations and implemented a system to support international customs cooperation. In particular, Article 3 of Law 54 of 2014 affirms that "the State of Vietnam shall facilitate customs formalities applied to import, export, exit, entry and transit in the Vietnamese territory" (English translation).

Within the context of the development of the AEO status in Vietnam, Article 42 of Law 54 of 2014, Article 10 of Decree No. 08/2015/ND-CP of 21 January 2015, and Article 12–17 of Circular 72/2015/TT-BTC of 12 May 2015, provide a list of requirements which must be satisfied by economic operators in order to obtain customs privileges, benefits and priority when clearing goods: strict observation of customs and fiscal law for two consecutive years; compliance with accounting and audit regulations, as well as the existence of an internal control system; the application of ITC programs and of e-customs procedures to manage import-export activities and to ensure the security of the supply chain (e.g., container inspections); the possibility of making via-bank payments; absence of violations against taxation and customs law (e.g., tax evasion, tax fraud, goods smuggling, and illegal trafficking across the border).

Among the privileges given to enterprises, the first paragraph of Article 43 of Law 54 of 2014 includes the exemption "from examination of relevant documentary evidence in customs documents and [...] from physical inspection of goods in the course of carrying out customs formalities, except cases in which law violation are detected or random inspection is needed to assess law compliance." On this subject, paragraph 2 of Article 9 of Decree No. 08/2015/ND-CP provides that "enterprises given priority by customs authorities and harbor warehousing agencies shall be permitted to get procedures for shipping and taking delivery of their cargos as well as customs examination and supervision procedures completed first."

Hence, Vietnamese customs authorities guarantee advantages to AEOs during clearing operations, mainly in terms of priority policy. In line with Articles 5–11 of Circular 72/2015/TT-BTC, the priority policy is essentially based on the exemption from document and physical inspections of goods, customs clearance with incomplete declarations (fulfilling the compulsory obligations successively), faster procedures in case of tax refund, and post-clearance analyses [22].

In terms of comparison, the AEO discipline was introduced in the European Union customs territory during 2005–2006 by EU Regulations 648/2005 and 1875/2006. EU customs authorities grant the AEO status if an economic operator is able to comply with best practices and security requirements in the international supply chain. Specifically, according to Article 38 of Regulation 952 of 2013 (the EU Customs Code in force) and Article 24 of Delegated Regulation 2446 of 2015, two types of AEO are granted:

- AEO type C (customs simplification), which enables the AEO holder to benefit from more favorable risk assessment and consequently fewer document-based controls and physical inspections than economic operators not owning the AEO status.

- AEO type S (security and safety), which entitles the holder to facilitations pertaining to security and safety.

Before May 2016, the AEO could be granted in three different types: AEO-C (customs simplification); AEO-S (security and safety); and AEO-F (full: customs simplification plus security and safety). The current EU Customs Code does not mention the AEO type F.

According to Articles 38 and 39 of the EU Customs Code, the main criteria for granting the status of AEO in the European Union can be summed up as follows: the absence of repeated and/or serious infringement of customs legislation and taxation rules; the demonstration of control of the flow of goods; managing commercial and transport records effectively; proven financial solvency and absence of bankruptcy proceedings; and appropriate security and safety standards, especially in case of AEO type S applications.

In case of serious infringements and of criminal offenses, the AEO status is revoked (Article 39 of the EU Customs Code). It is worth noting that as far as penal proceedings is concerned, Article 42 of the EU Customs Code states that "each Member State shall provide for penalties for failure to comply with the customs legislation. Such penalties shall be effective, proportionate and dissuasive." However, even though Article 83 of Treaty on the Functioning of the EU (TFEU) tries to regulate the matter of finding a homogenous definition of criminal offenses and sanctions inside the EU, penalties might be different in each Member State due to the lack of harmonization of national criminal laws and the absence of synchronized criminalization regimes in the EU [23].

Despite the advantages and benefits guaranteed by the AEO status, a large gap comes out among EU Member States, as the number of AEOs is still limited in various EU Countries, such as Bulgaria, Croatia, Finland, Slovakia, Portugal, and Romania. As of 30 April 2019, the total number of AEO valid authorizations in the EU customs territory was 17,504—almost 40% of AEO authorizations were released in Germany (7146). With reference to 2019 figures, other EU Member States investing in the AEO opportunities were France with 1689 AEO authorizations, the Netherlands (1561) Italy (1378), Poland (865), and Spain (762). The total number of AEO authorizations in United Kingdom was 815. The statistics of the United Kingdom deserves some attention, as the United Kingdom, notwithstanding its official withdrawal from the EU in January 2020, will be part of the EU customs territory until the end of 2020. The distribution of AEO authorizations in the EU per sector was the following: 22% exporters, 20% importers, 17% manufacturers, 9% customs broker and freight forwarders, respectively, 8% warehouse keepers, and carriers 5% (source: European Commission—DG TAXUD, Unit A3 Risk Management and Security).

## 8. A conclusive analysis: The EU-Vietnam Free Trade Agreement

In 2018, the principal export markets of Vietnam were the following: the United States (19%), China (17%), the European Union (17%), ASEAN Members (10%), Japan (8%), and South Korea (8%). Therefore, the EU was the second largest export market of Vietnam. In particular, the EU has been one of the main global importer of telephone sets, electronics, garments, and footwear that are produced in Vietnam.

During the same year (2018), Vietnam exported globally an amount of 49 billion USD of telephone sets and components, almost a fourth of which (13.1 billion USD) were directed to the EU. The Vietnamese export of electronics and computers amounted to 29.3 billion USD (4.7 billion USD exported to the EU market). Also, Vietnam exported 30.4 billion USD of garments and 16.2 billion USD of footwear in

the international markets. The Vietnamese exportation of garments and footwear to the European Union was equal to 4.1 billion USD and 4.6 billion USD, respectively (source: Vietnam's General Statistics Office and General Department of Vietnam Customs) [24].

Along with the application of the Generalized Scheme of Preferences (GSP), which provides trade preferences and customs benefits to products having developing-country origin and entering the EU internal market (as established by EU Regulation 978/2012), on 30 June 2019 the European Union and Vietnam signed a free trade agreement, which had been previously approved in the EU with Decision 753 of 30 March 2020.

The free trade agreement between the European Union and the Socialist Republic of Vietnam (EVFTA), officially in force since August 1, 2020, has created a free trade area between the EU and Vietnam in line with the provisions of Article XXIV of GATT 1994 on customs unions and free trade areas. Specifically, according to Article XXIV of GATT 1994 (Paragraph 8b), a free trade area refers to "a group of two or more customs territories in which the duties and other restrictive regulations of commerce (except, where necessary, those permitted under Articles XI, XII, XIII, XIV, XV, and XX) are eliminated on substantially all the trade between the constituent territories in products originating in such territories."

As indicated in Article 2.1 of the EVFTA, "the parties shall progressively liberalize trade in goods and improve market access over a transitional period starting from the entry into force of this Agreement in accordance with the provisions of this agreement and in conformity with Article XXIV of GATT 1994."

Thus, the agreement on the one hand enhances the chance of doing business in Vietnam for European enterprises; on the other hand, it may increase the level of Vietnamese export to the EU. In addition to the benefits of the GSP, goods having Vietnamese preferential origin enter the EU customs territory with no duty (Article 2.7 of the EVFTA), apart from a few exceptions in delicate sectors requiring a gradual and year-on-year reduction of duties, such as agri-food and fishing industry (Annex 2-A, Section A of the EVFTA, and Appendices 2-A-1 and 2-A-2 on EU and Vietnamese tariff schedule). Furthermore, quotas have been confirmed on sensitive products: specific agricultural goods imported in the EU from Vietnam like eggs, rice, garlic, sweet corn, tuna, sugar, and products containing high levels of sugar (Annex 2-A, Section B of the EVFTA about tariff rate quotas).

Concerning customs-related operations facilitation and the simplification of customs procedures, the first paragraph of Article 4.1 of the EVFTA states that "the parties recognize the importance of customs and trade facilitation matters in the evolving global trading environment. The parties shall reinforce cooperation in this area with a view to ensuring that their respective customs legislation and procedures fulfill the objectives of promoting trade facilitation while ensuring effective customs control." In addition, Article 4.5 underlines that "each party shall provide for simplified customs procedures that are transparent and efficient in order to reduce costs and increase predictability for economic operators, including for small and medium-sized enterprises. Easier access to customs simplifications shall also be provided for authorized traders according to objective and non-discriminatory criteria."

Inside the new commercial scenario created by the EVFTA, the AEO status becomes a valid instrument of accreditation and a symbol of correctness and fairness for European and Vietnamese economic operators and businesses which are part of the international supply chain and of the global freight distribution.

The AEO, especially if combined with the implementation of single windows, can offer advantages in terms of time-reduction of customs clearance operations and bureaucratic procedures. In this regard, as highlighted by the UNECE in

Recommendation No. 33, a single window is "a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements" [25]. Therefore, the implementation of a network of single windows in the customs system accelerates customs clearance operations, improves the efficiency of the entire supply chain system, reduces the risks of delays, and consequently facilitates the activity of any economic operator involved in international trade [26].

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# Chile in Times of Pandemic

*Daniela Ramírez*

## Abstract

This chapter provides an overview of the economic impact in Chile caused by Covid −19, the evolution of the Chilean economy in a compact and direct view. The restrictions imposed on consumption and production, as well as the decline of private investment are be the main obstacles that will keep the country from growing, exacerbated by the consequences on labor activity; on the other hand, the increase in public spending helps to counteract these effects, but only to a certain extent. We will consider a brief look at the political situation in the country, since the Chilean economy was in a vulnerable position at the time of receiving the pandemic with an economic contraction of 4.1% in the last quarter of 2019, as the result of the social crisis triggered in October of the mentioned year. The following aspects will be developed which include quantitative information about; Chilean economic situation, making reference and taking comparative parameters to the foreign sector, public sector, fiscal policy and monetary policy. Economic prospects and political situation.

**Keywords:** economic impact, social crisis, pandemic, uncertainty, politic

## 1. Introduction

Chile is one of the Latin American economies that in the last four decades has had rapid and sustained growth, within a stable economic framework, which has allowed it to reduce poverty even when the international economic context has not been the most favorable, The crisis in 1995, the Asian crisis of 1998 and the world crisis of 2008 hit the working class of this country to different degrees. Today, while the world is debating whether we are entering a new depression, in Chile the collapse of the economy appears to be one of the biggest in recent times, with the price of copper at its worst levels, the stock market falling at the same time. Long 2020 and the rise in the value of the dollar.

This research is motivated by the interest in achieving a better knowledge of the economic and social situation in Chile in times of pandemic. In this work, based on a quantitative research, we present a series of statistical indicators, obtained from Chilean and international organizations that allow us to contextualize the current situation based on said data, and that lead us to analyze and comment on the initial impacts of Covid −19.

## 2. International context

By the end of the first half of 2020, the world economic outlook is one of great uncertainty, the unprecedented effects of the pandemic have caused financial conditions to ease and the economic slowdown that has dragged on since 2018,

GDP (Percent change from previous year)

| | (Percent change) | |
|---|---|---|
| | 2019e | 2020f |
| **World** | 2,4 | -5,2 |
| **Advanced economies** | 1,6 | -7,0 |
| United States | 2,3 | -6,1 |
| Euro Area | 1,2 | -9,1 |
| Japan | 0,7 | -6,1 |
| **Emerging market and developing economies** | 3,5 | -2,5 |
| China | 6,1 | 1,0 |
| **Latin America and the Caribbean** | 0,8 | -7,2 |
| Brazil | 1,1 | -8,0 |

**Figure 1.**
*Real world GDP. Official data obtained from the World Bank. Source: World Bank. Note: e = estimate;*
*f = forecast. 1. Aggregate growth rates calculated using GDP weights at 2010 prices and market exchange rates.*
*2. Annual GDP is on fiscal year basis, as per reporting practice in the country. 3. Quarterly data are preliminary.*

particularly for emerging countries, has created the perfect scenario. For a projected global economic contraction in GDP of 5.2%, this situation puts on the table the urgent need to take support measures to cushion the effects of Covid-19 and protect economies from events of similar characteristics in the future.

According to World Bank estimates [1], contractions of more than 7%, mainly in the Eurozone, 5% in the United States, Japan and Brazil and 0.4% in China, directly affect the exports of a country with a powerful development of an open economy (**Figure 1**).

## 3. Economic situation in Chile

At the time of the pandemic, Chile was in a position of economic and social vulnerability, as a result of the social crisis triggered in October 2019, this situation causes a strong health and economic impact due to its negative effect on supply and demand, reflected in numbers [2] for 2018, the expansion of GDP in Chile reached 3.9%, while in 2019 it only grew by 1.1%.

The pandemic has hit the Chilean economy by several sides, the stagnation of economic growth as a result of the fall in private investment, restrictions on consumption and production and the consequences of unemployment will further weaken the supply and demand situation. That can be reversed to some extent with increased public spending.

On the other hand, the Chilean economy is also being hit hard by the international context, especially by the fall in the price of copper and the increase in the value of the Dollar [3] (which reaches almost $ 860 pesos) and the Euro (which reaches $ 925). Although the international collapse in the price of oil has been welcome news, which somewhat offset the trade balance, there is concern that it could deepen the international economic crisis.

The economic activity index as of March 2020 reflected a slight increase in relation to the last quarter of 2019, which was interrupted by the magnitude of Covid-19, the official data of the Central Bank Chile [4] provides an advance of the impact with a fall in activity −13.2% between April and June (**Figure 2**).

In the field of foreign trade and according to the statistical information of the National Customs Service, Chile's commercial exchange decreased 14.2% in the
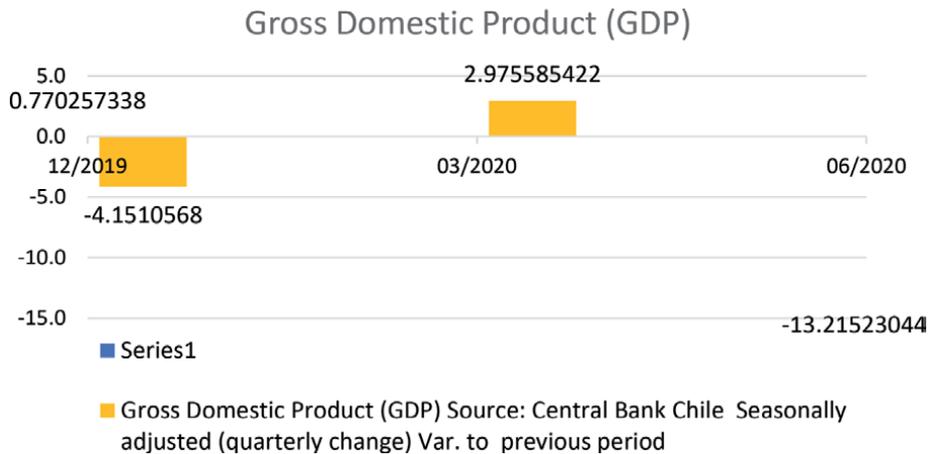
**Figure 2.**
*Comparative GDP variation previous quarter. Based on data [4].*

first semester 2020, exports reached US $ 34,070.9 million, equivalent to a negative variation of 9.9%, while imports reached US $ 26,388, 3 million, registering a decrease of 18.5% [5].

Despite this contraction in exports during the first semester, shipments to China, Chile's main trading partner, registered an increase of 7.5% with US $ 11,896.7 million and a share of 34.9%, followed by The United States with 14.3% and Japan with 9.1% participation, which translates into total sales of 58.3% [5].

Exports related to mining represented 51.7% of total shipments reaching US $ 17,616 million, which caused a decrease of 3.1%. Copper within mining products represents 41.1% of the total, reaching a variation of −2.5%, equivalent to US $ 185 million. However, iron and its concentrates had an increase of 79.3% corresponding to US $ 252 million [5].

Non-mining exported products totaled US $ 16,455 million, presenting a decrease of 16.1%.

On the other hand, imports decreased by 18.5%, equivalent to US $ 26,388 million. China, even as the main seller with a 25.5% share of total international purchases, decreased by 8.1%; The United States with 19.8% and Brazil with 7.5%. Fuel imports accounted for 14.4% of total revenues, highlighting the drop in the purchase of crude oil with −46.1% [5].

In parallel, imports of non-fuel products totaled US $ 22,585, which represents a decrease of 15.6%. In relation to these variations, there is an increase in the purchases of generators and corn for consumption [5].

## 4. Public policies

Promoted by the International Monetary Fund, all over the world countries are applying extraordinary measures to mitigate the effects of Covid-19 on the well-being of the population and the economy; in Chile, the Ministry of Finance announced the Emergency Economic Plan as economic support for families, workers and small businesses (SME); This plan involves fiscal resources for US $ 11,750 million equivalent to 4.7% of annual GDP, in addition to US $ 5,000 million allocated by the Treasury to protect the economy and income, totaling 17,000 million equivalent to 6.9% of GDP [6].

The arguments presented by Chile in this fiscal package include an increase in health spending, additional transfers to all municipalities in the country, a special

unemployment insurance fund, as well as the deferral of tax payments for companies with smaller sales. at $ 12 million.

In addition, the government agreed to an emergency Family Income as a complement to family income, extendable so that each household has at least 110 euros per person from a minimum floor of 30 dollars.

Also, a subsidy was established for independent workers who have suffered a sharp decrease in their income, considering an average income of less than 540 euros.

A capitalization of the Guarantee Fund for small Entrepreneurs of 3 billion dollars was ordered with the objective of leveraging guaranteed loans.

For reference, if we compare these data with other countries in the region, the measures taken by the Chilean government are some of the highest, being surpassed only by Peru, Argentina for example in its government aid program reaches 3, 5% of GDP; This position is also positive if we compare it with countries like Germany, which is equivalent to 156 billion euros, equivalent to 4.9% of GDP, or that of France with 110 billion, close to 5% GDP [6].

Considering the macroeconomic impairment, the decrease in income is justified, and it is projected that the Central Government's income will contract by a real 16.1% compared to 2019.

In April 2020, the Budget Office announced that as a result of the economic measures adopted by the pandemic, the effective deficit will reach 9.6% of GDP and a structural deficit of 3.5%. Thus, for the end of this year, an increase in fiscal spending of 11.4% is expected compared to 2019 and it is projected that the gross debt of the government will be located at 32.7% of GDP and 35.7% at the end of 2021, reaching 40% in 2024 [6].

The foregoing dangerously brings us closer to a debt threshold that significantly increases the payment of interest and with this the possibility of entering a debt crisis, estimates indicate an interest payment of the order of US $ 4.5 billion in 2024.

## 5. Employment

The Chilean labor market prior to facing the crisis due to COVID-19 was in a fragile position due to the internal social crisis that unleashed as of October 18, 2019, clearly there is a difference in facing a crisis with a robust labor market and dynamic that with a weakened market, Chile is unfortunately in the latter situation. According to what was reported by INE-National Institute of Statistics of this country, in the quarter prior to this pandemic (December 2019–February 2020), total formal jobs had fallen by 37,423 annually and informal employment had increased by 193,519. For its part, the creation of formal private salaried employment in the December 2019–February 2020 quarter was only 67,057, which contrasts with the 129,830 in the August October 2019 quarter; This, despite fiscal efforts to avoid company bankruptcies and worker layoffs, did not prevent many from closing permanently. The severity of the health crisis then accelerated the collapse of employment [7].

The unemployment rate reached 7.8% in the moving quarter December 2019–February 2020, this percentage has been sustained by the dramatic increase in informal employment, which has prevented the unemployment percentage from rising sharply.

Although during recessions the unemployment rate increases, it is cushioned by the changes that occur in the composition of employment, however, the severity of the current health crisis compared to other crises is that it directly prevents or

hinders the execution of jobs that allow people to avoid a situation of total unemployment, which entails fewer options for an increase in informal employment and consequently there are more abrupt rises in the unemployment rate.

According to the figures for the April–June 2020 quarter (Nacional Institute Statistic) show that the employment rate fell by 20% compared to the same period of the previous year, which implies 1.78 million jobs lost in 12 months; Employed persons in April–June reached 7.14 million people in contrast to 9.12 million in the mobile quarter November–January 2019 [7].

We must bear in mind that the contract suspension measure of the recent "employment protection" law maintains an employment relationship with more than 800 thousand people who maintain a link with their employer, receiving in most cases a lower remuneration and/or return to work after four weeks.

The seriousness of the health crisis can be expressed more clearly in that the total number of effective hours worked fell by 32% in twelve months. The average hours worked reached 32.4 hours per week, far from the legal 45 hours of salaried work [7].

## 6. Monetary policies

Faced with the signs of an economic slowdown since October 2019 and the repercussions of the last quarter of the year, the Central Bank's council had lowered the interest rate by 1%, which had been sustained at 3% since January 2019 and that after the social outbreak it fell again, reaching 1.75%. Faced with the pandemic, the Central Bank reduces the refinancing interest rate by 1.25%, leaving it at its technical minimum of 0.5% [8].

The annual record of inflation remained below the Central Bank's target range of 3% from September 2018 to December 2019 [9]; Between January and March, the effect of the accelerated devaluation of the peso became tangible, which had a rapid impact on import prices. In the immediate future, the decrease in household consumption will put downward pressure on consumer prices, which is already evident in May with a 0.1% drop [9].

For its part, the dollar, at the beginning of the social crisis in October 2019, was worth 713 pesos, reaching a maximum of 838 pesos in November, and then falling again thanks to the exchange intervention of the Central Bank [10]. Said intervention with an amount close to US $ 20,000 million, began on December 2, 2019 and has been maintained with some oscillations according to the variation of the exchange market; In conclusion, the dollar scenario in Chile is strongly marked by global uncertainty, the evolution of the pandemic and its impact on various economies.

## 7. Economic outlook

The Central Bank of Chile in June lowered its projections for March and modeled a fall in the economy between −5.5% and − 7.5% while it projects a rapid recovery with growth of 4.75% to 6, 25% for the year 2021 and 3 to 4 percent for the year 2022. For the government, the fall in domestic demand would reach 9.8% in 2020, much greater than the contraction of 3.3% forecast in April [11]; and it is anticipated that the dollar would end the year with an approximate value of 792 pesos, GDP is expected to expand on average 3.5% between 2022 and 2024 above the estimated 3.2% [12].

The IMF, for its part, adjusted the projection for Chile in June 2020, estimating a 7.5% drop in GDP, this estimate is similar to the worst scenario contemplated in Chile by the Ministry of Finance.

It is important to mention that in May the International Monetary Fund, approved a flexible credit line for the Central Bank of Chile, of almost 20 billion dollars, whose objective is to guarantee the liquidity of the currencies in the case of greater complexity in the crisis. Thus, this organization projects a GDP growth of 3.7% for Latin America, positioning Chile with 5%.

In general, expectations continue to anticipate that the recovery will be gradual in the remainder of the year, although this is directly related to the health indicators and their improvement, there is optimism as the statistics show figures below 2,000 cases of Covid-19 per day, this trend indicates that it is very likely that the government will continue to soften the measures taken.

Finally, it is important to note that the price of copper continues to rise, exceeding 3 dollars per pound, however, although manufacturing in China could continue to drive the price of copper, there is also a great downside risk considering the possible slowdown in the pace of the global recovery due to the fact that the stimulus measures begin to expire in several of the economies that affect international consumption.

## 8. Political situation

The Chilean political context in which the health crisis has taken place is of tremendous complexity, in October 2019 the government of Sebastián Piñera had to face a wave of massive protests that lasted for months; Although the trigger for these was the increase in the price of the subway ticket, the social demands of the protesters had a heterogeneous nature and covered issues as varied as access to health, the reduction of gender disparities, the insufficient amount income and the end of the private pension system, among others. With a mobilized society and a good number of opposition political actors, two main arguments began to be structured. First, socioeconomic inequities are not sustainable and must be reduced. Second, the rigid institutional rules of the game, fundamentally enshrined in the 1980 Chilean Political Constitution, designed during the dictatorship, protect the status quo and hinder the adoption of changes that promote greater equity.

For the month of March 2020, a reactivation of the social unrest that began in October 2019 was expected, after the first case by Covid-19 announced on March 3, the political scene turned completely to contain the crisis and its effects economical. Towards the end of April and until the first fortnight of June, the expansion of Covid −19 was exponential, despite general measures, such as the closure of the border, mandatory quarantines for infected people, prohibition of public events, suspension of classes, sanitary cords and the use of mandatory masks, one of the government's mistakes was deciding general voluntary quarantine and selective and brief confinements that, far from helping to stop contagions, increased them since the Metropolitan region is a city of continuous displacement and dormitory communes; this led to the late introduction of strict quarantines.

Finally, it is feasible to think that there are two types of outcomes after this crisis, in the first place it is likely that when the waters calm down and the health crisis is no longer the first problem, the opposition forces will focus on the weaknesses of the economy market, the fragmentation and inequalities of the health system and the lack of social policies and secondly, the confinement has kept the country without social mobilizations, which may favor the ruling party to maintain a discourse of national unity that tarnishes the social reality that lives The country

is quick to venture to envision which scenario will prevail, since if the government is not able to protect the most vulnerable from the economic effects of the crisis, social unrest could become more acute.

## 9. Conclusions

The figures show the impacts of the pandemic, in short, what we have in Chile is not just a health problem that can be addressed scientifically or technically. Chilean society is literally experiencing a storm, in which three situations of economic crisis (China-US trade war, Social Outbreak and pandemic) are linked to each other; If to this we add the fact that the political system is in crisis, without major leaderships that allow organizing society as a whole or projects that can channel the demands and uncertainties that arise with the pandemic and provide effective responses to problems that arise. Have become more and more urgent, clearly, we are facing a complex situation in which each of the elements (health, economic and political) has its own dynamics that depends on different types of national and international actors in the face of different uncertain factors.

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# Competitive Advantages of Cross-Border M&As to Non-Location-Bound Chinese ICT Firms

*Yan Chen, Fei Li, Jaime Ortiz and Wenbo Guo*

## Abstract

Cross-border mergers and acquisitions (M&As) undertaken by emerging market firms have been associated with competitive advantage. However, little research has focused on the transferability of this enhanced competitive advantage. Even less is known about the role played by state-owned enterprises. This paper investigates whether Chinese information and communications technology firms that undertake cross-border M&As can improve their non-location bound competitive advantage. We used cross-border data between 2010 and 2017 and propensity-score matching and differences-in-differences approaches. We found that cross-border M&As significantly improve the home-country-bound competitive advantage. However, the effect on non-location bound competitive advantage is not significant. From the perspective of impact mechanism, this is due to a crowding-out effect of cross-border M&As on research and development (R&D) investment which inhibits non-location bound advantages. It also results from state-owned enterprises which are generally considered to have institutional advantages, not effectively using cross-border M&As to enhance their competitive advantages. This research distinguishes and quantifies home-country-bound competitive advantage and non-location bound competitive advantage and establishes a framework for how cross-border M&As enhance enterprise competitive advantage. It provides an explanation for the extant research on whether state-owned enterprises can enhance their competitive advantage through cross-border M&As, and what kind of advantage they attain.

**Keywords:** China, non-location-bound competitive advantage, home-country-bound competitive advantage, cross-border M&As, state-owned enterprises

## 1. Introduction

Competitive advantage is a major determinant of firm survival and sustained profitability and perhaps the most decisive factor that enables emerging market multinational enterprises (EMNEs) to catch up with MNEs from developed countries. In the existing research which delved into competitive advantage in emerging market countries, foreign direct investment (FDI) is considered the most important way to enhance EMNE competitive advantage and technological catch-up [1–3]. Luo and Tung [4] pointed out that, due to weaker innovation capabilities and

knowledge of resource reserves found in their home countries, EMNEs use FDI as a 'springboard' by adding strategic assets to establish a competitive advantage and achieve corporate growth. M&As undertaken by EMNEs have increased significantly over time, especially China's cross-border ones. According to Thomson Reuters and Price Water House Coopers, in 2016 Chinese firms undertook as many as 923 cross-border M&A transactions (excluding M&As in Hong Kong SAR and Macao) representing a 142% increase from 2015.

One of the most active fields of innovation, and also one of the fiercest areas of technological competition globally, is represented by the new generation of information and communications technology (ICT) firms which focus on cloud computing, big data, and artificial intelligence. The ICT industry has incurred substantial FDI especially across emerging economies [5, 6]. The ICT industry is also characterised by significant technological dynamism as a high proportion of firms engage in internationalisation to obtain strategic assets outside of the firm boundaries [7]. The Deloitte's 2017 China TMT Industry Overseas M&A Report shows that between 2012 and 2016, the growth rate of cross-border M&A transactions in the Chinese technology, media, and telecom (TMT) industry reached 20%. In contrast, their worldwide growth rate reached 8% in the same period. China has become the most active M&A initiator in the TMT industry. As one of the ten key areas of China's manufacturing, the new generation of information technology plays a pivotal role in China's implementation of innovation-driven development strategies and high-quality foreign cooperation. However, since 2017, cross-border M&As of China's ICT industry has faced more stringent scrutiny by the United States and EU countries. The U.S. government identifies ICT as a critical technology industry, especially in the 5G and semiconductor arena. Foreign direct investment in these industries has been subject to strict security scrutiny. For example, in February 2017, the Chinese state-owned enterprise (SOE) named National Integrated Circuit -Industry Investment -Fund Co., Ltd. acquired Xcerra, an American semiconductor testing equipment manufacturer. This acquisition was quickly objected to by the Committee on Foreign Investment in the United States (CFIUS), on national security grounds. Xcerra and the Chinese acquirer signed the termination agreement on the same day. Therefore, in the current international investment environment, it is necessary to reconsider whether cross-border M&As are the best way for Chinese ICT enterprises to enhance their core competitiveness. A case in point is whether or not the background of state-owned enterprises enhances or hinder the enterprises' use of external strategic resources to enhance their competitive advantage.

Recent studies have focused on the adaptation of internalisation theory for EMNEs [3, 8]. Such theory states that foreign investments undertaken by EMNEs in the absence of firm-specific-advantages (FSAs) are made to acquire FSAs and the intangibles of foreign firms [9]. Therefore, the goal of foreign investment is not to exploit FSAs but to acquire them [10]. However, little empirical research has been conducted to examine the actual effect and impact path of cross-border M&As on FSAs of EMNEs. In that context, internalisation theory proposes that FSAs can either be transferable (non-location-bound) such as technological knowledge, or specific to a local context (location-bound) such as local market knowledge and access to local networks [11, 12]. Some studies believe that firms from emerging economies such as China, adopt cross-border M&As to gain strategic resources and then redeploy and integrate them to establish a competitive advantage which can be transferred in the global market [2, 4]. Other scholars pointed out that EMNEs undertake cross-border M&As in order to strengthen their strategic assets in their home countries and seek local—rather than global—expansion by leveraging cheap labour, natural resources, and institutional advantages of their home countries [13].

Benefiting from the rapid economic growth of their home countries, EMNEs can expand into local markets and gain considerable economic returns through cross-border M&As [14]. However, many EMNEs have fallen into a pattern of continuous integration and strengthening of external and regional bundling assets, giving them leverage in their home markets [15]. For example, upon acquiring Volvo, Geely Automobile achieved a rapid revenue growth at the expense of Volvo's strong R&D capabilities and China's huge auto market, low labour costs, and policy support. However, Geely's overseas sales' share has been declining, with a 2016 domestic sales ratio of 97.2%. Strategic assets acquired through CBAs can only establish an EMNE's competitive advantage if they are attached to home market supports such as natural resource endowments, labour force, market scale, and local culture [16].

Although the existing literature favours the impact of cross-border M&As, mixed results have been found concerning the impact on different types of competitive advantage. To examine the inconsistency of current views, this paper distinguishes and defines two types of competitive advantage of EMNEs according to their boundedness to its home country. On the one hand, home-country-bound competitive advantages are defined as a location-bound FSA which is highly dependent on the home market and cannot transferred to other locations and therefore limits the capability of EMNEs to become global firms, e.g. home market scale [14], political connection [17]. On the other hand, non-location-bound competitive advantages are defined as those that can be transferred within the enterprise itself and can increase leverage in the global market without the boundness of location, e.g., global brand, and technology knowledge [18]. As opposed to home-country-bound competitive advantages, non-location-bound competitive advantages can reduce the liability of foreignness, and are associated with a greater capacity to penetrate geographically distant markets and achieve a global geographic scope [7]. They are therefore the rationale for measuring the internationalisation ability of enterprises [19, 20], and act as the criterion to test whether cross-border M&A can constitute the "springboard" of internationalisation [20, 21].

State ownership has also been a topic of research in cross-border M&As of EMNEs [22]. Compared to non-SOEs, characteristics of SOEs such as non-economic motivations, long-term orientation, and different risk preferences influence the foreign entry strategies of SOEs [23]. Some literature suggests that the state can provide state-owned enterprises (SOEs) with monopolist advantages at home by creating and enforcing rules that shape market entry and transactions, and by providing preferential access to financial resources [24]. SOEs have better access to resources in their home countries than non-SOEs, and thus are less concerned about the high operating costs associated with larger geographic distances [25]. On the other hand, the state's economic and social objectives can inhibit the SOEs' ability to develop FSAs [26]. However, the existing literature focuses on whether SOEs can enhance their competitive advantage through cross-border M&As and what kind of advantage they can attain and remains quite controversial.

We studied the effect of cross-border M&As on enterprise competitive advantage by distinguishing between home-country-bound competitive advantage and non-location bound competitive advantage in Chinese ICT firms' contexts. We addressed the following research questions:

1. Can cross-border M&As improve the non-location-bound competitive advantages of Chinese ICT firms?

2. Does state ownership enhance the competitive advantage of Chinese ICT firms through cross-border M&As?

This research enriches the understanding of FSAs and internalisation theory by building on insights from home country dependency and by taking into account the particular heterogeneity of EMNEs such as internationalisation experience and state ownership. We examined cross-border M&As data from Chinese firms in the information and communication technology industry for the period of 2010–2017. Using the propensity-score matching and differences-in-differences approaches, we compared variations in the competitive advantages of Chinese firm that have undertaken CBAs and those that have not, to observe the net effect of CBAs on competitive advantage. We compared the short-term and long-term effects and examined the impact mechanism of CBAs on competitive advantage.

This study contributes to the existing literature in the following ways. First, based on the transferability of competitive advantage, it distinguishes and quantifies home-country-bound competitive advantage and non-location bound competitive advantage, and establishes a framework for how cross-border M&As enhance enterprise competitive advantage. Second, it empirically analyses the effects and impacts of cross-border M&As on competitive advantage, deepening the internal logic of M&As and competitive advantage. Third, this paper focuses on the moderating effects of firm heterogeneity and internationalisation experience and enterprise ownership to find out the differences between different types of ICT enterprises in obtaining competitive advantage through cross-border M&A. It provides an explanation for the extant research on whether SOEs can enhance their competitive advantage through cross-border M&As, and what kind of advantage they attain. The empirical results have distinct implications for the Chinese government in redirecting the FDI endeavours of Chinese enterprises.

This chapter is structured as follows. We first outline the theoretical foundations, develop our hypotheses, and describe the research design and methodology. Then, we present and discuss the results. We conclude by discussing theoretical and managerial implications, recognising limitations, and suggesting future research possibilities.

## 2. Theoretical background

### 2.1 Cross-border M&As and competitive advantage enhancement

Essentially, to compete successfully in any given environment, firms need to cross certain asset thresholds. Different types of complementary assets determine specific asset thresholds, which must be bundled together. The asset threshold attained by this 'bundling' determines an enterprise's competitive advantage. Furthermore, having acquired external strategic assets through cross-border M&As, enterprises also need to integrate and bundle them with their own internal ones. Some enterprise assets are not firm-specific but are associated with those particular locations in which an enterprise only has 'special access rights. 'Bundling' external strategic assets and assets with different attributes determines alternative asset thresholds—i.e., cross-border M&As will have contrasting impacts on regional competitive advantages (linked to specific locations) and non-regional competitive ones (that are not location-specific).

First, enterprises 'bundle' external strategic assets with firm-specific-ones to create a non-regional competitive advantage, which we define as a non-location-bound competitive advantage. After the completion of cross-border M&As, firms integrate external strategic assets with their own tangible specific ones in order to develop a competitive advantage that can be transferred within the enterprise itself. On the other hand, cross-border M&As also help connect with suppliers and new customers, broadening the scope of access to external complementary strategic

assets and best innovation practices [27], enhancing technology and management levels, and transferring and deploying technology and management experience in the global market [2]. Once a merger is complete, the focus is on enhancing the EMNE's weak absorption of external strategic assets. Second, an enterprise 'bundles' external strategic assets with non-firm-specific ones to which the enterprise only has 'special access rights', such as industry franchise rights granted by the home country government and actual knowledge of the home market in order to create a regional competitive advantage that we define as 'home-country-bound'. Although the rapid growth of emerging economies has increased domestic market demand, indigenous technology applicability is generally low [28]. In order to establish economies of scale in their home countries and seize market opportunities, enterprises acquire strategic resources through cross-border M&As and introduce these resources directly into their domestic markets [13], using low manpower and resource costs, and the institutional preferential policies of their home countries to expand their scale of production. In addition, firms also promote integration into overseas business networks, enhance professional levels, and achieve geographical matching of product development, production, and sales [29]. That is to say that, when faced a huge domestic market demand, enterprises further enhance their scale efficiency advantage through cross-border M&As. Based on the above arguments, we established a theoretical framework for how cross-border M&As enhance competitive advantage (**Figure 1**), and hypothesised that:

Hypothesis 1. Cross-border M&As effectively promote the improvement of home-country-bound and non-location-bound competitive advantages.

Besides providing an important channel for firms to obtain strategic resources, cross-border M&As also increase the complexity of operations as firms need to coordinate resources located in different geographical locations [2], and corporate heterogeneity and transaction uncertainty diversify corporate strategy and performance [30, 31]. At the same time, research has been conducted in the context of a large-scale 'going out' of Chinese enterprises into cross-border M&As conducted by firms with government support. Thus, we chose internationalisation experience and state ownership as variables to analyse the adjustment mechanism of cross-border M&As and competitive advantage. First, empirical knowledge is an important resource component of an enterprise, as it plays a key role in international business and strategic management and constitutes a core element of the Uppsala internationalisation model [32]. Second, state ownership is the most important institutional factor affecting firms in emerging economies [22]. Different ownership systems have several home country institutional resources, such as low-interest financing and tax reduction [33], and each system's strategic goals of internationalisation are also significantly different. Enterprises with state ownership can access more institutional resources in their home countries, such as low-interest financing and tax relief [33]. Hence, their internationalisation goals are usually different from those of private enterprises.
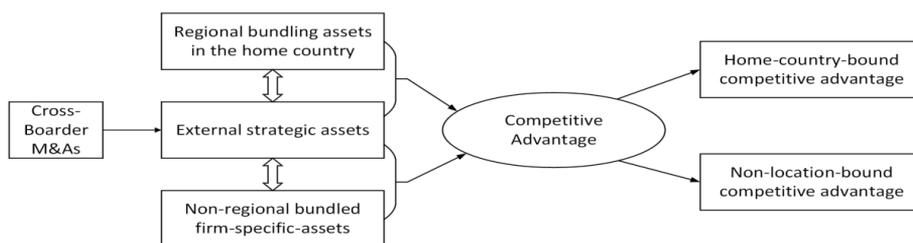


**Figure 1.**
*Theoretical framework.*

## 2.2 Internationalisation experience and M&A competitive advantage effect

EMNEs face the challenges posed by their 'liability of emergingness' and are often the first generation of firms venturing abroad from their home countries, depending significantly on home country market scale [34]. An important challenge that firms face when they seek to enter foreign markets relates to their being outsiders in local networks and to their lack of knowledge of local business opportunities. However, it can be argued that firms with region-specific experience are less likely to suffer from such liability, as participation in regional networks in the internationalisation process provides them with better access to local resources and institutional contacts [35].

Organisational learning theory [36] suggests that firm experiences result in the creation of knowledge that significantly influences firm strategies and related outcomes. Firms are viewed as routine-based systems wherein prior experiences are coded into routines that guide future behaviours. In the context of cross-border M&As, internationalisation experience has also been closely linked to the ability of the acquiring firm to absorb new information related to potential targets, something that can be valuable in the improvement of competitive advantage. However, when acquiring firms are lacking in prior experience, their ability to absorb and assess acquisition-related information is generally limited [35].

In addition, the promotion of cross-border M&As for competitive advantage needs to be realised through resource integration and resource restructuring, which requires firms to have a rich international experience to deal with the integration challenges they face in the aftermath of M&As [33]. Transfer of capabilities between acquiring and target firm as one of the main pillars of integration process, which in turn is argued to have direct and indirect effects on other aspects of post-acquisition performance. However, due to its tacit and socially complex nature, transfer of knowledge across organisational boundaries is not an easy task [37]. Johanson and Vahlne [38] pointed out that such rich international experience helps firms to identify opportunities and risks, strengthen their ability to integrate global resources, and enables them to effectively build business units in overseas markets. Technology acquisition M&As allow firms integrate suppliers and customers in the value chain, leading to horizontal or vertical expansion and to the extension of technological knowledge. By the same token, a lack of international experience hinders the identification and application of technological knowledge [34], which may cause the emergence of technological reverse spillover effects [39]. In addition, EMNEs that lack an ownership advantage face more serious disadvantages and need greater resources and capabilities to cope with the adverse effects of institutional differences. International experience is an important knowledge resource for firms to cope with institutional conflicts in host countries and overcome the competitive disadvantages engendered by institutional uncertainty [40], creating a good external environment for the use of strategic resources. Based on the above arguments, we hypothesise that:

Hypothesis 2. Internationalisation experience moderates the effect of cross-border M&As on home-country-bound and non-location-bound competitive advantages, as these positive gains will be positively correlated to the richness of a firm's internationalisation experience.

## 2.3 State ownership and M&A competitive advantage effect

Particularly in global M&As, actors outside the merging organisations, such as government, unions, and investors, can become involved in merging process [41]. State-owned enterprises (SOEs) may face more prominent liabilities of emergingness due to the close relations maintained with home-country governments, the threat of financial protectionism, reduced MNE transparency with state

ownership [42], loss of key national strategic assets, and whether home-based management practices can be transferred to advanced economies [34]. Although the political connections linked to government ownership help in building legitimacy and prestige in domestic markets, these firms still participate in global competition and struggle to gain legitimacy in foreign ones [43, 44].

Our analysis of state owned EMNEs focussed on the influence of home governments on the internationalisation strategies of domestic enterprises. As agents of their home governments, SOEs garner more policy support and have stronger institutional advantages [24], including 'special access' to key resources [10, 45]. However, the internationalisation of SOEs ultimately discloses the will of the government and the need to strike a balance between economic and political goals [46]. Specifically, state ownership affects a company's resource input and internationalisation strategies and goals [47]. Both state-owned and non-SOEs face pressure from formal or informal institutions in their home countries, and their responses to these pressures are influenced by their dependency on resources. If they are highly resource-dependent, enterprises will choose to comply with institutional pressures to avoid negative consequences [48]. As SOEs are highly dependent on the government for their resource input, they are more likely to abide by political goals over economic ones. As non-state-owned firms are more focussed on profit and efficiency goals, their motivation to seek and utilise overseas strategic resources is stronger and more efficient [47]. Based on the above arguments, we hypothesise that:

Hypothesis 3. State ownership moderates the effect of cross-border M&As on home-country dependent and non-location-bound competitive advantage. The positive effects will be smaller if a company is a state-owned enterprise.

## 3. Methods

We tested the hypotheses by relying on China's listed information and communications technology (computers, communications, and other electronic equipment) manufacturing firms. The selection of ICT firms was based on the following three considerations. Firstly, the new generation of ICT technology, representing cloud computing, big data and artificial intelligence, has become one of the most active fields of innovation, and one of the fiercest areas of technological competition among major countries. Besides, the ICT industry had substantial FDI around the world and, especially across emerging markets [5]. Secondly, a large number of ICT manufacturing enterprises have implemented cross-border M&As. Deloitte's '2017 China TMT Industry Overseas M&A Report' shows that, between 2012 and 2016, the annual compound growth rate of overseas M&A transactions in China's TMT industry reached 20%. Thirdly, The ICT industry is also characterised by significant technological dynamism and a high number of firms engaging in internationalisation to obtain strategic assets outside the firm boundary. The new generation of the information technology industry plays a pivotal role in China's implementation of innovation-driven development strategies and improving the country's competitiveness. Under these conditions, can Chinese ICT manufacturing enterprises improve their competitive advantage through cross-border M&As? The answer to this core issue has fundamental practical significance.

We collected M&A data and financial data from two datasets, one of which was derived from the BVD (Zephyr) database, which is a well-known international M&As database and widely used in cross-border M&A research [49, 50]. However, distorted data points remained. Thus, it was necessary to clean the original data and removed outliers before further analysis could be conducted by using the following filtering criteria: first, we only retained M&A transactions with a 'completed' or

'completed assumed' status, and confirmed the completed M&A transactions through the company's website, annual reports, and financial news. Regarding multiple cross-border M&As of a company within a year, there were multiple transactions recorded around the target firm for tax minimization purposes [51].

The measurement of the cross-border M&As experience advanced by Jiang [52] suggests the approval time of multinational enterprises occurs well after the time of the M&A, which may render an inaccurate recording of the subsequent M&As′ experiences that take place within the same year. Thus, we only retained the first data recorded, when the same company had implemented multiple M&As with different targets in a year. Third, we removed any samples missing M&A information and the sample of capital increase for foreign subsidiaries [53, 54]. These excluded samples were not significantly different from retained cases as far as characteristics such as the percentage of shares acquired, ownership structure of the acquiring firm, or the acquirer's acquisition experience in a target's country. The second dataset used was taken from the CSMAR database, and included three major accounting statements—the balance sheet, cash flow statement, and income statement, which provide detailed financial information for the company. The authors obtained an effective sample data of 98 cross-border M&As undertaken from 2010 to 2017. The sample description is shown in **Table 1**.

### 3.1 Empirical model

Distinguishing the correlation and causality between cross-border M&As and the growth of competitive advantage effect brings some challenges. This is particularly evident when enterprises with strong competitive advantage conduct cross-border M&As and the change of competitive advantage may be endogenous and self-selected. Therefore, performing an OLS estimation would be invalid. Following extant literature [47], we used the propensity score matching to assess the causal effect of cross-border M&As on the competitive advantage change of Chinese ICT firms.

First, we used the nearest-neighbour matching method to divide the ICT industry firms into two groups: one with those firms that had implemented cross-border M&As (denoted as treatment group), and the other with those that had not (denoted as control group), where the construction enterprise was a virtual variable

| Ownership | | Province of acquirer | | Equity of acquirer (%) | | Related M&A (If the first two SIC codes are the same) | | Deal value (Million Euros) | | Host country | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SOE | 31 | Guangdong | 34 | <50 | 29 | Related M&A | 83 | <10 | 52 | U.S. | 25 |
| Non-SOE | 67 | Jiangsu | 16 | 50–100 | 21 | Non-related M&A | 15 | 10–100 | 29 | Germany | 9 |
| | | Beijing | 14 | 100 | 48 | | | >100 | 17 | Canada | 8 |
| | | Zhejiang | 14 | | | | | | | U.K | 5 |
| | | Shandong | 7 | | | | | | | Japan | 5 |
| | | Hebei | 5 | | | | | | | Italy | 4 |
| | | Shanghai | 3 | | | | | | | Malaysia | 4 |
| | | Sichuan | 3 | | | | | | | Australia | 3 |
| | | Fujian | 1 | | | | | | | Israel | 3 |
| | | Gansu | 1 | | | | | | | Others | 32 |

**Table 1.**
*Sample description.*

*y* of cross-border M&As. All samples and data of ICT firms that do not conduct M&A (control group) were collected from the CSMAR database.

We constructed the dummy variable *CBA* where 'CBA = 1' for a company that had implemented cross-border M&As, and 'CBA = 0' for a company that had not. Then we used the logit method to estimate the model:

$$P_{i\,t} = Pr\{CBA_{it} = 1\} = \Phi\{X_{i\,t-1}\} \tag{1}$$

where i denotes the firms in treatment group, j denotes the samples in control group, t represents time, $P_{it}$ denotes the probability prediction value or propensity score to be estimated, $X_{it-1}$ denotes the matching variable, $\Phi$ refers to the logistic function. After estimating Eq. (1), we were able to obtain the probability prediction values $\hat{P}_{it}$ and $\hat{P}_{jt}$ of the treatment and control groups, respectively. The results of optimal matching $\Omega_{it}$ can be expressed as:

$$\Omega_{it} = \, min \, \left\| \hat{P}_{it} - \hat{P}_{jt} \right\|, \, j \in (CBA = 0) \tag{2}$$

Following Jiang [52], we selected overall total factor productivity (*TFP*), enterprise size (*Size*), capital density (*Capital*), and total return on assets (*ROA*) indicators as matching variables. The lack of data on intermediate input and added value indicators made impossible to use the OP [55] and LP [56] methods to calculate TFP across enterprises. Thus, this paper follows Jiang's [52] approach to calculate TFP by using a panel data with a fixed effect. Compared with the OLS method, panel data can control the intra group differences to the greatest extent to obtain more consistent and robust capital and labour coefficients. The natural logarithm of the total number of employees is used to measure the enterprise size. The data matching was performed using a ratio of 1:3. Thus, 131 ICT firms are matched as samples in the control group. **Table 2** shows the differences in overall TFP before and after matching The matching results showed that the difference in overall TFP between the treatment and control group is significant before matching, and there is a 'self-selection effect' in cross-border M&As. After matching, the means of the overall TFP values of the treatment and control groups were highly similar, indicating that the 'self-selection effect' of cross-border M&As was effectively controlled.

On the basis of the data matching results, we used the differences-in-differences method to analyse the impact of cross-border M&As on home-country dependent and non-location-bound competitive advantage, constructing the respective dummy variables CBA = {0, 1} and CT = {0, 1} to indicate whether a company had implemented cross-border M&As and the completion time of M&A deal. The $HCB_{it}$ and $NLB_{it}$ variables represent the home-country-bound and non-location-bound competitive advantage, respectively, and $\Delta HCB_i$ and $\Delta NLB_i$ represent the changes of the two types of competitive advantage. In terms of the home-country-bound competitive advantage (the non-location-bound competitive advantage is calculated in a similar way), whether the cross-period changes in cross-border M&As are $\Delta HCB_i^1$ and $\Delta NLB_i^0$ respectively. Thus, the actual impact of cross-border M&As on home-country-bound competitive advantage is $\delta$:

$$\delta = E(\delta_i | CBA_i = 1) = E(\Delta HCB_i^1 | CBA_i = 1) - E(\Delta HCB_i^0 | CBA_i = 1) \tag{3}$$

As the $E(\Delta HCB_i^0 | CBA_i = 1)$ in Eq. (3) is unobservable, according to the treatment and matched control groups, it was possible to fit the changes of the treatment group's $HCB_{it}$ with the matched control group's $HCB_{it}$ and indirectly identify the actual impact of cross-border M&As.

| | Before matching (TFP) | | | After matching (TFP) | | | Treatment group | Control group | Matching results |
|---|---|---|---|---|---|---|---|---|---|
| | Treatment group | Control group | t value | Treatment group | Control group | t value | | | |
| 2010 | 0.315 | 0.412 | −1.832* | 0.315 | 0.332 | −0.890 | 3 | 93 | 6 |
| 2011 | 0.282 | 0.337 | −0.954 | 0.282 | 0.308 | −0.271 | 9 | 115 | 20 |
| 2012 | 0.367 | 0.750 | −4.831*** | 0.367 | 0.323 | 0.600 | 7 | 137 | 15 |
| 2013 | 0.425 | 0.794 | −8.152*** | 0.425 | 0.458 | −0.321 | 8 | 146 | 13 |
| 2014 | 0.603 | 0.745 | −3.440*** | 0.603 | 0.663 | −0.412 | 13 | 144 | 13 |
| 2015 | 0.607 | 0.780 | −2.551** | 0.607 | 0.633 | −0.370 | 21 | 163 | 22 |
| 2016 | 0.661 | 0.631 | 0.774 | 0.661 | 0.683 | −1.000 | 24 | 202 | 28 |
| 2017 | 0.793 | 0.626 | 4.900*** | 0.793 | 0.746 | 0.100 | 13 | 223 | 14 |

*In order to save space, the above table does not report the matching results of Scale, Capital and ROA. As the duplicate matching samples are excluded, the matching results are not presented 1:3. We performed the test of robustness matching according to the ratio of 1:1 and 1:2, and obtain similar results without affecting the conclusion of this paper.*
*Note: *, **, *** indicate significance level at 10%, 5% and 1%, respectively.*

**Table 2.**
*PSM matching results.*

Then, we converted Eq. (3) into an econometric model that could be empirically tested as follows:

$$HCB_{it} = \alpha_0 + \alpha_1 \cdot CBA + \alpha_2 \cdot CT + \beta \cdot CBA \times CT + \xi_{it} \qquad (4)$$

where the $\beta$ coefficient of the interaction term $CBA \times CT$ is the actual influence of cross-border M&As. $\beta > 0$ indicates that cross-border M&As systematically enhance the home-country-bound competitive advantage or the non-location-bound competitive one.

## 4. Measures

### 4.1 Dependent variables

Our dependent variables were home-country-bound competitive advantage and non-location-bound competitive advantage. Accordingly, home-country-bound competitive advantage refers to competitive advantage with location-bound attributes gained by 'bundling' external strategic assets with the resources, markets, and institutional environments of the home country. Non-location-bound competitive advantage refers to competitive advantage with non-location-bound attributes gained by 'bundling' external strategic assets with the acquirer's firm-specific assets, such as knowledge and technology, which can be transferred between enterprises.

Within large and fast-growing emerging market economies that correspondingly have large and growing domestic demand bases, economies of scale are an important competitive advantage. EMNEs have non-traditional FSAs that enable them to better exploit scale economies of home countries [45], which is the home-country dependency advantage as defined in this paper. While all firms in home markets potentially have access to economies of scale, some can leverage it better. The home-country-bound competitive advantage between EMNEs is different as the heterogeneity exists in the ability of EMNEs to leverage scale economies [10]. The change in economies of scale decomposed from the TFP index measures how firm-level production diverges from a constant return to scale [57]. Thus, we measured the home-country-bound competitive advantage by scale efficiency following Bhaumik et al. [21]. The increase in scale efficiency reflected the use of external strategic assets to develop home country resources and markets, which constitutes the basis for competition between EMNEs and developed economy MNEs (DMNEs) in the home market.

We measured non-location-bound competitive advantage through pure technical efficiency [21]. Improvements of technical efficiency reflect the extent to which enterprises embed external strategic assets and develop their own firm-specific-ones, reflecting the strategic goal of EMNEs to use cross-border M&As as a 'springboard' to catch up with DMNEs [58].

We used the stochastic frontier model to measure the overall efficiency level (*TE*) of each individual and the Malmquist decomposition method suggested by Coelli et al. [57] to decompose it into scale efficiency (*SC*), technological progress (*EC*), and pure technical efficiency (*TC*). *SC* and *TC* are the measured home-country-bound competitive advantage (*HCB*) or the non-location-bound competitive advantage (*NLB*). The modified equation for the stochastic frontier estimation is as follows:

$$LnY_{i\,t} = (\beta_0 + w_i) + \sum_{n=1}^{N} \beta_n LnX_{nit} + \frac{1}{2}\sum_{n=1}^{N}\sum_{j=1}^{N} \beta_{nj}LnX_{nit}LnX_{nit}$$
$$+ \sum_{n=1}^{N} \beta_{tn}tLnX_{nit} + \beta_t t + \frac{1}{2}\beta_t t^2 + \upsilon_{it} + \mu_{it} \qquad (5)$$

where $Y_{it}$ is the output variable of the enterprise, expressed in terms of sales revenue. $X_{nit}$ is an input variable, including labour input and capital investment. Labour input is expressed by the number of employees, and capital investment is expressed by net fixed assets. Sales revenue and fixed assets were deflated by the price index and the fixed asset price index, respectively. In addition, $v_{it}$ is the error term, $\mu_{it}$ is the inefficient term, and $w_i$ is the individual random effect. We assumed that $v_{it}$, $\mu_{it}$ and $w_i$ retained the following distributions:

$$v_{it} \sim N\left[0, \sigma_\nu^2\right], \, \mu_{it} \sim N^+\left[0, \sigma_\mu^2\right], \, w_{it} \sim N\left[0, \sigma_w^2\right]$$

where $N^+\left[0, \sigma_\mu^2\right]$ is a truncated normal distribution with mean 0 and variance $\sigma_\mu^2$. Once the production function had been estimated, the inefficiency parameter $\mu_{it}$ could be estimated as follows:

$$\hat{E}[\mu_{it}|\epsilon_{it}] = \frac{\sigma_\epsilon}{1 + \lambda^2}\left[\frac{\phi(z_{it})}{1 - \Phi(z_{it})} - z_{it}\right] \tag{6}$$

where $\epsilon_{it} = \nu_{it} - \mu_{it}$, $\sigma_\epsilon = \sqrt{\left(\sigma_\nu^2 + \sigma_\mu^2\right)}$, $\lambda = \frac{\sigma_\mu}{\sigma_\nu}$, $z_{it} = \frac{\epsilon_{it}\lambda}{\sigma_\epsilon}$, $\Phi(\bullet)$ and $\phi(\bullet)$ denote the density and CDF function evaluated at $z_{it}$. Given the translog specification in Eq. (7) the efficiency level (*TE*) could be calculated as:

$$TE_{it} = exp\left(-\hat{E}[\mu_{it}|\epsilon_{it}]\right) \tag{7}$$

while the overall efficiency level (*TE*) was decomposed into three factors: scale efficiency *(SC)*, technological progress (*EC*), and pure technical efficiency (*TC*).

$$EC_{it} = \frac{TE_{it}}{TE_{is}} \tag{8}$$

$$TC_{it} = exp\left\{\frac{1}{2}\left[\frac{\partial LnY_{is}}{\partial s} + \frac{\partial LnY_{it}}{\partial t}\right]\right\} \tag{9}$$

$$SC_{it} = exp\left\{\frac{1}{2}\sum_{n=1}^{N}[e_{nis}SF_{is} + e_{nit}SF_{it}]Ln\left(\frac{X_{nit}}{X_{nis}}\right)\right\} \tag{10}$$

where $SF_{is} = \frac{e_{nis}-1}{e_{nis}}$, $e_{nis} = (\partial LnY_{is})/(\partial X_{nis})$, $e_{is} = \sum_{n=1}^{N}e_{nis}$. Scale efficiency (*SC*) and pure technical efficiency (*TC*) represent the home-country-bound competitive advantage (*HCB*) and the non-location-bound competitive advantage (*NLB*).

## 4.2 Independent variable

Our independent variable was the interaction term *CBA* × *CT* or the product of the dummy variables $CBA = \{0, 1\}$ and $CT = \{0, 1\}$, indicating the net effect on competitive advantage of implementing cross-border M&As.

## 4.3 Moderators

Internationalisation experience (*experience*). Following Jiang & Jiang [59], internationalisation experience was calculated by the difference between the overseas investment approval time of China's Ministry of Commerce's 'Investment List

of Overseas Investment Enterprises' and the sample observation period. If the approval time of the sample company lags behind the observation period or the difference was less than zero, a value of 0 was assigned to internationalisation experience. If the difference was greater than zero, a value of 1 was assigned to internationalisation experience.

State ownership (*ownership*): ownership was a dummy variable. The value assigned to SOEs (including SOEs and state-owned holding firms) was 1, and the value assigned to non-SOEs was 0.

## 4.4 Control variables

We controlled for firm heterogeneity, time effects, and regional fixed effects. Firm heterogeneity was controlled through capital density (*Capital*), enterprise size (*Size*), R&D investment (*R&D*), and marketing expenditures (*Market*) where *Capital* was expressed as the natural logarithm of the ratio of net fixed assets to the

| Variables label | Variables definitions | Variables calculation | Data source |
|---|---|---|---|
| HCB | Home-country-bound competitive advantage | Stochastic frontier model and the Malmquist decomposition method | CSMAR database |
| NLB | Non-location-bound competitive advantage | | |
| CBA × CT | Cross-border M&As Implement | Dummy variables CBA and CT indicate whether a company had implemented cross-border M&As and the completion time | Bvd-zephyr database. |
| Experience | Internationalisation experience | Calculated by the difference between the overseas investment approval time and the sample observation period. | China's Ministry of Commerce's 'Investment List of Overseas Investment Enterprises'; Bvd-zephyr database. |
| Ownership | State ownership | Dummy variable, non-SOEs was 0 and SOEs was 1. | CSMAR database |
| Capital | Capital density | Expressed as the natural logarithm of the ratio of net fixed assets to the number of employees | CSMAR database |
| Size | Enterprise size | Measured by the natural logarithm of the number of employees; | CSMAR database |
| R&D | R&D investment | Expressed as the percentage of R&D investment in operating income | CSMAR database |
| Market | Marketing expenditures | Expressed as the percentage of sales revenue in operating income | CSMAR database |
| Time | Time effect | Dummy variable reflects year of samples | CSMAR database |
| Region | Region effect (dummy variable) | Dummy variable reflects province of the acquirers | CSMAR database |

**Table 3.**
*Variables definitions and sources.*

number of employees; *Scale* was measured by the natural logarithm of the number of employees; *R&D* was expressed as the percentage of R&D investment in operating income; and *Market* was expressed as the percentage of sales revenue in operating income. Time and regional effects were controlled by incorporating time and region dummies. **Table 3** presents the definitions, calculations, and data sources of all variables.

## 5. Results

### 5.1 Instantaneous competitive advantage effect of cross-border M&As

Table 4 san shows the estimation results of the M&As' instantaneous competitive advantage effect. Models (1) through (4) examine the impact of cross-border M&As on the home-country-bound competitive advantage. Models (5) through (8) examine the impact of cross-border M&As on the non-location-bound competitive advantage. The results of model (1) show that the coefficient of the interaction term $CBA \times CT$ is significantly positive at the level of 5%, indicating that cross-border M&As improve home-country-bound competitive advantage. Models (2) through (4) gradually add control variables, time, and regional fixed effects. Although the coefficients of the interaction term $CBA \times CT$ varied, they were all significantly positive. The results of model (5) show that the coefficient of the interaction term $CBA \times CT$ is positive, but not significant. After adding control variables, time, and regional fixed effects, the significance of the coefficients did not change significantly, indicating that cross-border M&As had not improved non-location-bound competitive advantage. Thus, hypothesis 1 was partially supported. The reason may be that firms invest more resources in developing their own markets, and 'realise' them more quickly than long-term strategic investments such as research and development. Although firms face competition from DMNEs—which have technological advantages in their home markets— EMNEs, due to the low technical applicability of the home markets [28], can be further consolidated by leveraging the unique advantages of their home countries, and strengthen their competitive advantage therein [10, 45].

### 5.2 Long-run competitive advantage effect of cross-border M&As

It takes time to bundle external strategic assets with regional ones in the home country or non-regional bundled firm-specific assets. The effect of cross-border M&As on competitive advantage may be affected by a lag. Therefore, we examined the changes in the home-country-bound competitive advantage and the non-location-bound competitive advantage five years after cross-border M&As. These results are shown in **Table 5**. The coefficient of the interaction term $CBA \times CT$ indicates that cross-border M&As only have a positive impact on home-country-bound competitive advantage in the first and second year after the merger, and their effect gradually weakens thereafter. There is no continuous impact on non-location-bound competitive advantage. A plausible explanation is that China lacks international management experience and capabilities, which leads to serious challenges in post-M&A integration [33]. Birkinshaw *et al.* [60] pointed out that Chinese firms adopt the M&A mode to carry out FDI and grant their target enterprises full post-M&A autonomy, retaining senior management teams and expecting cross-border M&As to become a 'highway' to catch up with developed countries. This reflects the fact that Chinese firms lack international management experience.

| | Dependent variable: HCB | | | | | Dependent variable: NLB | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| CBA | −0.054*** | −0.063*** | −0.048*** | −0.050*** | −0.034 | −0.043* | −0.034* | −0.041** |
| | (0.017) | (0.017) | (0.014) | (0.025) | (0.025) | (0.025) | (0.020) | (0.021) |
| CT | −0.104*** | −0.109*** | −0.044*** | −0.028** | −0.036* | −0.050** | −0.066*** | −0.056*** |
| | (0.014) | (0.014) | (0.011) | (0.011) | (0.022) | (0.022) | (0.019) | (0.019) |
| CBA*CT | 0.044** | 0.047** | 0.033** | 0.029* | 0.033 | 0.036 | 0.033 | 0.033 |
| | (0.019) | (0.019) | (0.016) | (0.016) | (0.033) | (0.033) | (0.025) | (0.025) |
| Capital | | 0.141*** | 0.138** | 0.104*** | | 0.001* | 0.002 | 0.002 |
| | | (0.020) | (0.068) | (0.018) | | (0.001) | (0.001) | (0.001) |
| Size | | 0.156*** | 0.133*** | 0.135** | | 0.001* | 0.004 | 0.003 |
| | | (0.037) | (0.034) | (0.064) | | (0.001) | (0.002) | (0.002) |
| R&D | | 0.047*** | 0.028*** | 0.031*** | | 0.083*** | 0.102*** | 0.096*** |
| | | (0.011) | (0.007) | (0.008) | | (0.009) | (0.009) | (0.009) |
| Market | | 0.026** | 0.016* | 0.012* | | −0.001 | −0.008 | −0.012 |
| | | (0.013) | (0.009) | (0.006) | | (0.002) | (0.009) | (0.021) |
| _Cons | 0.206*** | 0.018 | 0.016 | 0.168 | 0.655*** | 0.272 | 0.543*** | 0.952*** |
| | (0.013) | (0.139) | (0.141) | (0.152) | (0.016) | (0.200) | (0.190) | (0.205) |
| Year | no | no | yes | yes | no | no | yes | yes |
| Region | no | no | no | yes | no | no | no | yes |
| N | 1343 | 1343 | 1343 | 1343 | 1343 | 1343 | 1343 | 1343 |
| R² | 0.071 | 0.141 | 0.376 | 0.432 | 0.003 | 0.310 | 0.482 | 0.514 |

*, **, *** indicate significance level at 10%, 5% and 1%, respectively. Standard errors are in parenthesis. The samples from the above test included the lag phase samples of the treatment group and the control group, and the subsequent tables were the same.

**Table 4.**
*Instantaneous competitive advantage effect of cross-border M&As.*

|  | Dependent variable: HCB | | | | | Dependent variable: NLB | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
|  | (1) Year 1 | (2) Year 2 | (3) Year 3 | (4) Year 4 | (5) Year 5 | (6) Year 1 | (7) Year 2 | (8) Year 3 | (9) Year 4 | (10) Year 5 |
| CBA | −0.041*** (0.014) | −0.028** (0.012) | −0.011 (0.010) | −0.014 (0.010) | −0.014 (0.013) | −0.038* (0.020) | −0.043** (0.020) | −0.056*** (0.019) | −0.044** (0.018) | −0.029* (0.017) |
| CT | −0.038*** (0.012) | −0.027*** (0.010) | −0.031*** (0.010) | −0.029** (0.012) | −0.020 (0.015) | −0.033* (0.019) | −0.035* (0.019) | −0.042** (0.020) | −0.037* (0.021) | −0.024 (0.025) |
| CBA*CT | 0.022** (0.010) | 0.009* (0.005) | −0.008 (0.011) | −0.004 (0.014) | −0.018 (0.019) | 0.019 (0.025) | 0.032 (0.027) | 0.046 (0.029) | 0.035 (0.031) | 0.028 (0.039) |
| _cons | 0.013 (0.147) | 0.193 (0.137) | −0.012 (0.090) | −0.025 (0.103) | −0.075 (0.109) | 0.960*** (0.226) | 1.603*** (0.248) | 1.535*** (0.260) | 1.875*** (0.243) | 2.535*** (0.244) |
| Control | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| Year | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| Region | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| N | 1140 | 945 | 769 | 607 | 458 | 1140 | 945 | 769 | 607 | 458 |
| $R^2$ | 0.402 | 0.395 | 0.251 | 0.266 | 0.273 | 0.679 | 0.732 | 0.610 | 0.552 | 0.590 |

Note: *, **, *** indicate significance level at 10%, 5% and 1%, respectively.

**Table 5.**
*Long-run competitive advantage effect of cross-border M&As.*

### 5.3 Path analysis of the M&A competitive advantage effect

The above results show that the improvement of competitive advantage is manifested in the dependency on regional resources of the home country. In order to further confirm and clarify the path of improvement, we analysed the impact mechanism of cross-border M&As by examining various post-merger business practices that affect competitive advantage based on the process perspective. Specifically, we used the interaction term $CBA \times CT$ to regress with capital density (*Capital*), enterprise size (*Size*), R&D investment (*R&D*), and marketing expenses (*Market*). The results are shown in **Table 6**.

The results show that cross-border M&As play a significant role in promoting corporate capital density, enterprise size, and marketing expenses; while their impact on R&D investment is not significant, as the coefficient value is negative. The instantaneous test results in **Table 4** show that capital density, enterprise size, and marketing expenses have a positive effect on home-country-bound competitive advantage, while R&D investment has a significant positive impact on non-location-bound competitive advantage. **Tables 4** and **6** confirm that in the wake of implementing cross-border M&As, enterprises strengthen their investment in fixed assets, expand their size, and increase their proportion of marketing expenditures, but overreach on R&D investment. Rugman [16] pointed out that, for emerging economies such as China, where the market is growing rapidly, the period of transformation into a leading competitive advantage through technology integration is long, and the cycle of establishing economies of scale is quite short. Due to their low technical applicability [28], these firms are more likely to take advantage of the economies of scale of their home countries by acquiring overseas strategic resources and directly feeding them back into the huge local market demand [13].

### 5.4 Internationalisation experience and M&A competitive advantage effect

Hypothesis 2 was tested by splitting the sample into two groups based on internationalisation experience and by checking whether there was a difference between firms with different degrees of international experience. The estimation results are presented in **Table 7**. The results show that, for the home-country-bound

| | Capital | Size | R&D | Market |
|---|---|---|---|---|
| *CBA* | 0.035*** | 0.026*** | −0.018** | 0.014 |
| | (0.003) | (0.003) | (0.007) | (0.011) |
| *CT* | 0.022*** | 0.020 | 0.016 | 0.014*** |
| | (0.005) | (0.016) | (0.016) | (0.003) |
| *CBA*CT* | 0.026*** | 0.020*** | −0.016 | 0.008** |
| | (0.005) | (0.005) | (0.011) | (3.733) |
| *_cons* | −0.314*** | −0.214*** | 0.212*** | 0.114*** |
| | (0.026) | (0.018) | (0.024) | (0.007) |
| *Year* | yes | yes | yes | yes |
| *Region* | yes | yes | yes | yes |
| *N* | 1343 | 1343 | 1343 | 1343 |
| $R^2$ | 0.316 | 0.422 | 0.295 | 0.384 |

Note: *, **, *** indicate significance level at 10%, 5% and 1%, respectively.

**Table 6.**
*Path analysis of the M&A competitive advantage effect.*

|  | experience = 1 | | experience = 0 | |
|---|---|---|---|---|
|  | (1) | (2) | (3) | (4) |
|  | Dependent variable: HCB | Dependent variable: NLB | Dependent variable: HCB | Dependent variable: NLB |
| CBA | 0.037 | 0.015** | −0.013 | −0.019 |
|  | (0.038) | (0.008) | (0.009) | (0.028) |
| CT | 0.102** | −0.008 | 0.009 | 0.029 |
|  | (0.045) | (0.008) | (0.006) | (0.026) |
| CBA*CT | 0.107** | 0.001** | 0.006** | 0.003 |
|  | (0.053) | (0.000) | (0.003) | (0.035) |
| _cons | −0.191 | 0.829*** | −0.111** | 0.526*** |
|  | (0.217) | (0.044) | (0.053) | (0.159) |
| control | yes | yes | yes | yes |
| Year | yes | yes | yes | yes |
| Region | yes | yes | yes | yes |
| N | 382 | 382 | 961 | 961 |
| $R^2$ | 0.351 | 0.398 | 0.418 | 0.360 |

*Note: \*, \*\*, \*\*\* indicate significance level at 10%, 5% and 1%, respectively.*

**Table 7.**
*Moderating effect of international experience.*

competitive advantage, the coefficient of interaction $CBA * CT$ is significantly positive—i.e., cross-border M&As can improve home-country-bound competitive advantage—but the promotion effect differs between enterprises with different international experience. The coefficient values $CBA * CT$ show that internationally experienced firms are more able to benefit from cross-border M&As.[1] It is important to note that the interaction coefficient $du * dt$ of experienced enterprises is significantly positive for non-location-bound competitive advantage. Although the coefficient's value is small, it shows that internationally experienced enterprises promote their non-location-bound competitive advantage through cross-border M&As. These empirical results are consistent with Buckley et al. [34], who found that internationalised experience knowledge has become one of the key factors affecting the effectiveness of cross-border M&As. The combination of an enterprise's internationalisation experience and its internal resources can give rise to an interface competency for global resources, thereby enhancing a company's knowledge management capabilities and promoting a better use of its internal and external network resources. In the end, this will create and strengthen competitive advantage and push a strategic upgrade of a company's internationalisation [34]. Therefore, hypothesis 2 is also supported.

## 5.5 State ownership and the M&A competitive advantage effect

In order to test whether state ownership matters, we split the sample into two groups. **Table 8** illustrates the corresponding estimation results. In relation to non-SOEs, cross-border M&As have positive effects on home-country-bound competitive advantage; however, the impact on SOEs is not significant—i.e., non-SOEs are

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[1] The result of T-test shows that the coefficients of CBA*CT across the two groups (experience = 1, experience = 0) are significantly different (p < 0.01).

|  | Ownership = 1 | | Ownership = 0 | |
| --- | --- | --- | --- | --- |
|  | (1)<br>Dependent variable:<br>HCB | (2)<br>Dependent variable:<br>NLB | (3)<br>Dependent variable:<br>HCB | (4)<br>Dependent variable:<br>NLB |
| CBA | 0.015<br>(0.059) | −0.032<br>(0.050) | −0.052***<br>(0.013) | −0.004<br>(0.021) |
| CT | 0.002<br>(0.027) | −0.079**<br>(0.040) | −0.037***<br>(0.012) | −0.024<br>(0.020) |
| CBA*CT | 0.005<br>(0.056) | −0.009<br>(0.061) | 0.034**<br>(0.015) | −0.002<br>(0.027) |
| _cons | 0.436<br>(0.364) | 1.751***<br>(0.403) | 0.258<br>(0.183) | 0.855***<br>(0.257) |
| Control | yes | yes | yes | yes |
| Year | yes | yes | yes | yes |
| Region | yes | yes | yes | yes |
| N | 354 | 354 | 989 | 989 |
| $R^2$ | 0.506 | 0.528 | 0.433 | 0.568 |

*Note: *, **, *** indicate significance level at 10%, 5% and 1%, respectively.*

**Table 8.**
*Moderating effect of the nature of ownership.*

|  | Dependent variable: $HCB_{it}$ | | | Dependent variable: $NLB_{it}$ | | |
| --- | --- | --- | --- | --- | --- | --- |
|  | $HCB_{it-1}$ | $HCB_{it-2}$ | $HCB_{it-3}$ | $NLB_{it-1}$ | $NLB_{it-2}$ | $NLB_{it-3}$ |
| CBA | −0.058***<br>(0.012) | −0.044***<br>(0.012) | −0.046***<br>(0.013) | −0.040*<br>(0.023) | −0.032<br>(0.024) | −0.038<br>(0.032) |
| CT-i | −0.093<br>(0.085) | −0.038<br>(0.047) | −0.024<br>(0.025) | −0.042***<br>(0.007) | −0.056***<br>(0.010) | −0.047***<br>(0.016) |
| CBA*CT-i | 0.004<br>(0.003) | 0.003<br>(0.003) | 0.002<br>(0.002) | 0.003<br>(0.002) | 0.003<br>(0.002) | 0.003<br>(0.003) |
| Capital | 0.171***<br>(0.031) | 0.167***<br>(0.027) | 0.125***<br>(0.022) | 0.002*<br>(0.001) | 0.003**<br>(0.001) | 0.002***<br>(0.001) |
| Size | 0.207***<br>(0.025) | 0.177***<br>(0.022) | 0.180***<br>(0.023) | 0.002<br>(0.002) | 0.005<br>(0.005) | 0.004*<br>(0.002) |
| R&D | 0.043**<br>(0.020) | 0.025*<br>(0.015) | 0.029*<br>(0.017) | 0.076***<br>(0.008) | 0.093***<br>(0.011) | 0.089***<br>(0.014) |
| Market | 0.025***<br>(0.008) | 0.015***<br>(0.005) | 0.011***<br>(0.004) | −0.001<br>(0.023) | 0.007<br>(0.006) | 0.011*<br>(0.007) |
| _cons | 0.031<br>(0.099) | 0.026<br>(0.097) | 0.285<br>(0.331) | 0.462***<br>(0.086) | 0.924***<br>(0.192) | 1.618***<br>(0.320) |
| Year | yes | yes | yes | yes | yes | yes |
| Region | yes | yes | yes | yes | yes | yes |
| N | 1225 | 1186 | 1030 | 1225 | 1186 | 1030 |
| $R^2$ | 0.385 | 0.335 | 0.125 | 0.468 | 0.438 | 0.282 |

*Note: *, **, *** indicate significance level at 10%, 5% and 1%, respectively.*

**Table 9.**
*Results of the robustness test.*

more dependent on home country resources and markets. In addition, when both state-owned and non-SOEs are considered, cross-border M&As do not significantly promote non-location-bound competitive advantage. A possible explanation for this result is that, on the one hand, both state-owned and non-SOEs lack international management experience. Chinese enterprises often fail to integrate the strategic assets they acquire through M&As [33]. On the other hand, SOEs and their host governments may have conflicting interests. In addition to being an independent market entity, a state-owned enterprise may, in relation to certain aspects, implement the strategies of their home country governments, resulting in insensitivity to market competition [47]. The transfer of strategic assets to SOEs faces more restrictions and scrutiny [20] than those linked to the profit-seeking nature of non-SOEs, driving them to use the home market and institutions to carry out 'short-quick' cross-border M&As and obtain short term profit returns [13]. Thus, hypothesis 3 is partially supported.

### 5.6 Robustness test

Following Fan and Tian [61], we conducted a placebo test on the relationship between cross-border M&As and competitive advantage by constructing false cross-border M&A implementation times. Specifically, we advanced the cross-border M&A times by one, two, and three years and examined the impact of the interaction terms $CBA * CT$ on the competitive advantages. If the $CBA * CT$ coefficient were found to be not significant, it would indicate that there had been no systematic error in the control and treatment group samples before the implementation of cross-border M&As, and the empirical result would be stable. The results of the placebo test showed that the influence of the $CBA * CT$ interaction terms on home-country-bound competitive advantage was no longer significant, indicating that the competitive advantage improvement was indeed caused by cross-border M&As, and that the empirical findings on the effect cross-border M&As on competitive advantage are stable (**Table 9**).

## 6. Discussion and conclusions

This paper has studied the effect of cross-border M&As on enterprise competitive advantage by distinguishing it between home-country-bound competitive advantage and non-location bound competitive advantage in the context of Chinese ICT firms. We have examined two highly relevant research questions: *Can cross-border M&As improve non-location-bound competitive advantages of Chinese ICT firms?* and *Does state ownership enhance the competitive advantage of Chinese ICT firms through cross-border M&As?*

Based on the framework of the influence mechanism of cross-border M&As on the competitive advantages of enterprises, we used the propensity score matching and the differences-in-differences methods to empirically analyse the relationship between cross-border M&As and corporate competitive advantages, the path of improvement, the moderating effect of international experience, and the nature of ownership. We found strong evidence that cross-border M&As significantly improved home-country-bound competitive advantage rather than non-location bound competitive advantage. The results of the mechanism tests suggest that this is due to a crowding-out effect of cross-border M&As on R&D investment, which inhibits the development of non-location bound advantages. It also results from state-owned enterprises, which are considered to have institutional advantages not always effective in using cross-border M&As to enhance their competitive

advantages. These findings enrich the understanding of FSAs in internalisation theory by building on insights from the home country dependency and considering the unique heterogeneity of EMNEs such as internationalisation experience and state ownership.

## 6.1 Theoretical implications

Although recent studies have paid attention to the adaptation of internalisation theory to EMNEs [3, 8], whether EMNEs can acquire FSA through CBAs remains controversial. Some researchers believe that EMNEs that conducted cross-border M&As can redeploy and integrate foreign strategic assets to establish a competitive advantage [2, 4]. However, others point out that the competitive advantage obtained can be used solely in the home country and cannot be transferred into the global market [13, 14]. Benefiting from the rapid economic growth of their home countries, EMNEs can expand into local markets and gain considerable economic returns through cross-border M&As [14]. We have provided a clearer perspective on this controversial issue by distinguishing and defining two types of competitive advantage of EMNEs according to their boundedness to their home country, and their home-country-bound competitive advantages versus their non-location-bound competitive advantages. In addition, we have found empirical evidence consistent with the views of Ramamurti and Hillemann [14], that cross-border M&As significantly improve home-country-bound competitive advantage rather than the non-location bound competitive advantage of EMNEs in the Chinese ICT industry. We have explained the reason through mechanism analysis, and therefore we have supplemented this research area. The results coming from the mechanism test suggests the presence of a crowding-out effect of cross-border M&As on R&D investment of ICT firms themselves which inhibits the expansion of independent R&D and innovation motivation.

Another key concept in internalisation theory that follows Rugman is country-specific advantages (CSAs). CSAs cover a wide range of external factors at country-level that affect firm performance, such as labour, technology levels, natural resources, or the institutional environment [23]. FSAs and CSAs are interlinked as MNEs tap into CSAs to utilise or develop their FSAs [7]. Although existing research suggests that CSA is available to all firms in the same country, while all firms in home markets potentially have access to CSAs, Bhaumik et al. [21] found that some firms leverage CSA better than others. We defined the home-country-bound competitive advantage in this paper, which is of great value for exploring the heterogeneity of EMNEs' ability to utilise CSA to develop FSA. That is, EMNEs that can better exploit CSAs in their home country have stronger home-country-bound competitive advantage. From the perspective of enterprise heterogeneity, we found that internationally experienced companies can more effectively use CBAs to enhance their home-country-bound competitive advantage. When compared with state-owned enterprises, non-state-owned companies can enhance more their home-country-bound competitive advantage through CBAs. This research has therefore enriched the understanding of FSAs in internalisation theory by building on insights from home country dependency and taking into account the particular heterogeneity of EMNEs such as internationalisation experience, and state ownership.

## 6.2 Management implications

The new generation of ICT technology has become one of the fiercest areas of technological competition among countries around the world. In the current global

investment environment, it is necessary to reconsider whether cross-border M&As are the best way for Chinese ICT enterprises to enhance their core competitiveness. Our findings have important practical implications for cross-border M&As of Chinese ICT firms. At the firm level, enterprises should rationally implement cross-border M&As. Cross-border M&As have not improved the non-location-bound competitive advantage of Chinese ICT firms currently. After cross-border M&As, the development of enterprises depends more on the rapid growth of the home market scale than on improving internal technical efficiency. Enterprises may invest more resources in developing the domestic market to obtain short-term benefits rather than long-term strategic goals such as technology research and development [28]. Improvements in the home-country-bound and non-location-bound competitive advantages cannot be achieved automatically, and the heterogeneity between enterprises will lead to differences in M&As. Therefore, enterprises should not blindly follow the trend but combine their own conditions and actively 'go out' while accumulating international experience, laying the foundation for a leap forward to advanced internationalisation. At the government level, even though state ownership can secure financial resources for enterprises, government intervention may have a negative impact on corporate FDI. Home governments can encourage firms to 'go out' by providing market and online information, rather than excessive institutional and financial support. Governments should also strengthen the supervision model of FDI, and encourage enterprises with the ability and international experience to conduct foreign investment. Governments should caution those enterprises that do not satisfy the conditions needed to invest overseas and to conduct the 'arbitrage-type' M&As that rely on the resources, markets, and institutional advantages of their home country to tread carefully.

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# Self-Government in Yugoslavia: The Path to Capitalism?

*Alpar Losoncz, Andrea Ivanišević and Mark Losoncz*

## Abstract

This chapter analyzes self-governing Yugoslavia in the context of capitalism. Regarding the problem of capitalism in socialist world, the practice of the former Yugoslavia cannot be ignored. The socialist Yugoslavia was predetermined to be qualified as capitalist. The Yugoslav leadership developed: (a) self-government, (b) elements of market-biased socialism, and (c) openness to the international economy or the integration in the world market. Its economy achieved remarkable results by the mid-1960s. Some notable economists compliment the results and suggest that the model is sustainable. However, since the mid-1960s, regressive tendencies have emerged that perpetuate significant social dissatisfaction. In 1968, students protested against the state of Yugoslav socialism, believing that it had absorbed capitalism. Others felt that Yugoslav socialism had not sufficiently developed market-based socialism. There were authors that argued that Yugoslav socialism had become capitalist but without capitalist rationality. In the 1970s, the *de iure* existing federation became a *de facto* confederation with closed national economies. The chapter discusses the presence of elements of capitalism in this form of socialism based on (a) dependence on the world market, (b) banks as the institutionalization of "financial mode of capital," and (c) the existence of perpetuated unemployment.

**Keywords:** self-management, Yugoslavia, socialism, capitalism, market

## 1. Introduction

Emerging after World War II, Yugoslavia was destined to be qualified as a capitalist country. Its openness to the world market, market-framed consumption, self-management that introduced democracy to economic entities, and supremacy over the working class are just a few things that have always fueled suspicion about the socialist character of Yugoslavia. However, the same qualification was given from different sources and with different intentions: sometimes as a stigma and sometimes as a praise. The list is long: as early as 1951, a prominent Trotskyist economist Ernest Germain (Mandel) [1] wrote that the emergence of the restoration of capitalism in Yugoslavia was imminent.[1] In 1963, a Chinese party leadership said that there had been a "counter-revolution" and "replacing of socialism with capitalism" in Yugoslavia [2]. Paul Sweezy [3], a well-known American economist, also argued in the panorama of socialist countries in the 1960s that the existing socialist countries (except China) had opened the door to the invasion of capitalist

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[1] Yet, we should note that Mandel believed all socialist countries to be capitalist.

content, and Yugoslavia did it as well. Now, let us do a little time traveling: Ernst Lohoff [4], a modern German Marxist, used the term "ideeller Gesamtkapitalisten" (ideal total capitalist) to describe the Yugoslav situation, that is, to represent the communist party which took care of the "social capital."

This does not mean that the list is exhausted. The mentioned assessments definitely stand for certain elements of the historically created situation in Yugoslavia. Yet, they contain certain reductions and do not capture the *procedural* character of the existence of capitalist aspects in Yugoslavia; if it is claimed that capitalism existed *per se* in Yugoslavia and *a priori* a sign of equality is placed between capitalism and Yugoslav socialism, then some important interpretation dimensions are lost. Socialist Yugoslavia disintegrated at the end of the 1980s, and that already created the impression of *pre*determination, that is, the absence of any alternatives. However, capitalism in self-governing socialism arose as an unplanned *outcome* of various socio-economic determinations and certain conflicts that were actually the articulation of the same conflicts. Capitalism in Yugoslav socialism could not be perceived on the basis of *predetermined* paths. *A conceptual distinction should be made between capitalism and the existence of elements of capitalism*: whatever the definition of capitalism we give, it represents a kind of socio-economic completeness and wholeness.

First, the paper presents a conceptual clarification based on which we have enframed the selected problems. After that, we are going to determine two ideological foundations of the Yugoslav system (self-management and social property) and describe, but not in-depth, the characteristic stages of Yugoslav socialism which relate to the chosen topic of our work. The following sections will contain discussions of the selected moments that show strong presence of capitalist elements which truly anticipate later capitalism on the ruins of Yugoslavia (reliance on the volatile world market as the supreme arbiter of economic rationality, the supremacy of banking and financial capital over social reproduction, the presence of labor market elements). This chapter does not present empirical investigations, but the claims are supported by empirical illustrations. We will neither discuss the causes of the collapse of Yugoslavia, nor the phenomena of "imitated modernizations." We will only treat the problem of the existence of capitalism in self-governing Yugoslavia on the basis of selected examples.

## 2. Some conceptual clarifications

Capitalism has always been prone to different interpretations. Max Weber, Werner Sombart, Joseph Schumpeter or Milton Friedman formulated the essence of capitalism in different ways. Moreover, capitalism is currently experiencing renewed and heterogeneous interpretations, some of which have even been questioning the existence of a "unitary definition of capitalism" due to "heterogeneity" [5].

Nevertheless, when discussing about Yugoslavia, we must turn to the author who is valued as the supreme landmark in terms of self-governing socialism, namely, Karl Marx because in this way the effects can be measured immanently, that is, we confront Yugoslav socialism with our own ideological self-understanding. However, Marx did not use the term capitalism as much as he referred to the "mode of capitalist production." In his perspective, structural determinations of capitalism imply certain social relations which mean that: (1) there must be wage labor which conditions (a) that direct producers are separated from the means of production and do not make investment decisions and (b) there is exploitation of direct producers in the sense that those who have the means of production command the use of labor, that is, achieve "exploitation as domination" [6], (2) there is competition between

capital in the market, (3) "monetization of the economy" and the "financial mode of existence of capital" [7], and (4) ideological infrastructure that supports structural determinations.

Socialism implies the appearance as well as a set of different intervention practices that abolish the specified conditions of capitalism. The same practices imply a synthesis of different interventions both in the field of ideology/rights/politics (e.g. disempowerment of property rights) and in the economic domain (e.g. creation of nonantagonistic relations in production, creation of socio-economic conditions for appropriation of surplus labor of direct producers). Therefore, socialism implies a deep-seated political-economic transformation: that was the intention of the Yugoslav communists as well. Yet they (like many others) understood socialism as a "transitional state" between capitalism and communism, that is, as a process that led to the goal of history. In other words, socialism was viewed *both* procedurally *and* teleologically: the communist party was considered to be the one that was "supposed to know" the paths of history leading to the desired goal.

At least two things need to be clarified here.

*First*, although the ideologists of Yugoslav self-governing socialism were not clear about this, it must be said that capitalism and (self-managing) socialism exist in the *same* conceptual field. Both are based on what the Yugoslav communists called "commodity-based production." However, the same communists projected the possibility of turning commodity-mediated collective organizations into a *means* that could be harnessed in the course of teleologically understood history. Successful *instrumentalization* of the commodity-principle is the main prerequisite for socialism not to regress into capitalism. Socialism represents a certain relationship between fine-tuning of *instruments* (commodity/market) and anticipated *goals* (communism). It is important to mention that the criticism that affects the ideological projections of the Yugoslav communists from leftist perspectives centers on that they managed to realize legal and political interventions with respect to the fabric of society, but not epochal changes in terms of transforming the structure of productions.

*Second*, Yugoslav ideologists like Edvard Kardelj [8] referred to *social capital*[2]. The semantic context of this term brings us back again to Marx, who in Volume III of *Capital* wrote about the self-transformation of capital (about joint-stock companies as forms of socialization of capital) "within the capitalist mode of production itself." "Cooperative firms" and "joint-stock companies" are signs that capitalism has come to its own "superseding" independently of the property rights of the means of production, which means that "workers in the association become their own capitalists."[3]

The same stands for the Yugoslav communists. The above given arguments indicate *the existence of capitalism and socialism on the same soil*. Does this mean that there is capitalism in socialism or vice versa, socialism in capitalism?

Johanna Bockman [11, 12] raised a provocative thesis stating that "neo-liberalism"[4] does not only have transnational roots but also "leftist origins." She explicitly mentions Yugoslav economists as interlocutors who, because of greater intellectual freedom in the former Yugoslavia, had the opportunity to familiarize themselves with the neoclassical logic of Western economists and, during the intensive communication and scholarship, thus also became acquainted with the appropriate economic techniques. In addition, more liberal worldview that emerged

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[2] This term is not be equalized with "social capital" popularized by Pierre Bourdieu.

[3] See [9], quoted by Jossa [10]. Jossa is a rare theoretician who believes that if capital goods are not owned by capitalists the "system is non-capitalistic" because it "reverses the capital-labor" relation. He does not use the term of self-management as much as the term of cooperatives for which he claims to be a new form of "mode of production."

[4] On neoliberalism, see [13].

in Yugoslavia after the break with Stalin resulted in systematic translations of economic literature in the West. This would then mean that the discursive constructions of liberal economists in Yugoslavia, who were attacking the system anyway, were an inevitable "source" for the renewal of liberal capitalism. Or it meant that one of the most famous Yugoslav economists (who regularly used the neoclassical technique), Branko Horvat, a theorist of self-management, *malgré lui* contributed to the emergence of neoliberalism. Bockman is not surprised that the Yugoslav self-governing enterprise has become an exceptional subject for various economic theorists in a capitalist perspective: neoclassical discourse has followed with great interest the models of employees being "their own capitalists" [14].

Bockmann's thesis is problematic as it overemphasizes neoclassical discourse (which cannot be equated with Hayek's Austrian discourse who played a significant role in the reshaping of the framework of today's "neoliberalism"). Moreover, changes of socialism toward capitalism or the affirmation of capitalism can be understood only by measuring the relationship between *structure* and *agencies* in Yugoslav society. The proposition that local economic discourse could contribute to the emergence of "neo-liberalism" should not be questioned, but it is of greater significance to notice that (at least if we accept that we can talk about embryos of "neoliberalism" in Yugoslavia) different social agencies were the "bearers" of this constellation.

However, there is an idea in Bockman's thesis that is important to us: it actually suggests that there is *ante litteram* capitalism on a discursive level. As for the relevance of discursive articulations, we can say that discourses have a function of revelation. Indeed, if we take a look at, for example, some economic and political discourses in the 1960s (regardless of Bockman), they actually anticipate transitional discourses of the late 1980s when, after the collapse of self-management, there was official transition to capitalism and ideology propagated definite supremacy of capitalism with respect to socialism. Or, if we evaluate the various economic discourses in the 1960s regarding the international market, then we see the absolutization of such export orientation, which is also emphasized in the post-socialist order as a panacea.

Broadly speaking, Bockman's argument is the basis for our further argumentation: the "transition period" was burdened with the "*recurrences of the past*" as ideologists said many times before (hence, there is always a path-dependent logic that determines the present) and at the same time it was determined by the elements of *future* that later became unambiguously "capitalist." Thus, the "transition period" develops *diachronic* time sequences as well as *synchronous* temporality. It is a temporal framework in which we can thematize the presence of capitalism in socialist Yugoslavia.

## 3. Ideological fundamentals throughout the history

There were two fundamentals of the system: self-management and social property. In both cases, the system saw itself as a pioneer [15]. The emergence of capitalism in Yugoslavia can only be understood as an *expression of the collapse* of the *synthesis* between self-management and social property.

In a nutshell, self-management meant that the "working man" in various associations was the main subject of the economic domain and the axis of all life in general [16]. At the same time, self-management as the microfoundation was the basis for macro-construction, that is, for the "self-government society." There was, therefore, an intention to expand self-management to the entire society, to transfer the norms of labor socialization to other (say, communal) levels, too.

Self-management was the *negative* fundamental of the system: Yugoslav socialism was considered to be significantly different from both the Soviet type of state socialism and the organization of labor under capitalism. Self-government

was supposed to realize analogous goals as well as capitalism and state socialism (economic rationality, productivism), but in a significantly superior way. Self-management goals can accordingly be classified in the following modes:

a. improving efficiency while creating the necessary conditions for calibrating economic motivations—self-managing enterprise overcomes various deficits of capitalist enterprise in terms of efficiency (according to some data, the total productivity of production factors in the period 1953–1965 in capitalism was 3.3, in state socialism it was 3.0, and in self-management it was 4.7 [17], p. 170). Thus, modern economic discourse recognizes in capitalism the acute problem of "incomplete contract" [18] in terms of organization of production and control by capitalists, but in self-management this problem disappears as there is no need for constant supervision of workers who are "their own capitalists"; they are capitalists with the right motivation but without capitalism;

b. the achievement of just distribution and egalitarianism, starting from the micro to the macro level (the Gini coefficient in the mentioned period was 0.40 in capitalist countries, 0.26 in "statist countries," and 0.25 in self-management) [17], p. 171; self-governing socialism wanted the same thing as transformed capitalisms after World War II, the prosperity, but in a different way;

c. some theorists and strategists even had the idea of abolishing the division of labor;

d. in the philosophical sense, the realization of "humanism," i.e. disalienation, or overcoming various forms of alienation in capitalism.

The conception of self-management was, in certain aspects, on the ground of capitalism, but for the purpose of transcending to the capitalism, and this can be proved with the thinking of Horvat who has already been mentioned here (he once managed federal Yugoslav planning institutions to become an "internal opposition" to the system). It is characteristic that, unlike liberal economists who believed in the late 1980s that entrepreneurship was possible only with the existence of consistently derived private property (according to the Austrian concept), Horvat insisted on self-management until the end of socialism as an adequate framework for *collective entrepreneurship* [19, 20]. Still, this concept of "*collective as entrepreneur*" does not exclude personal initiative: on the contrary, this way self-management surpasses capitalism, which enables far-reaching inclusion of personal initiatives in the collectivity. Self-government in the context of "commodified production" aimed to establish efficient and fair use of capital—but always without capitalism.

Social property was more difficult to interpret because it had far fewer predecessors than self-management. We can understand social-property as a critique of private and group property in the sense that social-property is inclusive in relation to the exclusivity of the mentioned forms of property. Strictly speaking, "society" was the bearer of property and this clearly had an anti-capitalist trait, but it was not easy to operationalize in the context of the increasingly intensifying market in Yugoslavia. A solution was found in the separation of economic and legal aspects of property, which is again (at least partially) analogous to a joint-stock company in capitalism where shareholders are the legal holders of property, but only management can establish "economic control."[5] It can be said that the combination of self-management and social-property had double function: (a) finding a unique Yugoslav position toward capitalism and state socialism and (b) overcoming the

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[5] See the discussion on property rights and appropriation [21–23].

antagonism between capital and labor as well as divergence between socialized economy and private appropriation[6].

Self-management was gradually introduced after the conflict with Stalin in 1948[7] and, as often described in the literature, with a great burden of the past it meant: (a) the legacy of pre-war Yugoslavia which was a peripheral capitalist country, (b) great destruction in World War II, brutal destruction of the existing capital which caused a lack of capital in the context of accelerated industrialization, (c) high disparities, that is, divergences in the development between different parts of a country with a federal structure. The Yugoslav communists knew that the weak working class, which was necessarily recruited from the peasantry in the agrarian country, lacked cognitive resources as well as habitualization for the realization of self-management. However, they assumed that the self-management processes could involve learning-by-doing principle due to the absence of time for education. Alternatively, we can say that the practiced self-management is not only a combination of goal-rational actions but also the creation of "endogenous preferences," that is, the creation of subjectivities for individual economic initiatives. Worker subjectivity is a dynamic category[8] and it can change depending on institutional conditions; dynamic self-management will just develop harmony between social justice and effectiveness.

For the genealogical approach, it is purposeful to adopt the well-established scheme[9] that shows briefly the dynamics of self-management with the macroelements relevant for our analysis:

a. 1945–1948: industrial take off; pure imitation of state socialism including state-property (in 1948 the industry was 100% state-owned); the plan directly and as legal imperative directed the economy, orders the proportions;

b. 1948–1965 [28]: introduction and affirmation of self-management; double decentralization both in terms of territorial organization and in terms of basic economic entities; existence of significant economic growth; plan/market axis in the sense that the plan sets the "basic proportions" of economics, however, self-management was never implemented consistently and, in addition, it always carried an inherent sign of the politics "from above"; at the beginning of the 60s, the first signs of exhaustion of the great industrial take off from the 50s appeared, that is, the cycle that brought primarily (unrepeatable) high growth was exhausted; the necessity of choosing a new direction in terms of economics, which would create a reform in 1965 (reforms were "endemic" in socialism anyway, as Adam Przeworski says);

c. 1965–1974: the inflammation of hard crisis (industrial production grew at a rate of 12.7 in the period 1952–1964, and at a rate of 7.1 in the period 1964–1978 [29]); strong turn toward the world market especially in search for foreign

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[6] Jossa [24] believes that there is a question "Which is the fundamental contradiction of capitalism: the capital-labor polarity or the contrast between socialized production and private appropriation?". Yugoslav self-management was the answer to that question.

[7] We are not starting an otherwise important discussion here about the motivation of introduction for self-government, and we are not arguing whether the motivation was idealistic, legitimation-based (establishing of something unique compared to state socialism), or opportunistic (transfer of responsibility to working entities), i.e. positioning the party in internal power configuration.

[8] For example, some theoreticians [25] reject market socialism based on that because it assumes constant preferences.

[9] This periodization could be referred, for example, to [26, 27].

aid; the modes of introducing market categories gave enormous power to the banks; a break in the "plan-market axis" in terms of the gradual disappearance of comprehensive planning; stabilization of high unemployment level; survival of regional disparities; high rate of inflation and significant social polarization; strong presence of elements of capitalism but without the appropriate capitalist rationality that would "domesticate" the results of deregulated markets; loss of socialism contours;

d. 1974–1980: constitutional completing of national states of the existing federalism with the modes and effects of confederalization; strengthening of economic sovereignty of federation constituents; "nationalization" of different economies with mimetic reheating of political conflicts between national oligarchies (politology employs here the term of "polyarchy"); exposition to advancing international economic crisis.

e. 1980–…: "perpetuation of Yugoslav crisis"; condensation of aggressive economic nationalism among the entities of federation leading to final disintegration; futile efforts to reconstitute Yugoslavia; openness to capitalism completed.

## 4. World market as a generator of capitalism in self-governing socialism: dependence

Capital circulation in the world market represents a significant source of capitalist elements in socialist countries. However, we should demystify a myth that persists in a permanent autarchy of socialism in which strong ideology has control over the economic communication with capitalism system: this bears no reality in the context of "red globalization" [30, 31]. Yugoslavia appears here as an exception, but with regard to it, we can only discuss about gradual differences in overall socialist world.

In any case, it is true that, as early as in 1950, Yugoslavia rapidly integrated into the world capitalist system, which was under the domination of the victorious USA. There were different forms of accession: integration into economic institutions of "liberal internationalism" (Coal Committee of the Economic Committee for Europe, loans from the World Bank, the IMF and the US Export–Import Bank, as well as British banks [32]), bilateral treaties; it was indicative that there was a very favorable balance of payment in 1948 (the period which, according to many authors, is believed to be the period of autarchism). The following year, there were "efforts to find new markets in the European Economic Community and the United States for… minerals… and timber; agreed to the dinar-dollar exchange rate…so as to obtain IMF credits" [33]. These moments are only examples, but they are representative enough to demonstrate that self-governing Yugoslavia was part of the capitalist world system and that it acted *in compliance with capitalist norms*.

However, there are phases that shed light on capitalist aspects: by 1965, although external financing was important, there was a certain balance between internal and external sources of financing and the debt was 1.2 billion of dollars until that period [34]. It can be said that there had been "shallow integration" by that time despite gradual integration into the world market determined by capital, and that it was not until 1965 that "deep integration" took place.[10]

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[10] For these notions but in other perspective, see [35].

Changes in integration in capitalist world market were depended on the processes in the early 1960s. Namely, the economic growth as well as the growth rate was slowed down, and it was obvious that the development direction should be reconstructed. One group of theorists and politicians, who emerged from liberal milieu, focused their attention to the world market as an ultimate criterion of economic rationality. They drew attention to the fact that the products of self-governing companies should be tested, in other words, the results of self-managers should be proven in the market with dominant capitalist rationality and absence of communist ideas. In addition, the highest-level political officials also warned about the necessity for reorientation in a domain such as tourism in order to attract foreign investments [36]. Other theorists and politicians (in scientific literature referred to as "developmentalists") have emphasized the importance of a phenomenon commonly referred to as "import substitution industrialization," which would imply a distance between Yugoslav economy to the capitalist dimensions of world market and focus on national resources.

The 1965 reform brought the triumph of economic liberalization. It can be said that this also meant a certain victory for economists and politicians of liberal provenance who emphasized the inevitability of the competitiveness of the Yugoslav economy in the world market (exports in 1970 amounted to about 15.1% of GDP [37]). A number of typical deregulatory measures were adopted with the aim of improving efficiency of the foreign trade system, devaluation of dinar was realized, and as the official documents emphasized "free disposal of foreign exchange," "foreign exchange self-financing," and "interbanking foreign exchange market" should be achieved [38]. Import was also increased and in the period between 1961 and 1965 it was covered with export in the range of 74% and then the same coverage was gradually reduced [28], p. 104. An institution, which was completely unknown in socialist countries, appeared as an expression of new orientation, namely, joint business venture (in accordance with the legislation, there was a certain restriction that "the foreign partner could not have more than 49% of the total value of joint investments"). Simultaneously, joint ventures were unknown source of financing as well as the form of cooperation with foreign capitalist companies for profit purposes. In the period between 1967 and 1980 "joint ventures were signed to the value of 49,255 million dinars, of which the foreign participation amounted to 10,264 million dinars or 20.74% of the total" [39]. Actually, the level of investment made by different foreign multinational companies (their structure reflected the structure of foreign trade of Yugoslavia with a significant presence of Western Germany and USA) varied but it represented a significant source of financing. Therefore, it can be said that with certain restriction, self-governing socialism found the source of financing based on the profit criteria; therefore, it can be said that Yugoslavia, following market-economic rationality, used loans for investment and not for consumption.[11]

However, despite the results (for example, state property definitely disappeared with the reform and became social property), major problems arose. The system of the federal state was decentralized in such a way that *the possibility of joint-federal planning* was increasingly lost, that is, there was a fatal fragmentation between the members of the Yugoslav federation who were divided by nationalist interest. Decentralization is a principle that can be justified, but at that time it acquired a pronounced disintegration-nationalist meaning: the focus was on the work that merged the nationalist affirmation of justice with market criteria. Favoring of the market often had a national character, the perspective of those who benefited from

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[11]  Or not for consumption, as other real-socialist countries did; on this relationship between Yugoslavia and the other socialist countries, see [34], p. 47.

inclusion in the world capitalist system. Moreover, it should be noted that the IMF, which of course implemented the norms of capitalist rationality in terms of debt, acted as a "promoter" of capitalism but internal decentralization of Yugoslavia as well[12]. In the meantime, Yugoslav economy became *de*regulated in significant elements losing chains between market and plan; the federation apparatus was losing its competencies and it could eventually manage only the monetary flows. It entered volatile world market with strong competitive pressures, but with subsequently drastically increased American interest rate, which resulted in the countries in debt being in undesirable situation [41], or with oil price shocks, Yugoslav economy was literally unprotected from contingent shocks of the world system. Some Yugoslav economists metaphorically called Yugoslav economy a *laissez-faire* system indicating to the absence of planning dimension, Rusinow [42] even used the term "*laissez-faire* socialism" ironically.[13] During the 1980s, which were important because the world economy was also restructured and profound transformations were commonly associated with the offensive of Ronald Reagan and Margaret Thatcher (who demolished post-war Keynesian compromise), Yugoslav economy was strongly affected.[14] Yugoslav economy with aspects of deregulation competed in the world market, its actors had to adopt the roles of capitalist subjects, and at the same time, Yugoslavia as a whole was left with and without *capitalist resilience* regarding the relationship between market and plan—we must not forget that the plan exists in capitalism as well (corporate planning), although it develops in a different way compared to socialism. Yugoslav communists wanted "endogenous planning"[15] (as opposed to imposed exogenous planning), and in the 1970s and 1980s they even legally forced basic economic units to implement planning, but planning in Yugoslavia became less and less possible. Socialism projects planning as a control of economic flows; planning is a guarantee to reduce waste, and self-management promised virtuous cycles between plan and market—however, these projections increasingly failed.

## 5. Banks as the institutionalization of "financial mode of capital"

As we have already seen, there were various forms of financing economic activities in the 1960s and they were related to the profit motive, that is, to capitalist incentives, with the constant intensification of dependence on the world market. However, banks in Yugoslavia played a special role in the entire constellation in the 1960s. The background to the problem was the argument about adequate sources of financing because some Yugoslav actors, at the same time, proposed institutionalization of the capital market as in capitalism, which would imply a consistent market distribution of funds for investment purposes.

The capital market was often a subject of various discussions regarding the market socialism. Namely, the advocates of market socialism believe that it is possible to develop market but without transition into capitalism, that is, it is possible to affirm market *without* capitalism (unlike those critics who believe that market socialists are inherently "capitalist roaders" [45, 46]). The capital market

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[12] On this, see [40], p. 123, and [32], p. 169, 170.

[13] There were efforts later to solve these problems with a specific system of bargaining where the firm was no longer an operating unit but a "unit of bargaining," see [43].

[14] This paper does not focus on the breakup of Yugoslavia which can be interpreted in different ways. In Yugoslavia, the debt of the country is often exaggerated because it was not more than third of the total product (see [37]) which means that interest rate did not account for high percentage of the GDP.

[15] For the concept of endogenous development, see [44].

can be rationalized in the system in which there is a synthesis of worker-control and decentralized market.

The capital market was not introduced in Yugoslav self-managing socialism. The argument for this was that, in that case, a self-manager would just be a pure "shareholder" of "social capital." At the same time, liberal economists discussed about that as being a symptom of a significant problem because the expansion of real income could not be converted into investments as it was converted into personal consumption and status of goods. This constellation encouraged some researchers to claim that Yugoslav self-management belonged to the sphere of "market socialism" [33], p. 169, due to the lack of capital market. The consumer market articulated personal consumption based on the logic of prices; there was a significant liberalization of the price mechanism in foreign trade as well, but the market mechanisms and allocative efficiency of the market were not applied in production factors. It is interesting that there is a belief even by the critical left that it was a mistake to give up on the introduction of the capital market [40], p. 291, because with appropriate infrastructure the engaged self-managers could rationalize the distribution of funding sources and control the use of resources exposed to irrational spending, that is, waste of resources. The result of this logic is that the capital market would enable rational use of social capital, which would finalize the idea regarding the targeted use of capital, but without transformation into capitalism. Conceptually, this argument emphasizes that it is completely wrong to think within the framework of a rigid dichotomy between plan and market, that is, the fact that there was no plan in Yugoslavia as coercive encompassing of economy does not mean that it represented market socialism.

However, coexistence between market and socialism has never been present without certain tensions. Actually, it was this context that the banks appeared in the 1960s as *exclusive* financiers and as financial entities in the absence of capital market. Banks, as financial institutions, did not have earlier a constitutive role in financing investments in Yugoslavia, they were simply a part of "bureaucratic planning": they did not prevent "irrational" allocation of resources, nor they could sanction "insolvencies." However, intensive liberalization in 1965 resulted in banks being analyzed from a new perspective. Actually, they were supposed to become an organic part of the "integrated self-management system" and achieve harmony between market and self-management.[16]

Commercial banks began to operate in accordance with capitalist norms, that is, they could borrow from the banks abroad and take deposits in foreign currency, thus being able to finance domestic companies and mediate between savings and investments [37], p. 399. The reform of the banks was intended to: (a) consequently complete the decentralization process that took place in Yugoslavia at various levels, (b) ensure price stability, and (c) prevent the supremacy of any institution that finances the Yugoslav self-managing economy. In other words, the territorial and functional organization of the banks was supposed to ensure the final triumph of self-management, that is, the victory of the working man who mastered the entire social reproduction. The self-managers actually gave a part of the "social capital" to the banks in order to rationalize the allocation of resources—that was the official argument.

However, if we try to understand the intention of financing investments and transfer of savings into investments as a "financial root" of self-management, then it can definitely be said that the reform failed. Banks in fact became superior to self-managing entities by becoming dominant managers over significant segments of

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[16] For a detailed account, see [47]. See the analysis of Yugoslav experiment in the light of Currency-school in banking here [48].

"social capital" allowing them to establish control over self-governing entities, even to "blackmail" self-governing actors. "Banking oligopoly" (known in the literature) became a relevant social phenomenon that soon became a political problem. This is proven by data: banks' funds in financing investments were about 7.0% in the period 1952–1958, but in the period 1964–1971, the same percentage was 30 to 41% [28], p. 99. Therefore, it should be added that "joint work" increasingly depended on financing based on foreign funds: in the period 1971–1975, foreign sources of investment increased to 28% [49].

Banks were criticized many times and most of those criticisms were political and were addressed to monetary technocracy in banks. However, the mentioned technocracy (which has been criticized many times for being "alienated" from joint work) just implemented rationality norms in the newly developed situation. In fact, it seems as if, at this stage, the discourse of differentiation between capitalism and socialism is reversed. Namely, if we were to analyze the language of the debates of that time, then we would have the impression that the discussions were conducted in a discursive perspective or of the *Finance capital* of Rudolf Hilferding (1910), or in the perspective of later and present elements of "financialization." In fact, there were aspects of *both* retrospective and anticipatory forms of financial capital in Yugoslavia.

In Yugoslav socialism when self-criticism always had strong forms, certain influential actors (such as Kardelj who is already mentioned here) analyzed the penetration of the banking capital as a prelude to capitalism. So, it should not come as a surprise that the measures adopted in the 1960s were *homologous* to the economic-political measures realized during the transition in post-socialist countries in the 1990s (control of public finances for the purpose of curbing inflation, etc.) and other implemented measures of economic policy that *anticipated* later transition into capitalism (relying on IMF loans, encouraging of exporting-based economy, "restrictive monetarism," cutting of import and budget, or lessening of welfare provisions, etc.). In fact, the same measures can be compared with the orientation schemes of late transition to capitalism. *Capitalism was structurally present as anticipation.*

## 6. Unemployment: elements of capitalist labor market?

In 1965, a dissemination of certain market criteria (in the sphere of housing construction[17] in the domain of service activities, etc.) was welcomed. Consequently, certain forms of social differentiation were intensified resulting in the destruction of egalitarianism as a socialist principle. The system made efforts to regulate income differences within the firm, i.e. the range of income, which provided certain forms of intra-firm egalitarianism, but the deregulated market created different forms of "rents" (which also implies different forms of inequality and exploitation).[18] Self-management socialism raised its flag which wrote "reward according to work" (this form was later changed and became "reward according to the *results* of work" [40], p. 345, which implies different perspective), but the "system of rents" created such situations in which income did not depend on work but on the branch of economy in which a "self-managing worker" performed his activities (locational rent). There were forms of intra-firm interest, but the workers in certain firms

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[17] Only certain market criteria because even in the 80s it was lamented that everyone should pay for housing investments; however, only small number of beneficiaries used them. Actually, there was still no market basis for the housing construction.

[18] It was the request of Diane Flaherty [50].

defended their own interests without respecting the interests of the working class as a whole. Relevant research indicated a tendency of agents of individual firms to behave as subjects of capitalist firms, namely, as agents of atomized firms with conflicting interests (this allows us to discuss about "fragmented" and "atomized" self-management). Although some research showed that "competitive pressures" in self-governing company was "relatively weak" [46], p. 314; [51], p. 243, in comparison to the capitalist firms, this did not imply expansion of solidarity in the form of socialist egalitarianism. *Solidarity did not overwrite atomized interests.* In capitalism, "choice in the small does not provide choice in the large"[19], which means that there was a structural possibility for individual rationality to be converted into "collective irrationality" (Przeworski), or into collective myopia, and Yugoslav self-governing socialism underwent that change.

A special attention here should be paid to unemployment. It is certain that it was connected with the mentioned reform as it can be seen from data: the number of unemployed people in 1965 was 265.000 and in 1968 it was 315.000 [28], p. 105. Simultaneously, the unemployment rate increased dramatically in the underdeveloped countries. In Macedonia, which was part of Yugoslavia, the unemployment rate in 1952 was 6.3%, in 1965 it was 13.5% (with a tendency to increase), and in 1974 it was 19.7%, and in Slovenia, the unemployment rate in the same year was only 1.4% [37], p. 394.

However, it must be said that the problem of unemployment (which is not interesting for us due to its phenomenology but in the light of the presence of capitalism) has attracted constant attention since the beginning of the second Yugoslavia, that is, since 1965. The Communist Party was faced with the mentioned problem earlier so it came to the conclusion that it was impossible to avoid unemployment, that is, it concluded that there was an "inevitable"/functional unemployment rate in self-governing socialism as well. Even in the period before 1965, when the growth rate in the social sector (4%) was high, job could not be provided to a great number of people who came from rural to urban areas. After the mentioned reform in the social sector, the employment rate in the period increased at a rate of 0.8%, which was less than the growth rate of the labor force; moreover, if we compare the employment rate with the growth rate of the entire population, then we could see negative rate of –0.1% [28]. The fact causing the concern was that around 50% of unemployed people were young. If we start from the fact that the "inevitable" unemployment rate in capitalism at that time was 4–5%, then the relevant fact is that the same rate in Yugoslavia was around 7% [40], p. 294, or that in 1968, around 47% more people were looking for employment in comparison to the percentage before reform [54], which indicates to the collapse of employment policy. Statistics showed permanent, long-term unemployment, but research, at the same time, indicated to excessive unemployment in companies (contrary to Benjamin Ward's theory of self-governing firms, which suggested that the said type of firm was a labor-saving one).

The problem of unemployment affected the basic ideological matrices of self-governing socialism. We should not forget that its ideology was based on socialization which is based on work[20], that is, on the fact that it can be integrated in social community only through the sphere of work. None can enjoy the benefits of socialism without work and a person may become *a*-social without work-biased subjectivity. The fact that aspects of labor market, which determine economic flows, also undermine socialist principle is very important here [56]. The Yugoslav communists

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[19] See [52], p. 18, quoted by Przeworski [53].

[20] We use this concept here in terms of [55]. Elson [52] used the concept of socialization in different sense as a market in the public perspective.

clearly projected the necessity of overcoming wage labor. Finally, as the important Polish economist Michal Kalecki [57] reminded us, unemployment is *per se* a political problem, that is, the employment rate always shows political configuration of power. Consequently, higher employment rate is homologous to the power and capacity of the working class. Political economy of Yugoslav unemployment was, in that sense, an adequate expression of general contradictions in terms of "real" self-governing social- ism. Not only is unemployment an economic phenomenon but also *condensation* of the existing social relationships. At the same time, it shows the loss of "associational power"[21], that is, disempowering of the working class which is always associated with the tendencies in the labor market. In addition, recurrent unemployment, loss of self-governing power, as published by the Yugoslav scientific literature, replicates capitalism in such a way that a "degraded worker" who loses the sense of commitment turns to infinite consumption and becomes a slave of "capitalist consumption mental- ity" [59]. When Yugoslav researchers tried to operationalize "alienation" (as a sense of "meaninglessness," "anomie," "social isolation") then they came to the conclusion that self-governing workers felt like wage earners; therefore, despite the desired projec- tions, the wage labor was present [60].

If we understand self-management as a framework for "zero-sum game" between socialism and capitalism, then perpetuated unemployment can be viewed as a loss of socialist horizon. Due to unemployment, the Yugoslav management allowed workers to go abroad after some hesitation. In 1972, there were about million workers and their dependents in what was then West Germany; it rep- resented 10% of the active population and "about 20 percent of those employed outside agriculture" [36], p. 199. Two-thirds of workers went abroad just after the 1965 reform [28], which shows the effects of the reform. This only completed the *extroverted* mode of existence of self-management socialism, that is, the structure of dependence from world-capitalism. The mentioned dependence was obvious in the situation when there was a stagnation in capitalism in the 70s and the Western European market was less and less absorbing labor from Yugoslavia. We also have to add that with perpetual unemployment the black market flourished which, together with aspects of dependence on the world labor market, inevitably indicated to the fact that there were constitutive dimensions of capitalism in self-governing Yugoslavia.

## 7. Conclusion

Yugoslav self-management promised idiosyncratic coordination between politico-economic actors. Self-government was determined based on the relations between the ruling communist party, capital, and labor. The goal of the self-management was to realize the dominance of labor over capital, but workers did not become "their own capitalists." Many economists have emphasized that self-management in Yugoslavia was introduced ("imposed") for noneconomic or ideological reasons. Simultaneously, there was hope that self-forcing mechanisms of self-management would create such a motivational structure of economic entities that would lead to adjustment of ideological and economic patterns. Strategists in the former Yugoslav order as well as many economists believed that the market, in the context of self-management and social property, was a set of neutral mechanisms that can combine ideological teleology and economic rationality. Pro-market arguments presented by Yugoslav liberal economists did not differ from the same arguments made by theo- rists in capitalism (e.g. Hayek regarding the information superiority of the market.)

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[21] On "associational power," see [58].

There is even a certain analogy with state socialism which aim was to govern the market; some economists thought that there was a "socialist commodity production." *Liberal economists wished self-management to be embedded in the mechanism of the market as a guarantee of different types of freedom. Communists, however, expected the market to be embedded in self-management.* However, if we take a look at the collapse of self-management in Yugoslavia, as well as the "collective irrationality" of Yugoslav socialism, then it can be said that the forms of markets that existed only prepared the way for capitalism, that is, that self-managements in Yugoslavia were "capitalist roaders." This will not after all provide general answer to the question already mentioned here as to whether market socialism is possible at all; it will only shed light on the fact that the empirical forms of the market in Yugoslavia did not prevent later capitalism. Self-management was constituted as a front against state socialism in Soviet Union and capitalism, as well (it was the so-called "third road"); *consequently, the failures of self-management marked triumph of capitalism.*

Yugoslav strategists did not think that capitalism was infeasible; on the contrary, they often mentioned "capital-relationship" as an existing horizon that should be overcome, but which returned to the self-governing scene as an internal danger. Capital was, in negative context, often mentioned in various forms, such as "state capital" (that is not "socially owned"), "trade and bank capital," and sometimes even the phrase "state capitalism" was mentioned. We have to interpret this as forms of the presence of capitalism in self-management; it cannot be otherwise. Self-governing Yugoslavia was always a strong candidate for the "bearer" of the phenomenon of capitalism due to its market orientation, which had strong deregulatory aspects. We could say that capitalism existed in self-governing socialism as a *futur antérieur.*

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The rapid growth and development of emerging economies offer both opportunities and threats for international businesses. Understanding the economic development of emerging markets, combined with a knowledge of the increasingly complex international business market, enables better exploitation of opportunities in increasingly competitive world markets. The BRIC countries, the most prominent emerging markets, have long been discovered by foreign firms due to their enormous potential for investment opportunities. This book offers a comprehensive look at emerging markets, especially as they integrate with the global economy. It offers a conceptual framework to analyze emerging markets from multiple perspectives, including those of indigenous entrepreneurs struggling to overcome constraints to build world-class businesses, multinationals from developed countries tapping into emerging markets for their next growth spurt, and domestic and foreign investors seeking to profit from investment opportunities in emerging markets.

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