

**ERENET PROFILE****PUBLISHER**

Dr. Számely Gábor – Editor  
 Dr. Antal Szabó – Scientific Director  
 Dr. Szabó Zsuzsanna - Info Director  
 Tamás Tóth – Designer

**INTERNATIONAL BOARD**

Desislava Yordanova  
*St. Kliment Obridski University*  
 Dr. Sanja Pfeifer  
*University of Osiek*  
 Dr. Hans-Jürgen Weißbach  
*Fachhochschule Frankfurt am Main*  
 Dr. Dumitru Matis  
*Babeş-Bolyai University*  
 Dr. Szabo Zsuzsanna  
*University of Tîrgu Mures*  
 Dr. Eric Dejan  
*University of Belgrade*  
 Dr. Marianna Siničáková  
*Technical University of Kosice*  
 Dr. Mateja Drnovsek  
*University of Ljubljana*  
 Dr. Miroljub Hadzic  
*Singidunum University*  
 Dr. Toni Brunello  
*Studiocentroveneto*  
 Dr. Ladislav Mura  
*J. Sežye University Komárno*  
 Dr. Krzysztof Wach  
*Cracow University*  
 Dr. Sonia Heptonstall †  
*UBIS Geneva*  
 Dr. Sybille Heilbrunn  
*Kinneret College on the Sea of Galilee*  
 Dr. Dilek Cetindamar  
*Sabancı University*  
 Dr. László Szerb  
*University of Pécs*  
 Dr. Zoltán Bajmócy  
*University of Szeged*

**Published by:**

**ERENET NETWORK  
 HUNGARIAN YOUTH  
 ENTERPRISE SUPPORT SOCIETY**

[www.erenet.org](http://www.erenet.org)

©ERENET PROFIL, 2020

ISSN 1789-624X

**CONTENT**

<b>Winter Message of the Scientific Director</b>	2
<b>PAPERS</b>	
<b>Ensure your Family Business is Fit for Purpose in a Post-Covid World</b> Peter Vogel	3
<b>New Entrepreneurship</b> Jean-Paul Close and John Schmeitz	5
<b>Assessment of the Impact of Entrepreneurship on Economic Growth: a Ghanaian Case Study</b> Buah Aku-Sika	19
<b>Efficient Monetary Integration as a Path to Higher Sustainability in Africa</b> Marianna Siničáková - Tomáš Mušínský - Laura Fotulová	28
<b>Lessons from the Pandemic: Strengthen Neighbourhood Self-dependency through SMEs</b> Perumal Koshy	37
<b>Career Transition Through four Personal Drives: A Cross-Sectional Analysis amongst Healthcare, Education, and Real-estate Employees</b> Hima Parameswaran	42
<b>INSTITUTIONAL PROFILE</b>	
• Poland Prize	57
• V4 Network on Entrepreneurship	58
• Startup Incubator Program launched in Oradea	59
<b>NEWS</b>	
• FIKUSZ 2020 International Conference, Symposium	60
• ATM for SMEs Interreg Europe	62
<b>CALL FOR PAPERS</b>	
• The 24th St Petersburg Economic Forum 2021	64
• ICBC World Congress Paris	65
• Eastern Economic Forum Vladivostok 2021	66



## ERENET WINTER MESSAGE

### Distinguished Readers and Friends,

We just left the thirds Sunday of Advent – the Sunday of the Joy – behind and started the last week prior to Christmas. Advent means “coming, expectation” – coming of Jesus into the world. We have to prepare ourselves and remember the real meaning of Christmas. We have to keep in mind that 2000 years ago Jesus came into the world as a baby to live as a man and die for us.

This year the waning is a special one. In spite of the street and windows decoration the streets are empty and peaceful. Only the big shopping centres are crowded and noisy. Everybody is hurry, because due to the curfews people have to leave the shopping places in order to reach their home by 8 p.m. During the last year the web-shopping has been developed fast and today its turnover tripled as compared with the last year trade. Restaurants, snack-bars and coffee-shops are also closed. Only those units are operating which offer takeaway meals. In connection with this there is a huge requirement of delivery.

The scientific life went to the Internet, Eventbrite, Microsoft Teams and Zooms are the three major engines which bring people together through live experiences. The International Conference on Management, Entrepreneurship and Benchmarking and the FIKUSZ International Conference organized and held at the Óbuda University, The ATM – Access to Microfinance - for SMEs final conference held on 8.12.2020, the IMD session on Leading in Turbulent Times held in Lausanne, the ICSB World Congress which will be held in Paris 2021, all events are webinars.

COVID-19 (Coronavirus) has affected day to day life and is slowing down the global economy. This pandemic has affected thousands of people, who are either sick or are being killed due to the spread of this disease. This virus is spreading exponentially region wise. Still we do not have vaccination, this is why more and more people die whether they are old or young.

Day by day more and more people – simply citizens, experts and journalists – are convinced, that COVID-19 is not a **PANDEMIC**, rather a **PLANDEMIC** – a planned world-scale operation. The US Secretary of State, *Mike Pompeo* made a remark, that COVID-19 is a real-time testing of a carefully prepared strategy. Only our Lord knows what is the truth behind this scenario. However, one is sure, that such kind of disease do not occur spontaneously.

Last but not least I wish all our ERENET members, Friends and their family members Merry Christmas and Happy and Prosperous 2021!

**May this Season love warm your home,**

**May this brighten your road without Covid but with hope!**

Dr. Antal Szabó  
Scientific Director of ERENET



## PAPERS

### Peter Vogel

Professor of Family Business and Entrepreneurship

International Institute for Management and Development - IMD, Switzerland

E-mail: info@imd.org

www.imd.org

## ENSURE YOUR FAMILY BUSINESS IS FIT FOR PURPOSE IN A POST-COVID WORLD <sup>1</sup>

### ABSTRACT

The Global Family Business Center at IMD Business School is a world-leading family business research and education center, focusing on the real issues that you face as a family business. In a safe, confidential environment, you will expand your knowledge of successful family firms and better understand and navigate specific challenges and critical issues in your own family business.

Many family businesses have inherent strengths that promote longevity and stability. But how can they evolve to survive as the world grows ever more complex and uncertain?

The Autor highlights that there are two core principles of long-term success that we see in family businesses - resilience and adaptation,

**Keywords:** success of family businesses, nrntprtises in the fourth revolution, resilience and adaptation of businesses.

**JEL Classification:** D23, L11, L25, M14

*Many family businesses have inherent strengths that promote longevity and stability. But how can they evolve to survive as the world grows ever more complex and uncertain?*

From LEGO to Toyota, family businesses account for as many as two thirds of all companies worldwide. Some date back more than a thousand years, surviving pandemics, financial crises and waves of industrialization along the way.

“There are two core principles of long-term success that we see in family businesses - resilience and adaptation,” said **Peter Vogel**, Professor of Family Business and Entrepreneurship. <sup>2</sup>

According to Vogel, there are various factors that contribute to the multi-generational success of family businesses, with six being particularly relevant. This checklist can be used as a tool to conduct a diagnosis of your organization’s health and preparedness.

1. **Long-term perspective.** This means building strong relationships across the family enterprise system and passing on healthy businesses to the next generation. It also embeds institutional knowledge that is valuable during crises.

2. **Financial prudence.** Spending and investing with discipline means that family businesses are less likely to be over-stretched in times of crisis, and have the resources needed as a buffer during hard times.

---

<sup>1</sup> This paper is published on the kind permission of the IMD

<sup>2</sup> Peter Vogel is Professor of Family Business and Entrepreneurship and holder of the Debiopharm Chair for Family Philanthropy at IMD Business School in Lausanne. He is also the Director of IMD Global Family Business Center.

3. **Emotional connection of family and owners.** Families often have their name, history and values embedded and attached to their business. This emotional connection creates a deep sense of commitment and duty that can prove crucial in a crisis.

4. **Deep rooted values and loyalty.** Family businesses tend to have lower employee turnover rates, are less likely to lay off people in a crisis and have loyal leaders and advisors.

5. **Entrepreneurial renewal and adaptation.** These strengths are part of the DNA of successful family businesses that have had to evolve to survive centuries of change, either by adapting their core activities over time or jumping into entirely new markets.

6. **Enterprising families as a force for good.** Family traditions such as philanthropy and stakeholder loyalty mean that family businesses contribute to long-term societal change, and have an interest in supporting customers, suppliers and employees during hard times.

### No ordinary crisis

The COVID-19 pandemic has hit most companies hard. While many family enterprises have honed and developed the capability to survive shocks, the current crisis feels unique in its complexity - and has challenged even the most resilient and adaptable firms.

“There is something that is quite particular about this crisis - it comes at a time when we are in a globalized world, we are in a world where digitization is at the forefront, and we are in the middle of this fourth revolution,” Vogel said. “Reactivity is no longer an option.”

Vogel recommends three ways to transform the way enterprising families govern and run their businesses in order to prepare for and navigate future opportunities and crises in a rapidly evolving world.

1. **Think and act holistically.** Families must look beyond the strategic aspects of their business. This means regularly reviewing and taking necessary action to ensure each component of their enterprise system is healthy and fit for purpose from the perspective of the individuals, family, ownership, leadership, business and society and environment.

2. **Move closer together in times of crisis.** Revisit family ownership and business governance to align with current needs. Create a cross-function, agile task force to bring together stakeholders in real time. Establish effective, rapid and transparent decision-making and communications processes.

3. **Step up and engage.** For families, this means taking everyone along with you and leveraging younger family talents. From an ownership perspective, family enterprises must signal to all stakeholders that you are in it for the long haul. Businesses must also preserve cash and reduce complexity, while investigating new opportunities.

Source: <https://www.imd.org/faculty/professors/peter-vogel/>

International Institute for Management  
for Management Development



Source:

[https://www.google.com/search?xsrf=ALeKk00BpRa4ULt8uFczDWFVnPUw2OuJKQ:1607786190210&source=univ&tbm=isch&q=IMD+logo+Lausanne&sa=X&ved=2ahUKEwi\\_p\\_el3sjtAhVn-SoKHb7YAq8QjkkEegQIBBAB&biw=1846&bih=920](https://www.google.com/search?xsrf=ALeKk00BpRa4ULt8uFczDWFVnPUw2OuJKQ:1607786190210&source=univ&tbm=isch&q=IMD+logo+Lausanne&sa=X&ved=2ahUKEwi_p_el3sjtAhVn-SoKHb7YAq8QjkkEegQIBBAB&biw=1846&bih=920)

**Jean-Paul Clode**

STIR Foundation/AiREAS, Sustainocracy  
Eindhoven, The Netherlands  
E-mail: jp@stadvanmorgen.com

**John Schmeitz**

STIR Foundation/AiREAS, Sustainocracy  
Eindhoven, The Netherlands  
E-mail: john@schmeitz.advies.nl

**NEW ENTREPRENEURSHIP**<sup>3</sup>**ABSTRACT**

**In our theory, we expected to be able to trigger entrepreneurship while helping people to resonate with healthy city development by offering raw and processed data to which they could relate.**

**Keywords:** Entrepreneurial Activity, Smart City, Social Entrepreneurship, Evolutionary Step, Financial Gain

**JEL Classification:** B15, B52, L32, M13, R10

In our theory, we expected to be able to trigger entrepreneurship while helping people to resonate with healthy city development by offering raw and processed data to which they could relate. This theory was based on our own experiences gathered through the STIR foundation while pioneering our ideology through practical entrepreneurial activities. When we moved the dot on our own horizon from competitive, career-driven to creative in the field of developing core human values, every aspect of our life's fulfilment and commitment changed. We had become entrepreneurial in a totally new sense and valued our progress through measurable steps and multiple rewards. The latter, the rewards, garnered special attention owing to the differentiation between true value and financial reward. We noticed in our own attitude that the reward of purpose-driven activity, social cohesion, meaningful exercise, a professional learning curve and social recognition was stimulating enough to overcome the burden of minimum economic reward. The economic reward structure of our society had evolved along lines that were contributing to the problems of pollution. Developing a new societal complexity also necessarily required addressing the reward system, either through the production of true sharable valuables (food, housing, energy, etc.) or through restructuring the flow of finance. A new socio-economic reality appears in which we as individuals were entrepreneurial pioneers, seeking harmonization between our purpose-driven investment, different types of reward and coverage of our daily needs.

When a whole city changes its dot on the horizon, for instance, from mainly trade- or technology-driven activity to a formal health deal with all stakeholders, then everything related to that city changes as well, including its choices and activities. This should also manifest itself in a new burst of vibrant, incubating entrepreneurship, developing products and services around the new paradigm. A new entrepreneurial era is introduced. Entrepreneurship in early industrial times was only profit-oriented, and processes were expressed in financial gain alone, never holding business accountable for the consequences. In 2005, I introduced this idea in my Dutch book about market leadership<sup>4</sup> in the 21st century with the following key differentiators:

---

<sup>3</sup> With the permission of the Author. ©The Author(s) 2016, J-P- Clode (ed) AiREAS: Sustainocracy for a Healthy City, Springer Briefs on Case Studies of Sustainable development, DOI 101007/978-3-319-45620-1\_4

<sup>4</sup> Handboek voor de toekomstige marktleider (2005), published by Move to Holland.

- Before the turn of the millennium: Entrepreneurship uses humankind and the planet for financial gain
- After the turn of the millennium: Entrepreneurship serves humankind and the planet for sustainable human progress.

The entrepreneurship of the 21st century is therefore not limited to money-driven traders or speculators, but specifically connects value-driven innovators, including political executives, civil servants and those using applied scientific knowledge. Indeed, it boosts completely new structures and organizational formats for that particular kind of awareness-driven progress. Sustainocracy is a logical evolutionary step in this complexity.

We tried to prove the existence of such a boost of new entrepreneurial energy by actively looking for a positive stimulus and inviting people to do something with the challenge in an entrepreneurial way. We had already seen the initiative of civilian Ben Nas when he decided to develop a bicycle route to connect the 400 initiatives related to sustainable progress in his city quarter. This is a form of social entrepreneurship.

The problem we encountered is that the entrepreneurship that we know today needs to resonate with the financial system, not with social or ecological progress. This has led to the destruction of our surroundings and has reduced our social interaction simply because the financial system has no sentiment towards correcting itself or the moral instruments with which to do so, other than external regulation and the reaction of nature itself, including our own human ethical awareness. Regulation had created a reactive problem-solving system that was equally based on the insensitive money-driven reality. This dual economy of consumption and dealing with the effects of it has outgrown itself to critical and unsustainable proportions. The consequences were so great that the system demanded even more consumption in an economy of growth to enable government to tax, introduce insurances and more regulation to address the problems in a remedial way. When taxation does not work anymore, the national debt rises. In the Netherlands, the cost of society had increased nearly threefold in 10 years' time (2004–2014). This had an exponential character with an unrealistic prospect towards the future. Drastic changes were needed. And change means leadership with a powerful entrepreneurial spirit. This leadership was not money- but value-driven. Understanding this required a new way of looking at entrepreneurial leadership. Thus, the Pyramid Paradigm was born.

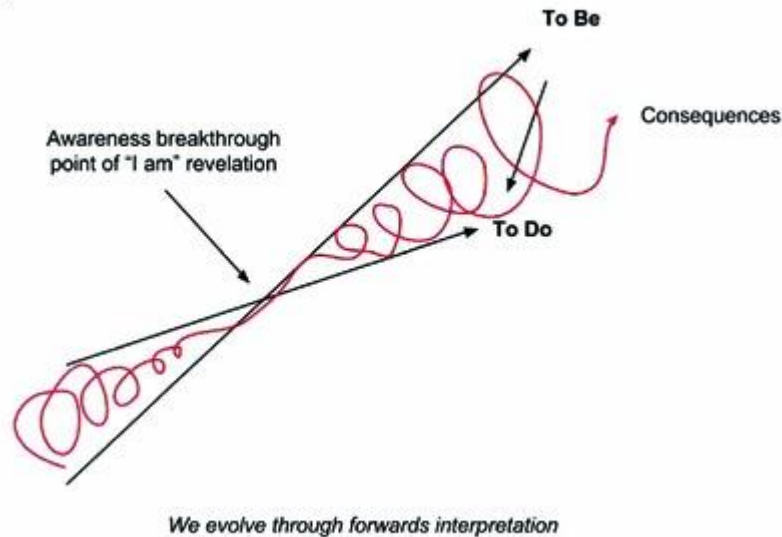
### **1. The Pyramid Paradigm**

In the previous publication on the development of AiREAS and its first phase of making visible the invisible, we already went to great length in introducing the human complexity. We introduced the cyclic evolutionary progress pattern that develops between the interaction of the consequences of what we do and the discovery of what we are through backward interpretation. To DO develops our to BE. We also suggested that we are at a point in history when a major psycho-social turnaround is taking place in which we are coming to know what we are and can develop our actions and choices around that wisdom, as shown in the picture above. Only then can our awareness (to BE) start guiding our actions (to DO) (see figure below). This energetic swap is unique in human history and represents our evolution from a collective perspective. It announces a whole new era in our existence as a self-aware, creative species.

When we apply this to our surroundings, we see that all kinds of human beings experience this upending of their wisdom through an intense boost of awareness. When some of these people occupy leadership positions in society, they become instrumental to the overall wisdom swap of that society. When we invited people to gather for AiREAS in 2011, a large diversity of individuals attended. Some had gone through the “I am” revelation, while others had not. Those who had not were in the competitive mode of survival, looking for short-term financial gain. They rapidly disappeared from AiREAS. The ones who had gone through this personal transformation stuck around and partnered in the multidisciplinary setting of value-driven creation and leadership. As we developed our activities, the contours of a whole new entrepreneurial setting appeared. We went step by step through this entrepreneurial breakthrough, which does not only affect business innovation but also the value-driven leadership of citizens, educators and government. We coined this as the Pyramid Paradigm.



Jean-Paul Close  
Inner illumination



The wisdom breakthrough and energetic swap

### 1.1 The Old Money-Driven Industrial Paradigm

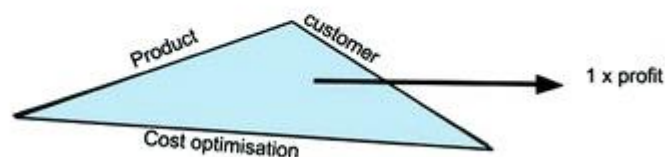
We are still living in the complexity of a society prior to the breakthrough of collective wisdom. This is normal, since only pioneers have crossed the line and united in preliminary value-driven settings such as AiREAS. Two worlds appear: the emerging and the one in collapse. Powerful forces try to delay the collapse, while both crises and the efforts of pioneers find openings to provide consolidated proof of the concept of the new era. This is called evolution, even though some experience it as a revolution.

The old industrial paradigm of money-driven productivity is based on a single profit-driven mechanism that consists of three basic elements: the product, the customer and cost optimization.

**Pyramid paradigm**

**4 x profit**

Industrial money driven basis



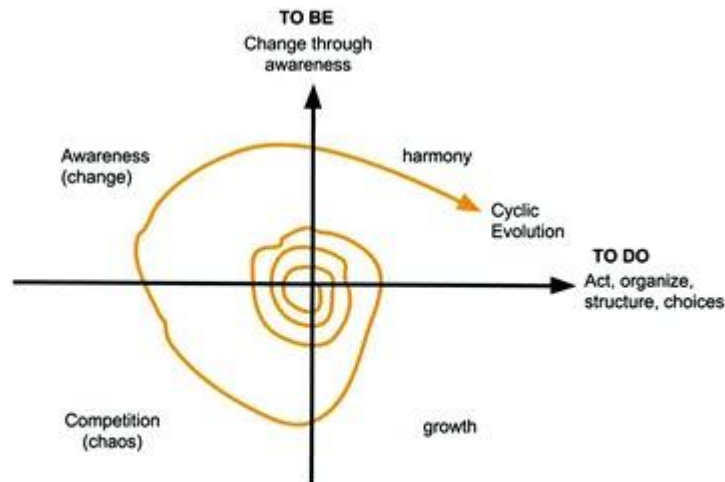
Jean-Paul Close

Value creation

It is an established theory in business economics that when a customer can choose between 3 or more alternatives, the destruction of value appears. This is caused by the competitive drive of each of the participants in the market and the disappearance of customer loyalty due to the choice between equivalents. Cost optimization efforts can concentrate on reducing the price of the product or increasing the volume of

sales. In both cases, a battle is fought which eventually will develop a shakeout among the market players at the expense of jobs, economic values and our environment. The focus on financial gain takes all emotion away from the choices made in the process, and ethics along the way. It is the law of the most aggressive that eventually wins the battle. This is, however, a temporary gain. The law of opposites shows that, while the blind battle of greed occurs, new players can introduce new ideas that eventually disrupt the greed by introducing genuine innovations. A cyclic economic pattern appears.

During the evolution of this industrial economic battle, we have seen the cyclic **Kondratiev**<sup>5</sup> patterns, showing peaks of economic development based on new communication and infrastructural innovations. The Kondratiev wave is equivalent to the cycle of human complexity of **Jean-Paul Close**<sup>6</sup> spread out over time. This cyclic pattern is shown here:



*Human complexity  
Jean-Paul Close (2009)*

Every time an era comes to an end, a crisis develops into chaos. This develops awareness and provides openings for new innovations to deploy themselves. The innovations probably already existed but were blocked by the conservative persistence of older techniques that remained dominant. When these reached the point of market exhaustion, natural adaptation occurred, just as in the previous collapse. Humankind and economies experience this as a crisis simply because nature and human cohesion are not part of this play. The sense of a crisis is nothing other than a powerful indicator that something that used to give a sense of security has gone obsolete and something new needs to fill the gap.

Economy emulates a universe of its own, having the same mechanisms as the biological patterns of life. But owing the disconnection with the reality of those cycles of life, due to the speculative economic focus on dealing with dead things (matter) that human life needs to support itself, it keeps developing ups and downs without the harmony that nature always experiences, simply because it combines various value systems at once. The focus on a single currency with no other collateral than debt makes the human and ecological drama even larger. In nature, a diversity of lifeforms mingles in permanent pursuit of harmony, using different resources to develop. During a workshop at the Zoo of Emmen, the imagination of entrepreneurship was triggered through looking at the diversity of butterflies living together in a relatively small space, and peacefully at that, due to the non-competitive differentiation of size, food, reproduction, etc. Creating an ecosystem in economies can overcome problems of current models that live through single cyclic patterns.

<sup>5</sup> [https://en.wikipedia.org/wiki/Kondratiev\\_wave](https://en.wikipedia.org/wiki/Kondratiev_wave).

<sup>6</sup> <http://www.hrpub.org/download/20150620/SA5-19690341.pdf>.



This also has its logic in the field of human complexities. Not everyone goes through a crisis at the same time or in the same phase of their lives. Many people do this on their own and develop awareness and innovative patterns ahead of the mainstream. If their leadership is blocked by a formalized mainstream, then progress is blocked out of the system's self-interest. Negative tension then gradually builds up. However, if the leadership receives freedom to deploy itself, it generates a positive tension between the robustness of the mainstream and the argumentation of renewal. When we deployed AiREAS, we addressed the awareness level of human beings at different levels of society first. When asking a deeply aware human being about the need for core human values, hardly any resistance is felt. If this is seconded by the proven vulnerability that builds up in the institutions, then the professional position of that same human being involves making a choice: contribute to the core values through the authority of the position, or negate awareness by supporting the mission of the institution, even if it proves damaging to the core values. Awareness and guts are human factors that become decisive for taking individual entrepreneurial action, but when these factors are combined in a multidisciplinary, awareness-driven co-creation, change is a fact. The human being comes first, awareness places the core values as a permanent goal, and leadership produces the required change for harmony. We use our institutions, knowledge and technology as instruments for progress, rather than submitting to them in dependence.

We have been attempting to prove this by going through our own value-driven cycles. Every exercise in AiREAS has been developed through this method of combined entrepreneurial approach by bringing people and authorities together behind the awareness switch. A whole new dialogue appeared, including new vocabulary to express ourselves without continuous disputes about the meaning of words in the different contexts.

### **1.2 4x Profit**

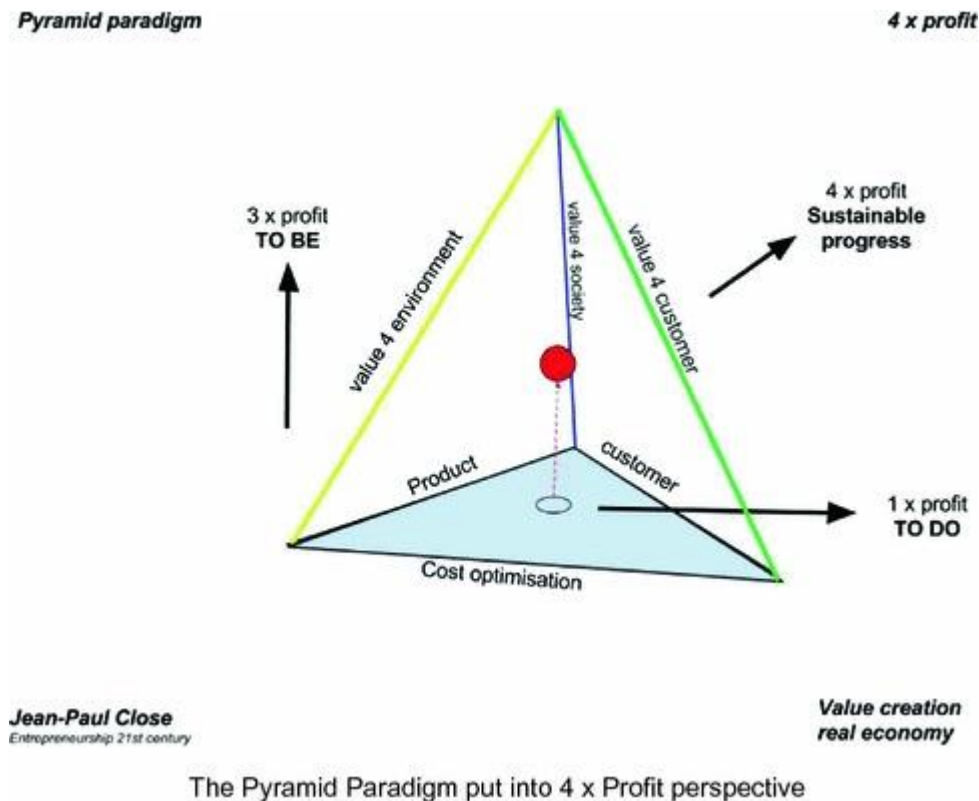
The new paradigm introduces the 4× Profit, or Pyramid Paradigm, mechanism as an evolutionary step in entrepreneurial value creation behind the moment of the wisdom switch. Since we have now become painfully aware of the consequences of the 1× profit paradigm, the transit to 4× Profit is becoming an adaptive response. Our entrepreneurial spirit does not just need financial profit through optimized processes of growth; it needs to connect emphatically to the ecological and humanitarian core values of sustainable progress through awareness and innovative change.

This evolutionary movement started around the turn of the millennium (the year 2000) with the common inspiration provided by the PPP (People, Planet, Profit) ideology. In essence, PPP introduced the other 3 profit lines of the 4× Profit Pyramid Paradigm. The only confusion people experienced resulted from the different mental association around the word "Profit". For the old age's mentality, "Profit" was simply contextually related to financial gain. In this PPP societal context, it hence would still relate to the old tradition of making use of the people and the planet for the company's financial benefit. For the new age's mentality, "Profit" means creating measurable added value within the meaning of 'Profit = Benefit'. In this new PPP context, this would mean that financial gain (the 4th profit) would be obtained by serving the people and the planet. To overcome such confusion, both in entrepreneurial and in societal circles, we defined the Pyramid Paradigm within Sustainocracy. This is proof of the need for a new vocabulary representing the new energies around the new challenges, avoiding the wrong verbal and mental associations that wind up generating long, meaningless discussions rather than co-creation efforts.

Our new vocabulary of Sustainocracy has been the cause of a great deal of discussion between people in regard to their perceptions, as it triggered the curiosity of those interested in learning about its meaning. Interestingly, the use of different words and semantics already carries the sort of real energy that we represent and with which we connect to each other within ventures and projects.

One of the consequences of such evolution is that the old, fragmented interests suddenly start to find each other in the center of that pyramid through the awareness-driven invitation. Entrepreneurship is no longer limited to money-driven business entities. Civil servants may also enter the same entrepreneurship of creating core values, not through regulation but co-creation. Civilians contribute through awareness-driven changes in

their consumption patterns and productivity. The 1× profit-based business practice is outdated and evolves into value-driven co-creation, affecting every participant. A product becomes an instrument, a user too, just like the financial means, a policy or the application of knowledge. This is both a major breakthrough and a tremendous learning process for all involved.



One of the consequences of such evolution is that the old, fragmented interests suddenly start to find each other in the center of that pyramid through the awareness-driven invitation. Entrepreneurship is no longer limited to money-driven business entities. Civil servants may also enter the same entrepreneurship of creating core values, not through regulation but co-creation. Civilians contribute through awareness-driven changes in their consumption patterns and productivity. The 1× profit-based business practice is outdated and evolves into value-driven co-creation, affecting every participant. A product becomes an instrument, a user too, just like the financial means, a policy or the application of knowledge. This is both a major breakthrough and a tremendous learning process for all involved.

With this, we started to experiment in order to prove the evolution of entrepreneurship of which we ourselves were an example. We now needed to show how the To Be part became dominant over our To Do decisions and that the center of the pyramid was populated with multidisciplinary tables of co-creation efforts based on core PPP + P values. Core value-driven entrepreneurship was no longer confined to “business people” but expanded so as also to include civilians, civil servants, educators, executives, etc., all of whom contributed to progress through value-driven interaction.

*Entrepreneurship is no longer referred to as “making money through producing and selling”; it becomes “co-creating core values together through multidisciplinary interaction”.*

With this basic understanding of the evolution of regional entrepreneurship, we could start finding our way in the complex duality of the existing reality, the old field of speculative economics and the new field of economic diversity through value-driven change and awareness-driven co-creation.

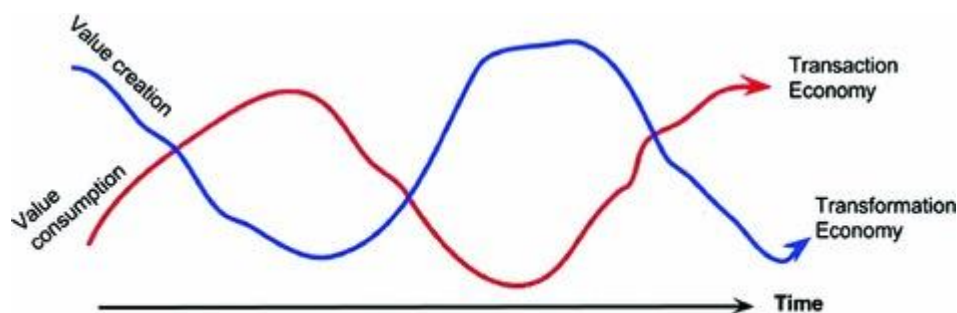
### 1.1 Hackathon <sup>7</sup>

In Eindhoven, another partner, **MAD** <sup>8</sup>, organizes so-called Hackathons, a challenge for software developers to do something with the open data that are being generated through the town's IT internet. AiREAS was invited to participate as an open data platform with its own live stream of near real time and fine maze air quality data. John Schmeitz represented the AiREAS challenge and explained its mission. Of the 10 registered teams, 3 decided to work with the AiREAS data. One of those became the winner of this particular challenge in 2015. This shows the impact of the new entrepreneurial context presented by AiREAS. The winning team had defined a mobile application allowing people to plan their bike route through town from a health perspective, using the fine maze air quality data provided by AiREAS. The idea was prize-winning, but the product did not get off the ground, because it could not connect with the economic drivers of the old paradigm. Who should finance it?

The traditional potential entrepreneurial partners concentrated on the speculative 1× profit alone. Since the App could only be deployed in Eindhoven, where we could use the ILM network, the investment would have to be covered by the local community or users. But the community is not yet in a mainstream phase of health acceptance. A commercial product was, at this stage, not feasible due to a lack of market awareness. The application would hence serve the leadership task of persuasion. It should therefore be made available free of charge and with strong persuasive techniques. AiREAS has no resources of its own to finance the development other than through our partners. The local government would have been the ideal sponsor, but no one could yet convince them to (co)finance this leadership issue to be introduced free of charge into the community. The links with financial backing could not be made and the project did not materialize.

This shows yet again that money and value are two different things, and so are management and leadership, in investment patterns. To deal with this differentiation, two routes could be chosen:

1. Revolving funds can be created to support such 4× profit initiatives at the pioneer stage when the moral/ethical part is covered but the 1× economic profit still needs to prove itself through persuasion and market development.
2. A new value system can be introduced that rewards those who create value through reviewing their decisions. Think of stimulating the first people who use the app and subsequently start biking so as to reduce pollution. This has obvious short-term and long-term benefits for society, including economic. The alternative system stimulates value creation rather than trade.



Two different value systems compensate themselves through human nature

<sup>7</sup> See at <https://en.wikipedia.org/wiki/Hackathon>.

<sup>8</sup> <http://madlab.nl/mad/?lang=en>.

AiREAS introduced its own AiREAS coin in an attempt to reward the value-driven participation of people. With this coin, they could access STIR inspiration classes and share locally-produced products from FRE<sup>2</sup>SH. It was experimental, but did not gain immediate acceptance from the local government due to their dependence on the Euro. Meanwhile, in other regions, we saw lots of other experiments with new value systems addressing the stress created by the way in which the Euro is managed as a single currency. With such a new, value-driven unit, the transaction economy could be relieved and both could develop positively. But these mechanisms would only be understood when commonly accepted throughout a community. It is only a matter of time before such instruments become common practice. Experiments already show progress.

## 2. AiREAS Itself as Value

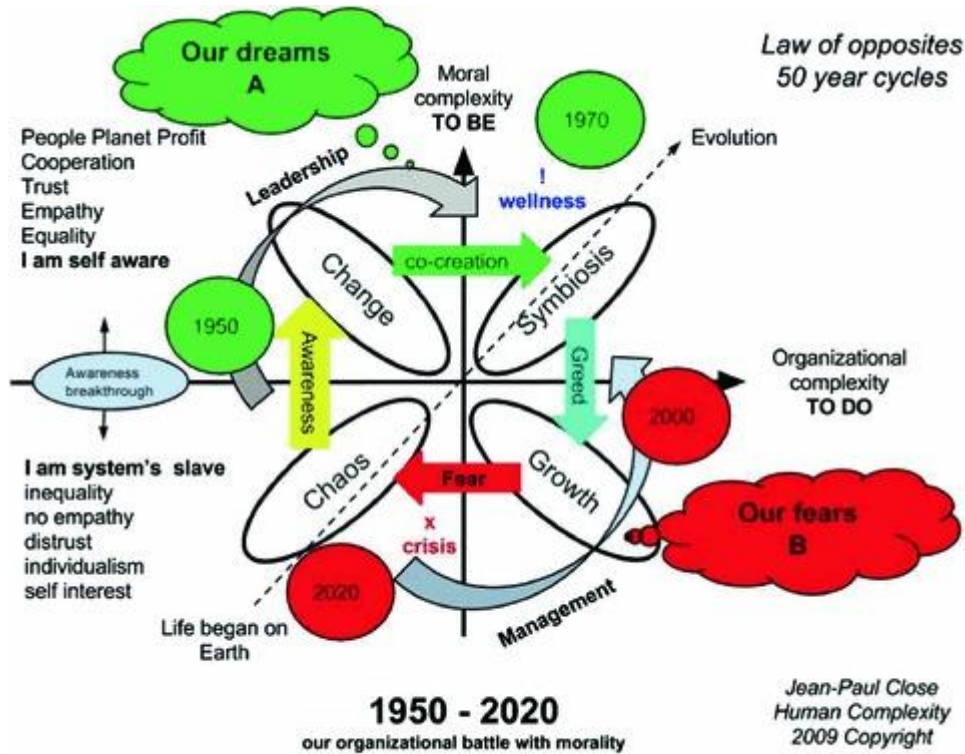
Meanwhile, other levels of entrepreneurship showed themselves to have significant influence. AiREAS had started off in a political and economic environment in 2011, connecting to the executive motivation of *innovation* (technology) and *civilian participation*. In 2015, new elections brought a further evolution of executive policy agreements. The new coalition adopted “health” as the main driver of technological and social innovation. This decision meant, for the first time, that the dot on the horizon had shifted from pure economic drivers to one of a core humanitarian value. Executive members of the local government were showing value-driven leadership, positioning themselves and their institutions at the core of the pyramid. This became a key source of inspiration for new age local entrepreneurship to do the same and seek coalition with its governance. AiREAS’s original government partner, Mary-Ann Schreurs, became the government initiator of the local “Health Deal”, a significant step forward towards a mature eco-society. This evolution can only be successful when broadly carried by the entire society and supported by the executive transition to the new era.

### 2.1 Historical Evaluation

200 years ago, the very first constitution of the Netherlands was designed to mediate between the industrial and public interests, including a commitment to health in response to the effects of pollution by the enterprises. At a certain stage, the average age in the region was just 30 years, due to both diseases (pollution) and local criminality (wide gap between rich and poor). Pollution and social inequity motivated a democratic political economic reality to develop based on the duality of economic growth and dealing with the consequences of the contemporary circumstances. Very soon after the introduction of the first constitutions, the political elite decided they needed to review their lawful commitment to health, because they felt they could not bear that responsibility. The variables were too large and beyond their scope of influence, other than the lawful option of regulating and introducing taxes for healthcare services. Thus, the fragmented structure we see today first appeared in which the government took on regulatory responsibility while structuring a remedial health care system that merely seeks to repair possible damage done. Over time, our remedial knowledge became so extraordinary that, together with an unprecedented period of regional peace due to the introduction of social securities and diplomacy, the average life expectancy grew to over 80. This also became the main trigger for modern age financial stress and the choices that were made in the ‘70s and ‘80s to let go of the gold standard and allow unprecedented economic growth through speculation. Enormous amounts of money were needed to sustain such a caring model of the state based on money.

The number of economic bubbles produced by the combination of these decisions and the human characteristic of greed could not be foreseen until 2008, when the credit crisis opened the eyes of many to the crude reality of an unsustainable economic situation. A choice needed to be made. Manage the situation by injecting capital into the old system, hoping for recovery? Or foster leadership for change, using our awareness and entrepreneurial spirit to create something new? The local government, back in 2008, was driven by a sense of urgency, and chose to manage the situation through capital injection as an instant remediation of the problem. STIR, in 2009, chose to opt for leadership and the design of a new reality. This duality has become the basis for a new way of addressing regional development, differentiating between the already-mentioned leadership and management routines.<sup>6</sup> This applies to individual human beings, institutions and societal systems. It differentiates between the stress of holding on and the guts to let go.

The transformation of the government’s financial positioning also began within that same timeframe. The investment patterns needed to change from hardware-driven infrastructural ideas to facilitating human-driven interaction, creating a transition between management and leadership through dealing wisely with chaos, letting go of fear and embracing guts.



The executive dilemma: management or leadership?  
"the law of opposites"

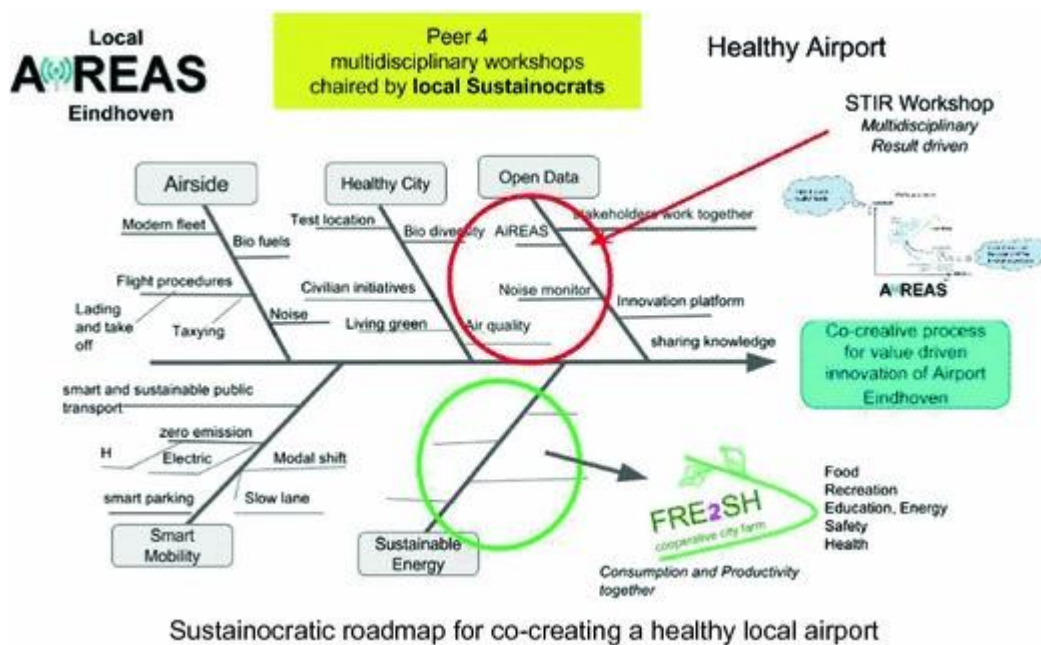
The context of the city’s directive had changed, and with it the entire image of the city’s short- and long-term development. The executives started to place “healthy” in front of everything and began to create roadmaps for achieving the required results and choosing the priorities that would follow. The sustainocratic method, with a Sustainocrat as an independent chairperson, serving as a hub of connection within the multidisciplinary setting, became the recommendation carried forward for developing each of the strategic lines. This released an unprecedented amount of power, mobilizing all of the talent available in the region to contribute to the leadership trail.

What was different from 200 years ago? Why could such an evolutionary step be taken now and not back then? The answer has multiple components. The primary one is that globalization has simply reached its limits. 200 years ago, there was no global perception at all. Growth was solely the byproduct of local governance, industrial activities and labor forces, clearly differentiated pillars of society. Today, this differentiation remains in formal terms, but the practical reality has been transformed. Financial dependence, the authority of private banking systems, the system of debt and speculation of shortages, and governance of control through technology in a world market with an explosive human presence has disturbed any harmony between the people, the system and our natural environment. The citizenry has access to unlimited amounts of information that it can process for its own awareness and survival processes in an obsolete formal system. In the past, responsibility could be claimed through democratically-chosen regional governments, but nowadays, we have become aware that to change the situation, we need to let go of everything and redefine our reality, just like we did 200 years ago. The context is different, as are the issues. The perception is arising



that it is not a financial issue, nor a government or business development. It is one of psycho-social awareness for which we are all responsible together, and we can only address our sustainable progress when working together through an approach of holistic regional co-creation, no longer merely thinking of the sum of the parts. The problem we must solve is overcoming the old sense of regional hierarchy that stands in the way of us finally, truly stating, ‘We are all in it together’.

The only issue to solve was overcoming the idea that government itself should lead, when, in fact, the core values such as health should. Government could pave the way and behave as the backbone of the complex process, but the stakeholders had to do the innovative work together. The role of the sustainocrat had proven itself throughout the years since AiREAS had been founded and had become the connector within this complex process. Rather than the duality of “economic growth and consequences”, a new duality arose: “core value-based leadership and expanding innovations”. This was a far more sound economic relationship, based on the 4× Profit, and was coined the Transformation Economy, an economy focused on value-driven change rather than just growth. Harmony through change was to lead, not greed through growth.



Every line along the roadmap requires value-driven entrepreneurship and intense change that can be measured along the 4× profit lines. Every creation is unique and hence a new value that can be added to the economic cycle between value creation and expansion through transactions.

## 2.2 Diner Pensant

In September 2015, the regional governance arranged an executive dinner during which the Health Deal was formulated, as well as the Sustainocratic way forward. A new era had started that had outgrown its living lab status begun in 2011. A new reality had emerged that would inspire ourselves and the rest of the world. This reality demanded a new underlying infrastructure of information and communication with which to work. It challenged the way we deal with data, leadership and each other. An initial commitment for a regional Health Deal was formulated. Eindhoven and Brabant were writing history.



The world reacted by showing interest in the format of awareness-driven multidisciplinary co-creation. In 2013, the partners within AiREAS had already determined that two core values, developed together, were ready for global expansion:

- the way of working together that had been coined Sustainocracy, including the Transformation Economy
- the phase 1 ILM structure of making visible the invisible.

### 3. Quality of Our Data and Interaction

Now that the entire regional development was resonating with the Health Deal, with the open data provided by multiple networks, including that from AiREAS, with the world watching over our shoulders, we were confronted with the imperative need to provide quality. When we established the ILM, we wanted to use the information on exposure to persuade the population to review their daily activities and develop patterns of social innovation. But the data we display and use has to be 100 % indisputable. In an experimental phase, we can still use a learning curve as an excuse, but when such basic infrastructure starts delivering data that is used for important decision-making, we need to re-examine our commitment. Not only did maintenance of the network become an issue, but also calibration, validation and interpretation. A new team was installed to examine the data independently with an eye towards three goals:

- Provide data, knowledge and feedback for policy-making
- Provide open access for users to develop their own applications and social innovations
- Connect to other systems to manage the city effectively.

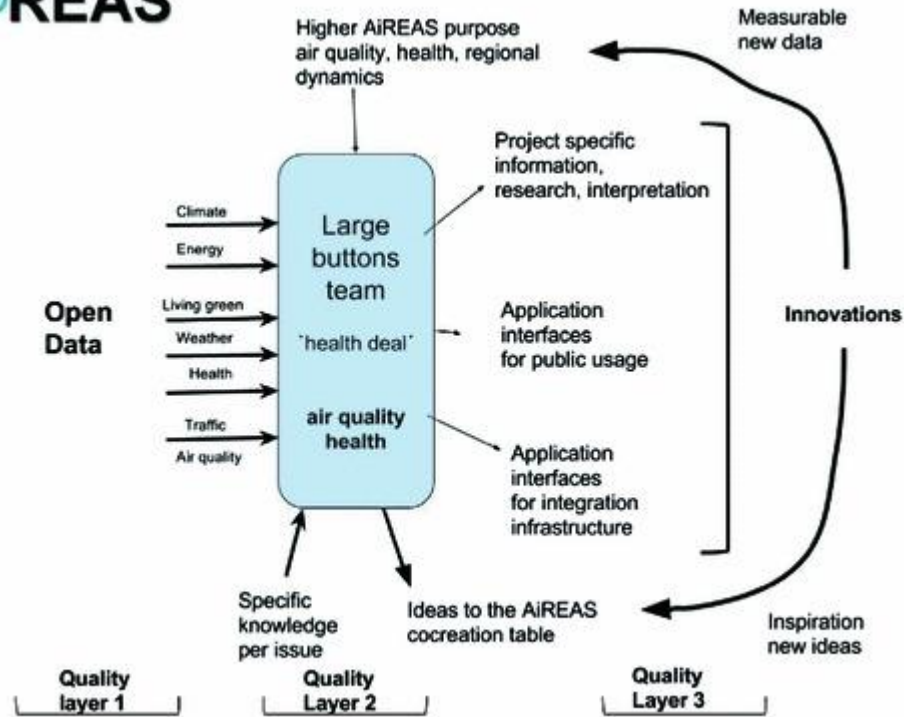
The team was called the “large button” team, not because we turn those buttons ourselves, but because we influence them by guarding the quality standards of our interaction and interpretation. We established three levels of quality:

All this is done in a circular format, in which data produce change and this change is then captured again by the system as new data.

2015 brought about a tremendous effort to assure quality along the lines of making choices and taking steps. The original entrepreneurial partners who had produced the airboxes needed to review their commitment, since they had not taken enough into account the maintenance and calibration requirements during the operation. Low cost networks can become very expensive if they provide incorrect information, especially if the data is used to influence the entire town’s dynamics. All kinds of issues needed to be resolved that had been unaccounted for in the original design and rollout of the ILM.

2015 brought about a tremendous effort to assure quality along the lines of making choices and taking steps. The original entrepreneurial partners who had produced the airboxes needed to review their commitment, since they had not taken enough into account the maintenance and calibration requirements during the operation. Low cost networks can become very expensive if they provide incorrect information, especially if the data is used to influence the entire town’s dynamics. All kinds of issues needed to be resolved that had been unaccounted for in the original design and rollout of the ILM.

This learning process has been registered to avoid such issues reappearing in other regions where similar steps might be undertaken. A new economy was created that referred to the educational support for peer 4 regional development, as well as the deployment of products, services and experiences that could be used to determine network requirements elsewhere. Every region is based on the human beings that reside and live their lives there. All regions hence share the common core values but differentiate in decision-making along the lines of local priorities informed by cultural and demographical diversification. Local Sustainocrats would make the difference, as they know the complexity of the local culture and history.

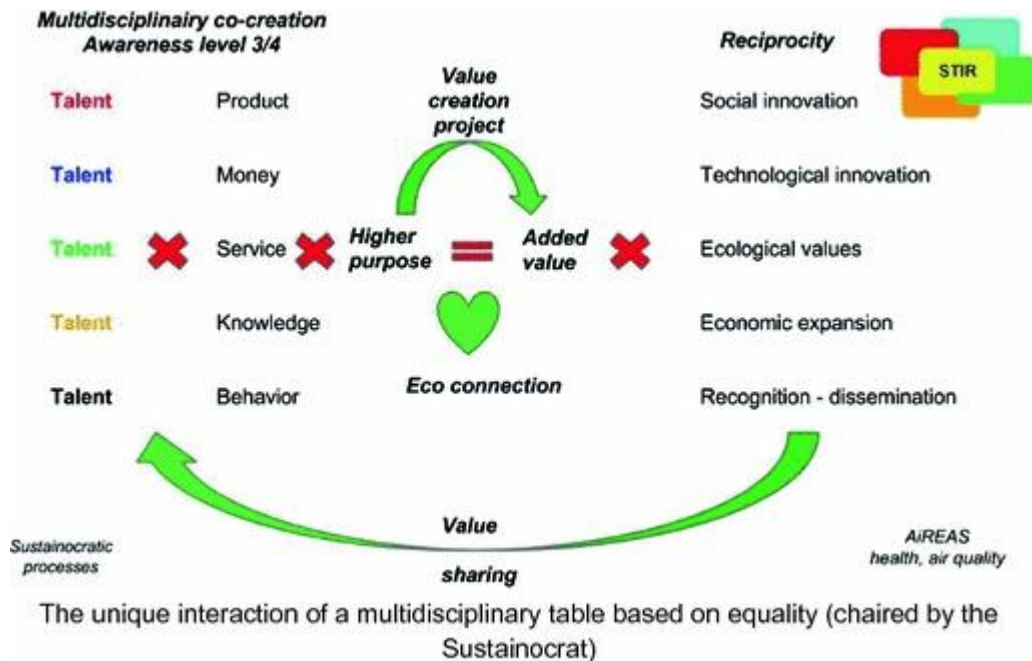


The large buttons team is, in fact, our quality assurance across the line

#### 4. CONCLUSION

The entrepreneurial context is relative to doing something of value for the surroundings in order to serve oneself. Reciprocity is another word that has a more diverse meaning than mere economic profit. It refers to the return one gets when engaging in value-driven entrepreneurial activities. The return can be to save money and resources (government), to develop or test new innovations (business), to collect new insights and knowledge (science), or to return to a healthier personal situation (civilian). All reciprocal rewards together in a multidisciplinary context do not tend to bite, but they do enhance each other. This lack of competition, with the freedom to defend one's own interests, empowers people to become entrepreneurial in a value-driven manner, no matter what talent or expectations one brings into the group, as long as they contribute to the higher purpose.

A whole new world of integral, value-driven entrepreneurship developed that involved everyone within society. Reciprocity may be diverse, but a new value system is needed to compensate public creativity, particularly when it is not directly related to the speculative world of trade and euros. With such duality, stability can be assured in the region, while harmony and empathy become the leading core value-based triggers for continuous innovation. Change becomes the only constant, producing progress and a safe environment. Through the involvement of many pioneers, we started to develop such an entrepreneurial path in which the product does not lead, but rather its innovative, measurable contribution to the value-driven context does. The appearance of a product is hence conditioned to these expectations and will only be considered a success when proven through the chain of events of co-creation. This has also introduced a totally new way of rewarding the effort.



#### 4.1. New Reward System

The sustainocratic table starts with no money, no budget, just the stakeholders and the higher purpose of health in relation to air pollution and regional dynamics. When a project is defined, then resources are allocated by everyone involved. Government tends to bring in public resources such as tax money and infrastructures. Others bring in innovative talent, existing or new technologies, social innovation and knowledge. So, when a project is started, the expected result is known, the commitments defined and the resources allocated. Everyone knows what to do. The money is deposited and people get paid instantly as their contribution materializes. Budgetary overshoots are not allowed and anything “unforeseen” is placed on the table as if it were a new project. The project is not finished if all commitments have not been covered and the expected results made visible. This includes the time needed to prove the effects of the multidisciplinary investment. The proof is for the benefit of all, in order that they might be able to expand the values created through contribution via the traditional transaction economy. Without this proof, the arguments that sustain the pursuit of core values are lost and the project loses at least three lines of profit. With the sustainocratic proof, the product reaches a leadership status of value creation that enhances its positioning.

#### 4.2. Global Expansion

Another significant entrepreneurial activity is the expansion of our values into the global setting of evolution. The first phase of AiREAS already introduced the basics of peer 4 regional development: the unique method of working and the need for qualified information to feed innovation for the pursuit and sustainability of core values. Phases 2 and 3 will further boost this internationalization of the evolutionary steps. The immense struggle we all had to go through to structure our new reality can be largely avoided elsewhere. It also made our arguments robust and our presentation persuasive worldwide. While Eindhoven did not get the politically-desired temporary title of cultural capital of Europe in a competitive environment among cities, we had already informally claimed the title of “global capital of cultural change”. Each of the pillars of our society is living up to that commitment by representing our values and co-creation. AiREAS itself, as a cooperative community, has also connected those commitments by presenting itself to the world through the following outlets:

- Open access publications, from Springer and New Horizons
- VINCI Award of Innovation

- Presentation in Barcelona, Global Expo Smart Cities
- Presentation in India: Smart Cities, Smart India
- LOI with China through Province North Brabant
- European programs H2020, Interreg V, Erasmus+
- Regional development programs with Turkey
- Healthy Airport
- Participative education program development
- Etc.

**The transition affects everyone:**

- *New entrepreneurship*: sensor development, applications, drones, complex ICT data infrastructures, integrated Traffic and Air quality management structures,
- *New governance*: Health Deal, health-based regional development, peer 4 participative society, new allocation of public funds,
- *New science*: DAMAST, POP Health, persuasive communication, city design, etc.
- *Civilians*: Social innovation, social entrepreneurship, participative learning.

Interestingly, we can hardly refer anymore to individual entrepreneurs, but have reached the point of an entrepreneurial society in which all participate and share the values. We still have a long way to go to make this mainstream, but the fundamentals are visible and growing, and seeds continue to find fertile ground across the world. Every year, we will see it develop itself and get more and more robust, in Eindhoven, North Brabant and throughout the whole world.

Copyright 2016, The Author(s)

**Open Access** This chapter is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, duplication, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the work's Creative Commons license, unless indicated otherwise in the credit line; if such material is not included in the work's Creative Commons license and the respective action is not permitted by statutory regulation, users will need to obtain permission from the license holder to duplicate, adapt or reproduce the material.

Bookshelf ID: NBK500230PMID: 29787095DOI: 10.1007/978-3-319-45620-1\_4  
Contents

**Buah Aku-Sika**

PhD Student

University of Miskolc - Institute of Economic Theory and Methodology

E-mail: qkoakusika@uni-miskolc.hu, akusikabuah@gmail.com

LinkedIn: <https://www.linkedin.com/in/aku-sika-buah-95b38b73>**ASSESSMENT OF THE IMPACT OF ENTREPRENEURSHIP ON ECONOMIC GROWTH: A GHANAIAN CASE STUDY<sup>9</sup>****ABSTRACT**

It is interesting to note that entrepreneurship is contributing immensely towards the economic growth and development of most nations. Particularly in less developed economies where it is somewhat difficult to get jobs in the public or private sectors, we see a lot of people trying to start-up their own small businesses and in the long run these businesses contribute their quota towards economic growth and development. The objective of this write up is therefore to assess the impact of start-ups and own businesses on economic growth and development using Ghana a case study. To achieve this, the Ease of Doing Business data which is measured by the score of starting a business from the world bank databank and the Self-Employment which is also measured as a percentage of total employment are used as proxies for entrepreneurship and these are the main independent variables in the model. Education and gross savings are employed as the controlled variables. To test if the data obtained is authentic and that it is not going to produce any spurious results, a stationary test is conducted using the Augmented Dickey Fuller (ADF) test. After conducting the unit root test to analyze the level of stationarity among the variables, it was observed that the results was a mixture of I(0) and I(1). The study thus employs the Fully Modified Ordinary Least Square (FM-OLS) to examine the relationship amongst the variables of interest. The FM-OLS method produces reliable estimates for small sample size and provides a check for robustness of the results. Using Ghana as the case study and a period between 2000 to 2020, the FM-OLS is the best technique that can be used to estimate the relationship among the variables of interest. The results indicate that the respective dependent variables have a significant and positive impact on economic growth.

**Keywords:** Entrepreneurship, Economic Growth and Development, Augmented Dickey Fuller test, Ghana

**JEL Classification:** C12, C14, G30, M13, M21, O,

**INTRODUCTION**

A recent research work, by Awlaqi and Ayah (2019), has thrown more light on the issues of entrepreneurship and growth. According to them, entrepreneurs do not only obtain wealth from entrepreneurial ventures as individuals, but they also create jobs which provides employment opportunities for others in the society and this has a long run effect on growth. The dynamic role of entrepreneurs and small business owners in emerging economies has contributed to vast development opportunities in the emerging economies. The International Monetary Fund (IMF) Regional Economic Outlook for Sub-Saharan Africa (SSA) has in fact reiterated that small and medium-sized enterprises (SMEs) create over 80% of the region's employment. Over the past decade, the evolution of entrepreneurs has been at the heart of Africa's growing economy. It is worthwhile to zoom the telescope on Sub-Saharan African, specifically on the Ghanaian economy to assess the impact of entrepreneurship on economic growth.

Although, through entrepreneurship the entrepreneur is made better off, there are some extended effects on the population and the planet as a whole. McClelland (1962), throws more light on the aspect of

---

<sup>9</sup> This is an improved version of the paper presented at the FIKUSZ Symposium for Young Researchers held on 20 November 2020 at the Óbuda University in Budapest.

social entrepreneurship. In his theory of the “Achievement Motivation Theory” he explains how entrepreneurship aids economic growth and development by influencing other aspects of the economy. Transferring this theory and knowledge into the Ghanaian context, we can postulate that, entrepreneurship will not only lead to economic growth and development, but the general wellbeing of the of the people and even the planet could be affected. It is of vital importance to pay attention to issues of entrepreneurship.

## LITERATURE REVIEW

The nexus between entrepreneurship and growth has been approached differently by different stakeholders. This section takes a critical look at some works on entrepreneurship and growth which have been done in past by some proponents.

For instance, Thanti and Kalu (2018) illustrate how institutions and human capital facilitate entrepreneurship, which in turn aids economic growth and development. It is interesting how Thanti and Kalu (2018) first create a robust support for the well-known notion by Adam Smith and Joseph Schumpeter, that for the economy to grow in the long run there is the need to improve human capital and institutions. With the Generalised Method of Moments as the base model, they develop the Entrepreneurship Orientation (EO), which consist of innovativeness, risk taking and proactiveness. With a sample of 93 countries and a period between 1980 and 2008 they use the Generalised Method of Moments (GMM) to examine institutions and human capital as potential determining factor of the so called Schumpeterian entrepreneurship.

Studying the impact of entrepreneurship on growth, Salgado-Banda (2005) uses data on self-employment and productive entrepreneurship as the two main measures to examine how entrepreneurship affects economic growth. Using 22 OECD countries, the author finds out that, self-employment has a negative relationship with economic growth where as productive entrepreneurship has a positive relationship with economic growth. According to Salgado-Banda (2005), productive entrepreneurship is simply the degree of innovativeness of the entrepreneur as inspired by Baumol (1990), while self-employment is starting up or owning a new business. Due to the nature of his research questions he employs different methods to undertake each specific objective. For instance, he uses the Ordinary Least Square (OLS), Two-Stage Least Square (TSLS) and the Generalized Method of Moments (GMM) to make a cross-sectional analysis using the data from 22 OECD countries within the period 1980-1995.

Another interesting paper on the entrepreneurship-growth nexus is the work of Stark (2012) where he used the Granger causality methodology to examine the causal relationship between entrepreneurship on economic growth in Alabama. To achieve this aim, he first provides a conceptualized meaning of economic growth and entrepreneurship. In the context of his work, employment growth was used as a proxy to represent the growth of the economy and the measures for entrepreneurial activity were sole proprietorship and patent activity. The former could be owning a business entity which already exist and the owner does not have a legal right to that property while the latter is creating something new and transforming it into a business and having the legal right to own that property. Using data from 1990 to 2008 from the Bureau of Economic analysis, Stark (2012) first test the stationarity level of his variables and then uses the granger causality test to examine the nexus between entrepreneurship and growth.

Dilanchiev (2014), in his work “Relationship between entrepreneurship and unemployment” used regression analysis to examine the impact of entrepreneurship on unemployment using Georgia as a case study. Although in recent years, the link between entrepreneurship and economic growth has become somewhat popular, the relationship between entrepreneurship and employment is gaining immense attention as well. From this assertion, it was determined that the nexus between entrepreneurship and unemployment was analyzed by two main factors; the Schumpeter’s effect and Refugee effect (Audretsch D., 2007) (Varheul et al., 2006). From the refugee effect, it can be concluded that, unemployment encourages entrepreneurship and from the Schumpeter’s effect, entrepreneurship has a negative relationship with unemployment. Activists of refugee effect claim that the high unemployment rate reduces the possibility to get satisfying level of income and decreases the opportunities to get gainful job places, hence, this two conditions “pushes” the individual to start business activity (Tervo H., 2002). Schumpeter’s effect on the other hand assumes that



growth of entrepreneurship and new start-ups will offer employment opportunities and ultimately influence the formation of employment in other existing firms. Using these major variables, Dilanchiev (2014), uses simple Ordinary Least Square (OLS) regression analysis to establish a relationship between these variables with data from 2003 to 2013. Two main hypothesis are tested; the first hypothesis is that, higher rate of entrepreneurship decreases unemployment rate and the second hypothesis is that with higher rate of unemployment, more people will start entrepreneurial activity.

**METHODOLOGY**

**Augmented Dickey- Fuller (ADF) Test**

The first test required in estimating a time series data is the unit root test. This test is done in order to know the order of integration of each variable used. In cointegration process, it is very important to test the order of integration for econometric model specification. Again, most variables according to economic theories should be integrated or have a random walk. In such a situation, it is important to perform this test in order to find exact estimated values. For the purpose of this study this test is done with the help of the Augmented Dickey Fuller (ADF) procedure. The objective of the unit root test is to ensure that the variables are stationary before proceeding to estimate the coefficients of the variables. The tests were conducted at the levels and at the first difference. When the test was done at the levels it was observed that all the variables were not stationary except for education, this means education is integrated to order zero I(0). To make the variables stationary the unit root test was conducted again at the first difference and it was observed that all the variables were now stationary. This means that the rest of the variables; Gross Domestic Product (GDP) per capita, Self-employment, Start-up and Gross savings are integrated to order one I(1). After making sure that all the variables are stationary, the next step is to examine the relationship among the dependent variable, (GDP per capita, which is used as a proxy for economic growth) variable and the independent variables.

The ADF test may be expressed by the following equation:

$$\Delta Y_t = \alpha_1 + \alpha_2 t + \alpha_3 Y_{t-1} + \sum_{i=1}^p \beta_i \Delta Y_{t-i} + \varepsilon_t \dots\dots\dots (1)$$

Where  $Y_t$  represents the time series variable, t is the time/trend variable,  $\alpha_1$  and  $\alpha_2$  are the estimated parameters,  $\Delta$  is the first difference operator,  $\beta_i$  denotes the various estimated parameters of the differenced values of the lagged variables and  $\varepsilon_t$  is the white noise error term.

**Fully Modified Ordinary Least Square (FM-OLS)**

Since most of the variables are stationary at the first difference I(1), the Fully Modified Ordinary Least Square (FM-OLS) can be used to examine the relationship among the dependent and independent variables. To demonstrate how to estimate a time series analysis using FM-OLS there is the need to ensure that the variables are stationary and that they will not produce spurious results. Phillips and Hansen (1990) initially designed the Fully modified least squares (FM-OLS) regression to provide optimal estimates of cointegration regressions. According to them, “the method modifies least squares to account for serial correlation effects and for the endogeneity in the regressors that results from the existence of a cointegrating relationship”. The FM-OLS method produces reliable estimates for small sample size and provides a check for robustness of the results. In Ordinary Least Square (OLS) estimation, the estimates may suffer from serial correlation and heteroscedasticity since the omitted variables might be captured in the residuals. This may produce biased and unreliable results. Therefore, the FM-OLS take care of endogeneity by adding the leads & lags and in addition. It is interesting to note that the Fully Modified (FM) procedure can be applied to models

with cointegrated regressors and even stationary regressors without losing the method's good asymptotic properties.

The foundation model upon which the FM-OLS is built is specified as follows;

$$y_{it} = A_{1X}i + A_{2X}i \dots A_{nX}i + \beta_{1it} \dots \beta_{nit} + u_{it} \dots \dots \dots (2)$$

where  $y_{it}$  is the dependent variable,  $A_{1X}i$  and  $A_{2X}i$  represents the independent variables and  $\beta_{1it}$  represents the controlled variables to be used in the equation.

Following the original version of the FM-OLS model by Phillips and Hansen (1990) the model to be used in the model is specified as follows;

$$GDP_{it} = A1STARTUP + A2SELF + \beta1EDUC + \beta2GRO\_SAVINGS + u_{it} \dots \dots \dots (3)$$

The dependent variable in the model is economic growth and for the purpose of this study the Gross Domestic Product (GDP) per capita is used as a proxy to represent growth. The independent variable is entrepreneurship and for the purpose of this study, the (STARTUP) and the (SELF) variables are used as proxies to represent entrepreneurship. From the literature, the following controlled variables are selected; Human Capital (HC) which is used as a proxy for education, and the gross saving (GRO\_SAVINGS) variable which also represents private investment. The private investment variable was specifically included in the model because most entrepreneurs after acquiring financial capital either start up a business or invest it in financial institutions. A1 and A2 are the coefficients for the main explanatory variables (startups and self-employment) while  $\beta_1$  and  $\beta_2$  represents the coefficients for the controlled variables (education and gross saving respectively).

### Description of Data

This study consists of 5 variables over the period 2000-2020 using Ghana as the case study. The study period is chosen based on the availability of data. The variables include Gross Domestic Product (GDP) per capita, Start-Up, Self-employment, Education and Gross savings.

The dependent variable is economic growth as proxied by Gross Domestic Product per capita. GDP per capita is chosen because it is a good measure of economic wellbeing (Global Economic Prospect Report, 2018). For the purpose of this study the GDP per capita growth (annual %) obtained from World Bank national accounts data, and OECD National Accounts data files was used. This variable shows the annual percentage growth rate of GDP per capita based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP per capita is gross domestic product divided by midyear population.

Start-ups is one of the explanatory variables used in the model. It consists of the score for starting a business. It is the simple average of the scores for each of the component indicators: the procedures, time and cost for an entrepreneur to start and formally operate a business, as well as the paid-in minimum capital requirement. Data for these variables was obtained from World Bank Group, Doing Business project (<http://www.doingbusiness.org/>). Economies are ranked on their ease of doing business, from 1–190. A high ease of doing business ranking means the regulatory environment is more conducive and relative easy to the start and operate a new business or a local firm.

Self-employment are those workers who, working on their own account or with one or a few partners or in cooperative, hold the type of jobs defined as a "self-employment jobs." They represent a percentage of the total employment that is owned by the private individuals. For this variable data was obtained from the International Labour Organization, ILOSTAT database.

The controlled variable Education measures the gross enrollment ratio, from primary to tertiary for both sexes. It shows the total enrollment in primary, secondary and tertiary education, regardless of age, expressed as a percentage of the total population of primary school age, secondary school age, and the five-year age group following on from secondary school leaving. Data was obtained from the UNESCO Institute for Statistics.

Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption). It is measured by the percentage of the GDP that did not go into consumption. Data is obtained from World Bank national accounts data, and OECD National Accounts data files.

Variables	Critical values	Levels + Intercept		Critical values	First Difference + Intercept		Integration Order
		t-statistics	Prob*		t-statistics	Prob*	
Dependent & Controlled variables	(5% significance level)	t-statistics	Prob*	(5% Significance level)	t-statistics	Prob*	I(0) / I(1)
GDP per Capita	-3.029970	-2.05872	0.0762	-3.040391	5.017235	0.0010**	I(1)
Start_Up	-3.081002	2.139257	0.2336	-3.119910	3.860399	0.0141**	I(1)
Self_Emp	-3.052169	0.029614	0.9429	-3.065585	3.660525	0.0164**	I(1)
Education	-3.212696	3.851954	0.0192**	-3.144920	8.192738	0.0000*	I(0)
Gross_Saving	-3.029970	0.619818	0.8440	-3.040391	4.374696	0.0035**	I(1)

## RESULTS

### Unit root test results

The results of the unit root indicate that at the level all the variables are not stationary except for **education**. The null hypothesis (H0) states that; the variable in question has a unit root while the alternate hypothesis

(H1) states that the variable in question does not have a unit root. If the probability value is greater than 0.05 then we accept the null hypothesis, however if the probability value is less than 0.05 we reject the null hypothesis. At the level the probability values for the variables; GDP per capita, Startups, Self-employment and gross domestic savings are all greater than 0.05. This means we accept the null hypothesis that the variable has unit root, and it means that at the levels these variables are not stationary. The education variable however is stationary at the levels and hence it is integrated to order zero I(0). To make the rest of the variables stationary so as to prevent biased and spurious results we test for unit root again at the first difference. At the first difference, we clearly observe that the rest of the variables; GDP per capita, Startups, Self-employment and gross domestic savings have become stationary and hence they are integrated to order one I(1). The unit root test thus shows a mixture of I(0) and I(1) results. This result pre informs us on the best method to use for the estimation. With a mixture of I(0) and I(1), the Ordinary Least Square estimation cannot be used as it is suitable for variables which are I(0). One of the best estimation technique which can be used for variables which have a mixture I(0) and I(1) is the Fully Modified Ordinary Least Square (FM-OLS)

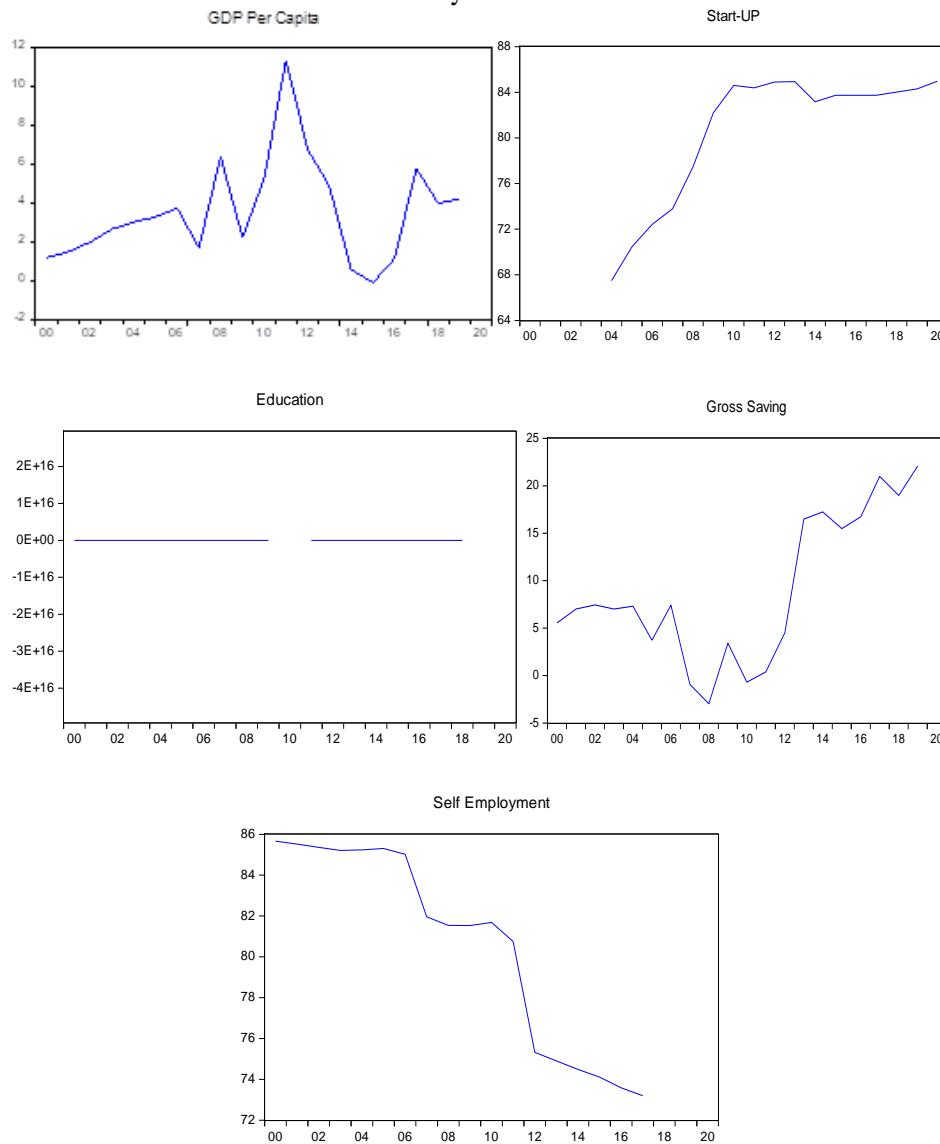
Table 1: Unit Root Test Results

Note: \*\*and \*\*\* denote rejection of the null hypothesis at 5% and 1% significance level respectively

### Graph of Variables at the level

The graphical analysis of the variables helps to identify the behavior of the series over time. This is important to the study as it provides the trends in the variables and also an alternative way to check the level of the stationarity of the variables.

**Figure 1**  
**Trend Analysis of Variables**



**Results of Regression Analysis**

Method: Fully Modified Least Squares (FMOLS)

Dependent variable: LNGDP

Sample (adjusted): 2005 2017

Included observations: 8 after adjustments

Cointegrating equation deterministic: C

Long-run covariance estimate (Bartlett kernel, Newey-West fixed  
bandwidth = 3.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>LNSELF_EMPLOYME</b>				
NT	48.99389	63.14751	0.775864	0.0373
LNSTART_UP	3.427591	46.32020	0.073998	0.0434
LNGROSS_SAVING	2.925606	1.434608	2.039307	0.7875
LNEDUCATION	10.82593	37.90256	0.285625	0.0848
C	282.7611	380.9176	0.742316	0.4859
R-squared	0.796571	Mean dependent var	3.860928	
Adjusted R-squared	0.712618	S.D. dependent var	3.259796	
S.E. of regression	2.672997	Akaike info criterion	5.107233	
Sum squared resid	42.86948	Schwarz criterion	5.288094	
Log likelihood	-23.08978	Hannan-Quinn criter.	4.993225	
F-statistic	2.218124	Durbin-Watson stat	1.798516	
Prob(F-statistic)	0.048173			

Substituting the results into the model (as shown in equation 3) we generate the following (as shown in equation 4):

$$GDP_{it} = A1STARTUP + A2SELF + \beta1EDUC + \beta2GRO\_SAVINGS + uit \dots\dots\dots (3)$$

$$GDP_{it} = 3.43STARTUP + 48.99SELF + 10.83EDUC + 2.93GRO\_SAVINGS + uit \dots\dots\dots (4)$$

From the coefficients of the results, we can generally observe that all the variables have a positive impact on economic growth. The main explanatory variables which also serve a proxy for entrepreneurship are the startup and self-employment variables.

As we can see in equation 4, when startup increases by one unit, GDP increases by 3.43 units, holding all other variables constant. This means when the score for starting a business is high, it is relatively easier for people to start a business and they contribute to the growth of the economy positively. The score of starting a business consists of the general procedures involved to startup, like the time and cost for an entrepreneur to start and formally operate a business, as well as the paid-in minimum capital requirement. Also, the variable is significant as it has a probability value of 0.0373, which is less than 0.05. This means the independent variable startup explains the dependent variable in a good way.

It can also be observed that the self-employment variable plays a very important role in the economic growth and development of the Ghanaian economy. From the results we see that when self-employment increases by one unit, GDP increases by 48.99 units holding all other variables constant. This was results was not surprising as it depicts a real picture about the Ghanaian situation. Within the Ghanaian context most people who do not find jobs in the public or private sectors venture into own business, typically Micro and Small and Medium Scale Enterprises (SME’s). The percentage of total employment that is owned by the private individuals is very huge in Ghana. According to data from the Ghana statistical service more than 80 % of the employed are working in the informal sector (SME’s). Over half of the employed (55.9 %) are own-account workers (self-employed); 20.4 % are employed in family enterprises and 17.6 % are wage employees. (Ghana Statistical Service reports, 2018).

The controlled variables education and gross savings have a positive impact on economic growth. As we see in the results, if education increases by one unit, GDP will increase by 10.83 units and if gross savings increase by one unit, GDP will increase by 2.93 units respectively. Within the Ghanaian context, the more people are educated the higher their chances of acquiring jobs or starting up their own businesses. Through education, people are able to contribute their own quota to the Gross Domestic Product (GDP), in the form of jobs. Savings on the other hand contribute positively to the economic growth and development within the Ghanaian context. The higher the level of income the higher the level of savings and higher incomes and savings level portray higher GDP growth.

## CONCLUSION

To assess the impact of entrepreneurship on economic growth using Ghana as a case study, the variables startup and self-employment have been used as a proxy to represent entrepreneurship. Both show a positive and significant impact on economic growth. Hence, it is worthwhile for government to make policies which will boost entrepreneurship. For instance, policies to reduce long bureaucratic procedures before starting up a business could be implemented. This will increase the score of starting a business index and make it relatively easier to start up a business in the Ghanaian context.

Also, the government should create a conducive environment which will encourage more people to startup their own businesses. For instance, giving out financial aids, tax exemptions for businesses which are less than two years and inculcating entrepreneurship into the education curriculum could boost self-employment within the Ghanaian context. Currently in Ghana, the National Board for Small Scale Industries (NBSSI) is restructuring to provide the needed assistance to SMEs. This is indeed a step in the right direction if an economy wants to use entrepreneurship as a bait for economic growth (<https://nbssi.gov.gh/>).

## LITERATURE

Audretsch, D. B. (2007). Entrepreneurship capital and economic growth. *Oxford Review of Economic policy*, 23(1), 63-78.

Andersson, M., & Koster, S. (2011). Sources of persistence in regional start-up rates—evidence from Sweden. *Journal of Economic Geography*, 11, 179–201. <https://doi.org/10.1093/jeg/lbp069>.

Awlaqi, mohammed & Altheeb, Ayah. (2019). Importance of Entrepreneurship in Economic Development. *Entrepreneurship and Regional Development*.

Baumol, William J. (1990). “Entrepreneurship: Productive, Unproductive and Destructive.” *Journal of Political Economy*, 80 5:893-921.

Bosma Niels, Kent Jones, Erkkö Autio and Jonathan Levie; *Global Entrepreneurship Monitor (GEM), 2007 Executive Report*.

Dilanchiev Azer (2014) Relationship between Entrepreneurship and Unemployment: The Case of Georgia *Journal of Social Sciences*; ISSN: 2233-3878; Volume 3, Issue 2, 2014

Fritsch, M., & Wyrwich, M. (2014). The long persistence of regional levels of entrepreneurship: Germany 1925 to 2005. *Regional Studies*, 48, 955–973. <https://doi.org/10.1080/00343404.2013.816414>.

Global Economic Prospect Reports (2018) <https://www.worldbank.org/en/publication/global-economic-prospects>

Ghana Statistical Service reports, 2018  
<https://nbssi.gov.gh/>

McClelland, D.C. (1962) Business drives and National development *Harvard Business Review*. Vol 40, Issue 4



Pesaran, M. H.; Shin, Y.; Smith, R. J. (1995). "Bounds testing approaches to the analysis of level relationships". *Journal of Applied Econometrics*. **16** (3): 289–326

Peter C.B. Phillips, 1993. "Fully Modified Least Squares and Vector Autoregression" Cowles Foundation Discussion Papers 1047, Cowles Foundation for Research in Economics, Yale University.

Philip P.C and Hansen B. E (1990), "Estimation and inference in models of cointegration: A simulation study" *Advanced Econometrics*.

Salgado-Banda, Hector. (2004). "Measures and Determinants of Entrepreneurship: An Empirical Analysis." Chapter 3, PhD Thesis, University of London.

Tervo, H. (2006). "Regional unemployment, self-employment and family background," *Applied Economics*, Taylor & Francis Journals, vol. 38(9), pp 1058.

Thanti Mthanti, Kalu Ojah, (2018) "Institutions, human capital and entrepreneurial orientation: implications for growth policy", *Journal of Entrepreneurship and Public Policy*, <https://doi.org/10.1108/JEPP-D-18-00002>

Varheul, I., Stel, A.J.V., Thurik, A.R. & Urbano, D.(2006).The relationship between business ownership and unemployment in Spain: a matter of quantity or quality? *Estudios de Economía Aplicada*, 24(2), 435-457.



**Panorama Sunset in Gazdagrét (Richfield)**

Photo © by Dr. Antal Szabó

**Marianna Siničáková**

Associate Professor, Technical University of Košice  
Slovakia

E-mail: marianna.sinicakova@tuke.sk

**Tomáš Mušínský**

PhD candidate, Technical University of Košice

E-mail: tomas.musinsky@tuke.sk

**Laura Fotulová**

E-mail: Student, Technical University of Košice

laura.fotulova@student.tuke.sk

## EFFICIENT MONETARY INTEGRATION AS A PATH TO HIGHER SUSTAINABILITY IN AFRICA

### ABSTRACT

The year 2020 was meant to be an important turning point and climax in the African history of monetary integration. Fifteen countries had ambition to adopt a new single currency “eco” within the ECOWAS group with a perspective to encourage further and deeper integration process across Africa. These plans were not achieved not only due to current pandemic situation but mainly as a result of insufficient fulfilment of convergence criteria. In this paper we identified other obstacles such as low level of convergence leading to asymmetric evolution of macroeconomic fundamentals and asymmetric shocks. Another aim of the paper was to determine potential leading or lagging countries within regional currency areas. In spite of the fact that more profound monetary integration must have been postponed, still wider monetary integration in Africa should be reassured as soon as countries are ready for this step since it can contribute to higher sustainability and credibility, better synergic effects, and quicker convergence of African countries at least to the World average.

**Keywords:** monetary integration, Africa, ECOWAS, CEMAC, UEMOA

**JEL Classification:** F15, F45

### INTRODUCTION

While total number of extremely poor people and global poverty rate have been continuously decreasing in the World since 1990, Africa and mainly its Sub-Saharan part demonstrates the opposite tendency. More than 416 million Africans still live in extreme poverty with rising trend (World Bank, 2020). Efficient monetary integration in Africa could improve economic sustainability and even reduce environmental issues of integrated countries (ITF-OECD, 2016). African countries suffer from insufficient mutual trade within their region, on the other hand their balance of trade with non-African countries such as the European Union countries, China and U.S. is relatively important. In 2019 and similarly during last decades Africa’s major partners for African export were EU countries (31%) and China (11%), for African import the EU (29%) and China (16%). Intra-African export and import represented only 16% and 13% respectively in spite of the fact that Africa is the world’s largest free trade area with more than 1.3 billion person market (Eurostat, 2020; World Bank, 2020). Nevertheless, many authors pointed out to a very low intra-regional trade in this sub-region (Ogunkola, 2001; Jebuni et al., 1999). Thus, integrated countries can not fully derive benefit from advantages of common currency. Low mutual trade within the region does not guarantee sustainable and successful economic development of this continent. In addition, while EU countries are exporting mainly manufactured goods to Africa (70% of all EU exports to Africa), African countries are exporting above all primary resources and goods with low value added (66% of all African exports to the EU) (Eurostat, 2020). Situation is more or less the same over the last decades. In addition, several countries’ exchange rate is pegged to euro, e.g. the case of the Central African Monetary Union and West African Economic and Monetary

Union so the rate is encouraging mainly exchanges with European countries. These inter-continental exchanges are contributing to increasing carbon footprint and other environmental damages. Exports of goods with low value added do not generate sufficient profits for local producers and do not enable them to create their own investments. Consequently, African countries become almost entirely dependent from foreign investments. Therefore, impact of current level of African monetary integration on economic growth is questionable (Gnimassoun, 2019).

Further monetary integration could enhance intra-African trade, reduce dependence from non-African countries, reduce transaction costs, etc. However, monetary integration can bring also negative aspects especially in case of insufficient preparedness of integrating countries. In addition, monetary integration should be at least to a certain extent in line with fiscal integration otherwise the whole success of currency union will be endangered (Amadou, Kebalo, 2019).

Therefore, the aim of this paper is to evaluate level of synchronization of African countries creating two regional currency unions, i.e. the UEMOA (Union Économique et Monétaire Ouest Africaine - West African Economic and Monetary Union, comprising 8 countries) and the CEMAC (Communauté Économique et Monétaire de l'Afrique Centrale - Economic and Monetary Community of Central Africa, comprising 6 countries). Another regional currency area – the Common Monetary Area based on the South African Rand consisting of 4 South-African countries was not included in this research due to lack of data.

We assume that a planned further and deeper monetary integration in Africa requires sufficient synchronization and adequate level of symmetries in existing regional currency unions. For the purpose of the study we analysed level of synchronization of five crucial indicators using correlation matrix and cross-correlations. This approach enables us to identify leading as well as lagging countries, i.e. potential core and periphery countries which is a usual approach for evaluation of monetary unions.

In the paper we gradually explain theoretical background and list current literature overview. In the analytical part we describe applied data, methodology and obtained results. Final chapter will be devoted to practical implications and conclusions.

## **THEORETICAL BACKGROUND AND LITERATURE OVERVIEW**

Our research is based on the theory of optimum currency area/region (OCA/OCR) originally pioneered by Mundell in 1960' (Mundell, 1961). The theory determines four basic criteria ensuring optimality of a monetary union: sufficient labour mobility, wage and price flexibility, fiscal transfer and ample symmetry of business cycles accompanied with symmetric economic shocks. Unsatisfactory fulfilment of these criteria should lead candidate countries to maintenance of their floating exchange regimes and avoiding integration to a currency area. McKinnon (1963) and Kenen (1969) developed this idea proposing further criteria on sufficient openness and production diversification of economies confirming successful monetary integration in currency areas.

Political boundaries do not necessarily correspond to optimum currency frontiers. Mundell (1961) tried to clarify the conflict between macroeconomic efficiency and microeconomic efficiency of a monetary union. From macroeconomic point of view we should try to limit the size of currency area as much as possible, since it is easier to perform single monetary policy in more homogeneous region, which usually corresponds to smaller geographical spread. On the other hand from microeconomic point of view we strive to minimise transaction cost (conversion of currencies, etc.), which is more obvious and beneficial in case of larger monetary unions. A compromise between the two conflicts could be a solution (Frankel, Rose, 1997). Buigut (2010) and others indicated loss of monetary independence due to monetary integration.

In spite of the fact that optimum currency area theory has been applied mainly to the European Economic and Monetary Union, its principles are appropriate for other monetary unions in the World, too. The euro area has been analysed abundantly and from multiple perspective very often in comparison with e.g. the United States which can be perceived as a monetary union, too, however more homogenous and integrated as

the euro area. Much less attention is devoted to other monetary unions in the World. The aim of the paper is to fill in the research gap and to enrich existing literature on African monetary unions. Studies on Caribbean Currency Union are scarce but mainly positive. Research on African regional monetary unions are more frequent however rather critical. Caribbean region seems to be easier for successful monetary union management due to its considerably smaller size (625 000 inhabitants, 8 countries), similar infrastructure and smaller cross-cultural differences (Eastern Caribbean Central Bank, 2020). Nevertheless, monetary integration in Africa is more challenging as it covers 1.345 billion inhabitants living in 54 countries (+2 disputed), if we consider the most ambitious plan of pan-African monetary union. Already existing regional monetary unions represent huge population of over 195 million of inhabitants in 6 countries of Eastern African Currency Union, over 65 million of inhabitants in 4 South countries in Common Monetary Area, over 56 million of inhabitants in 6 countries in the Central African CFA zone, over 130 million of inhabitants in 8 countries in the West African CFA zone - UEMOA, over 265 million of inhabitants in six countries in the West African Monetary Zone, and almost 400 million of inhabitants in 15 countries in the Economic Community of West African States (Worldometer, 2020).

Xiaodan and Yoonbai (2014) researched Eastern Caribbean Currency Union via structural vector autoregressive model and detected structural similarity among member states and penchant to rather symmetric shocks. Hallett and Jensen (2016) evaluate quite positively a fiscal framework in the Caribbean Currency Union as an important precondition for optimum currency area.

Asongu (2014) performed estimations of real, monetary and fiscal convergence in African countries and suggested harmonization of cross-cultural differences in structural and institutional sphere to encourage quicker convergence in Africa. Importance of impact of cross-cultural differences in the similar context is explained e.g. by Rostekova, Palova (2020). Bizuneh et al. (2020), Bizuneh et al. (2018) focused on monetary integration in Eastern Africa from the perspective of public support and with the aim to avoid similar monetary union crises as we have experienced in the euro area recently. Mensah (2015) researched West African Monetary Zone (WAMZ) identifying certain features of a modest convergence among countries thanks to convergence criteria and very low mutual trade between 2002 and 2013. Thus the WAMZ according to his findings does not qualify as an OCA however with an improving potential.

Gil-Alana et al. (2020) research cointegration of central bank policy rates in African countries using cointegration analysis. Correct application of common policy rates will be crucial in case of continuing monetary integration in Africa. Authors conclude that use of independent monetary policy might be for many African countries difficult in future without considering global policy rate trends.

For the purpose of our research we set three hypotheses:

- a) The UEMOA countries are sufficiently synchronized and ready for further monetary integration.
- b) The CEMAC countries are sufficiently synchronized and ready for further monetary integration.
- c) West African countries are ready for creation of the ECOWAS monetary union and adoption of „eco” single currency.

## **DATA AND METHODOLOGY**

For the purpose of our research we researched five crucial convergence indicators, namely inflation rate, nominal interest rate, public debt to GDP, GDP per capita, GDP growth rate. First three indicators correspond to nominal convergence criteria known e.g. from Maastricht treaty. Budget deficit data were not available for all countries during whole time span. Exchange rate criterion is less relevant for these African countries as they have pegged their currency, CFA franc (Communauté Financière Africaine - African Financial Community), to French franc or later on to euro since many years. Two other indicators related to GDP represent basic tools how to evaluate business cycles synchronization which is fundamental for optimum currency area approach to avoid potential asymmetric shocks.

Data cover the period from 2000 to 2018 and were retrieved from World Bank and International Monetary Fund databases. Closer observation of data led us to division of the period into two sub-periods, 2000 – 2008 and 2009 - 2018 as in 2008/2009 we identified a break point evidently implied by the global financial and economic countries. It seems that African countries were marked by the crisis mainly in 2008 and 2009.

We applied correlation matrices based on the Pearson correlation coefficient among member states of the UEMOA and the CEMAC. In order to identify leading, lagging and perfectly synchronized countries cross-correlations were employed. In addition to comparison of data in  $t_0$ , we considered also data in time  $t+1$  and  $t-1$ , i.e. leading or delayed data by one trimester. Longer lead or delay was not confirmed for these countries. Cross-correlations were calculated between monetary union average data and each monetary union member states.

**Table 1: Statistical Overview of the CEMAC, the UEMOA, and the ECOWAS Countries, 2018**

Country	GDP p.c. in PPP (USD)	Ranking of HDI	HDI	HDI classification, 3-year average	population
<b>CEMAC</b>					
Central African Rep.	859	188	0.381	low HD	4 829 767
Cameroon	3785	150	0.563	medium HD	26 545 863
Congo, Rep.	5662	138	0.608	medium HD	5 518 087
Gabon	17875	115	0,702	high HD	2 225 734
Equatorial Guinea	22743	144	0.588	medium HD	1 402 985
Chad	1968	187	0.401	low HD	16 425 864
<b>average total</b>	8815	154	0.541		56 948 300
<b>UEMOA</b>					
Benin	2424	163	0.520	low HD	12 123 200
Burkina Faso	1984	182	0.434	low HD	20 903 273
Ivory Coast	4207	165	0.516	low HD	26 378 274
Mali	2316	184	0.427	low HD	20 250 833
Niger	1063	189	0.377	low HD	24 206 644
Senegal	3782	166	0.514	low HD	16 743 927
Togo	1773	167	0.513	low HD	8 278 724
Guinea-Bissau	1799	178	0.461	low HD	1 968 001
<b>average total</b>	2419	174	0.470		130 852 876
<b>WAMZ</b>					
Ghana	4746	142	0.596	medium HD	31 072 940
Guinea	2504	174	0.466	low HD	13 132 795
Gambia, The	2612	174	0.466	low HD	2 416 668
Liberia	1308	176	0.465	low HD	5 057 681
Nigeria	5990	158	0.534	low HD	206 139 589
Sierra Leone	1601	181	0.438	low HD	7 976 983
<b>average total</b>	3127	168	0.494		265 796 656
Cabo Verde	7454	126	0.651	medium HD	555 987

N.B.: GDP – gross domestic product, PPP – purchasing power parity, HDI – human development index  
Source: IMF, World Bank, Worldometer

The CEMAC countries are rather imbalanced as for their GDP p.c. as well as human development index. The WAMZ countries are quite similar apart from Nigeria which could be a source of important imbalances in future due to its size in terms of absolute GDP and population, too.

## RESULTS AND DISCUSSION

The UEMOA currency area consists of eight countries: Benin, Burkina Faso, Guinea-Bissau, Ivory Coast, Mali, Niger, Senegal, and Togo. The UEMOA countries reached relatively huge level of synchronization in all observed indicators. The highest synchronization was achieved in GDP p. c. In addition, all countries managed to increase their output per inhabitant since 2000, in spite of the fact that the pace of growth should have been much higher to reduce at least partially the gap with advanced and emerging economies. Since 2000, the highest pace of GDP p. c. was in Ivory Coast and Senegal. However, we spotted a break point in 2008/2009 when relatively high correlations among countries began to decline. The break point is the outcome of the global financial and economic crisis in 2008 which created several disturbances among countries. Some of them faced the consequences of the crisis more successfully than the others. The asymmetries can be explained by low sectoral diversification of their economies. Most of these countries are focusing just on one domain which is very risky especially in times of crisis.

**Table 2: The UEMOA average Pearson correlation coefficients retrieved from correlation matrices**

Indicator	GDP p.c.	GDP growth rate	Inflation rate	Public debt to GDP	Nominal interest rate
<b>Period</b>					
<b>2000 - 2008</b>	0.989	0.104	0.715	0.592	0.737
<b>2009 - 2018</b>	0.713	-0.557	0.488	0.499	0.448
<b>Selected major observations from 2000 - 2018</b>					
<b>Benin</b>	rise		decrease	decreasing trend	
<b>Burkina Faso</b>	rise		decrease	decreasing trend	
<b>Ivory Coast</b>	important rise		decrease	decreasing trend	
<b>Mali</b>	rise		decrease	decreasing trend	
<b>Niger</b>	rise		decrease	decreasing trend	
<b>Senegal</b>	important rise		decrease	decreasing trend	
<b>Togo</b>	rise		decrease	no positive change	
<b>Guinea-Bissau</b>	rise		decrease	important decrease	least stable

*Source:* own calculations based on IMF and World Bank data

Senegal and Ivory Coast were the only two countries with relatively highly correlated GDP evolution (0.69) even in the second period. Inflation evolution was highly correlated in the most of the countries prior to crisis. However, situation worsen after 2008. On the other hand the positive finding is that inflation rate has been gradually reduced safely under 5% in all countries while in 2008 it peaked between 6 to 12% in all UEMOA countries. Since 2000 all UEMOA countries apart from Togo managed to reduce their public debt to GDP which is very positive. The most successful reforms in this field were performed by Guinea-Bissau which managed to contract it's debt from above 200% of GDP in 2000 to 163% in 2008 and only 60% in 2018. In addition, this contraction was well correlated among all UEMOA countries but Togo being outlier. In the second period, i.e. after crisis, public debt increased only slightly. Ivory Coast and Guinea-Bissau continued in the reduction of their public debt thus overall correlation coefficient is in the second period lower.

Nominal interest rate evolution was highly correlated prior to crisis. Symmetries dropped after the crisis and evolution was the least stable in Guinea-Bissau probably due to huge reduction of public debt to GDP ratio during previous years.

We can identify certain similarities in evolution of basic macroeconomic fundamentals in the UEMOA countries. However, the global crisis in 2008/09 rather shattered their convergence and synchronization process. Among positive achievement can be named significant drop of inflation rate, public debt to GDP (except for Togo) and at least slow pace of GDP growth p.c. (mainly obvious in Ivory Coast and Senegal). However non-synchronic evolution of GDP growth rate, in other words of business cycles, create complications for common monetary policy implementation and would be an important constraint for further monetary integration. Therefore, at present the first hypothesis on the UEMOA preparedness for further integration can not be fully confirmed.

Similar analysis was performed for the CEMAC regional currency area consisting of six countries: Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon.

**Table 3: The CEMAC average Pearson correlation coefficients retrieved from correlation matrices**

Indicator	GDP p.c.	GDP growth rate	Inflation rate	Public debt to GDP	Nominal interest rate
<b>Period</b>					
2000 - 2008	0.962	0.055	0.290	0.792	0.428
2009 - 2018	0.527	0.172	0.007	0.829	0.319
<b>Selected major observations from 2000 - 2018</b>					
<b>Central African Rep.</b>	minor rise		unstable	decreasing trend	
<b>Cameroon</b>	minor rise		unstable, better since 2013	decreasing trend	
<b>Congo, Rep.</b>	minor rise		Unstable, better since 2013	huge decrease	
<b>Gabon</b>	minor rise		Unstable, better since 2013	decreasing trend	
<b>Equatorial Guinea</b>	minor rise	important but unstable rise	Unstable, better since 2013	decreasing trend	
<b>Chad</b>	minor rise		highest deviations, better since 2013	decreasing trend	

*Source:* own calculations based on IMF and World Bank data

Unlike the UEMOA countries, the CEMAC countries did not experienced an obvious rise of GDP p.c. The pace of growth per capita was much lower. Evident growth was observed only in Equatorial Guinea, however with very unstable evolution throughout whole period. Very low GDP p.c. growth was highly correlated in the first period. The second period is marked with lower mutual correlations mainly due to asymmetric evolution in Cameroon. GDP growth evolution was completely uncorrelated in the CEMAC countries in both periods. Evolution of inflation was uncorrelated and very unstable for all countries. The highest deviations were observed in Chad with frequent changes from very low deflation to very high inflation levels. The last years since 2013 were marked with more steady inflation behaviour in all countries but the Central African Republic.

Evolution of public debt to GDP was highly correlated in both periods. All countries gradually managed to lower their debts with slight increase after crisis. The most important debt decrease was experienced by Congo, from over 200% of GDP in 2003 to 39% in 2013 and then moderate increase to 88% in 2018.

Nominal interest rates were not significantly correlated during observed periods, their evolution was rather unstable.

Similarly to the UEMOA group, the CEMAC countries managed to decrease their public debt since 2000. The drop was significantly correlated among countries. Growth of their GDP p. c. was even more correlated however its overall rise was much lower than in case of the UEMOA group. The CEMAC countries are not really catching up with the rest of the World. Evolution of other crucial indicators was rather independent in the CEMAC economies. Consequently, we can not confirm the second hypothesis on sufficient preparedness of the CEMAC countries for further monetary integration with other African countries.

On the basis of cross-correlations we have not identified any obvious leaders in the currency areas. No countries were lagging nor leading with statistical significance over the rest of the group. If evolution was synchronized than it was in the same time ( $t_0$ ) with no time lag. However, in case of the UEMOA average GDP evolution was most explained by Ivory Coast and then by Niger and Senegal. In case of the CEMAC average GDP was most determined by GDP of Equatorial Guinea and Chad. These countries seem to be a kind of core countries within given monetary unions.

**Table 4: The UEMOA and the CEMAC cross-correlations of GDP evolution to currency area average, 2000-2018**

2000-2018	t-1	t	t+1		2000-2018	t-1	t	t+1
<b>UEMOA</b>					<b>CEMAC</b>			
Benin	0.207	0.189	0.263		Cameroon	-0.082	0.111	-0.355
Burkina Faso	-0.371	0.494	-0.515		Central African Rep.	-0.163	0.418	-0.093
Guinea-Bissau	0.321	0.079	0.368		Chad	0.244	0.735	0.340
Ivory Coast	0.530	0.752	0.495		Congo	0.201	0.295	0.385
Mali	-0.590	0.372	-0.474		Equatorial Guinea	0.431	0.876	0.311
Niger	-0.242	0.713	-0.310		Gabon	-0.309	-0.091	-0.199
Senegal	0.085	0.685	0.013					
Togo	0.436	0.566	0.547					

N.B.: table captures Pearson's correlation coefficient retrieved from cross-correlations, statistically most important coefficient are highlighted

Source: own calculations based on IMF and World Bank data

The third hypothesis can not be confirmed neither. Adoption of single currency “eco” for the ECOWAS countries consisting of eight UEMOA countries plus six West African Monetary Zone (WAMZ – Gambia, Ghana, Guinea, Liberia, Nigeria, Sierra Leone) countries and Cape Verde could be at present more than challenging. While eight UEMOA members are mainly French speaking countries, WAMZ group is mainly English speaking. The difficulties are not enrooted only in language differences but principally in different economic structure of particular countries, low economic diversification of these countries and low mutual openness expressed by low mutual trade, capital and labour force exchanges. The UEMOA members have already an experience with a monetary union and use of a single currency West African CFA franc. Their CFA franc exchange rate has been pegged to euro (before to French franc) and helped them to stabilize evolution of inflation and interest rates. However the WAMZ countries miss this experience and are more prone to instability of inflation, interest rate, and exchange rate. Nevertheless UEMOA reserves have been centralized in the French Treasury which provides these countries with the guarantee on unlimited exchange of their CFA franc, but on the other hand increases their dependence from France (Oyé, 2020) and the euro area. CFA central banks deposit 65% of their foreign currency reserves on operations account in the French Treasury in Paris (African Business Magazine, 2012). CFA franc zones in spite of their two central banks, one for western UEMOA group, one for central CEMAC group, are dependent from the European Central Bank monetary policy. Moreover, the ECOWAS monetary union would not be adequately balanced due to disproportionately large size of Nigerian economy over the rest of the group. Nigerian's GDP represents 67% of the whole ECOWAS output (Asongu, 2019).

The ECOWAS countries suggested six convergence criteria which must be fulfilled prior to common currency implementation. Four out of six are similar to Maastricht nominal criteria which are required for monetary integration to the euro area, two other criteria are inspired by particular needs of these African economies, namely: i) budget deficit below 3% of HDP; ii) public debt below 70% of GDP; iii) inflation below 5%; iv) stable exchange rate; v) gross foreign reserves must be sufficiently large to ensure at least three months of import cover; vi) central bank financing deficit must not exceed 10% of tax revenue from the previous year (Asongu, 2019).

As of October 2019, only 5 countries (Cape Verde, Guinea, Ivory Coast, Senegal, Togo) were fulfilling but only two criteria on inflation and budget deficit.

## PRACTICAL IMPLICATIONS AND CONCLUSIONS

According to our findings, existing regional currency unions West African Economic and Monetary Union (UEMOA) and Economic and Monetary Community of Central Africa (CEMAC) are not adequately prepared



for further monetary integration. Application of “eco” as a single currency in the ECOWAS currency union would be at present even more complicated. Evolution of economic fundamentals in these countries is not always satisfactorily symmetric and correlated. Targeted convergence criteria are not accomplished. Therefore, implementation of a common monetary policy would be intricate. We do not confirm our three hypotheses encouraging deeper monetary integration straightaway. On the other hand, outlined monetary integration would bring many positive opportunities for member states, such as higher credibility of integrated countries, possibilities to develop mutual trade more intensively, to attract more investments, to launch economic boost, etc. Focus on mutual trade would help to profit from single currency advantages, from absence of exchange rate transaction costs among member states and would promote ecological and sustainable aspect. Consequently, above mentioned countries should not wait too long and definitely should not abandon the idea of monetary integration. Their integration could be inspiring for other monetary integration in other African countries and would enable to profit from synergies and to gain an adequate level of independence e.g. from the euro area.

### ACKNOWLEDGMENTS

The paper was elaborated within project VEGA 1/0793/19.

### LITERATURE

- African Business Magazine. 2012. A Brief History Of The CFA Franc. *African Business Magazine*. February 19, 2012.
- Amadou, A., Kebalo, L. 2019. Single Currency in ECOWAS: Is the Proposed Fiscal Convergence Criterion Pro-Growth? *African Development Review-Revue Africaine de Developpement*. 31 (4), 423-433
- Asongu, S. 2014. Are proposed African monetary unions optimal currency areas? Real, monetary and fiscal policy convergence analysis. *African Journal of Economic and Management Studies*. 5(1), 9-29.
- Asongu, S. 2019. Can a West African currency union work? World Economic Forum. October 21, 2019.
- Bizuneh, M., Buigut, S., Valev, N. 2018. Gaining Global Clout Through Monetary Union: Evidence from East Africa. *Journal of Economic Integration*. 33 (2), 1363-1387
- Bizuneh, M., Buigut, S., Valev, N. 2020. Beyond Borders: The Euro Crisis and Public Support for Monetary Integration in East Africa. *South African Journal of Economics*. 88 (2), <https://doi.org/10.1111/saje.12258>
- Buigut, S. 2010. Loss of monetary policy autonomy and public attitude toward monetary union. *Journal of International and Global Economic Studies*. 2(2), 61-76, <https://doi.org/10.11130/jei.2018.33.2.1363>
- Eastern Caribbean Central Bank. 2020. Eastern Caribbean Currency Union Statistics. Available at: <https://www.eccb-centralbank.org/statistics/dashboard-datas/>
- Eurostat. 2020. Africa-EU - international trade in goods statistics. Available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Africa-EU\\_-\\_international\\_trade\\_in\\_goods\\_statistics#Africa.E2.80.99s\\_main\\_trade\\_in\\_goods\\_partner\\_is\\_the\\_EU](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Africa-EU_-_international_trade_in_goods_statistics#Africa.E2.80.99s_main_trade_in_goods_partner_is_the_EU)
- Frankel, J. A., Rose, A. K. 1997. The Endogeneity of the Optimum Currency Area Criteria. *The Economic Journal*. 108 (449): 1009–1025. doi:10.1111/1468-0297.00327
- Gil-Alana, L. A., Mudida, R., Abakah, E. J. A. 2020. Are central bank policy rates in Africa cointegrated? Evidence from a fractional cointegration approach. *Applied Economics*. 52 (57), 6171-6182, <https://doi.org/10.1080/00036846.2020.1785619>
- Gnimassoun, B. 2019. Is the WAEMU Integration Growth-Enhancing? *Revue d'Economie Politique*. 129( 3). 355-390.

- Hallett, A. H., Jensen, S. E. H. 2016. The Fiscal Framework in a Currency Union: Lessons from a Comparison between the Euro Area and the Eastern Caribbean Currency Union. *The World Economy*, 39 (6), 803-823.
- ITF-OECD. 2016. The Carbon FootPrint of Global Trade. International Transport Forum. Available at: <https://www.itf-oecd.org/sites/default/files/docs/cop-pdf-06.pdf>
- International Monetary Fund. Central Government Debt [online]. [cit. 2020-05]. Available at: [https://www.imf.org/external/datamapper/CG\\_DEBT\\_GDP@GDD/CHN/FRA/DEU/ITA/JPN/GBR/USA/BEN](https://www.imf.org/external/datamapper/CG_DEBT_GDP@GDD/CHN/FRA/DEU/ITA/JPN/GBR/USA/BEN).
- Jebuni, C.D., Ogunkola, E.O., Soludo, C.C. 1999. A review of regional integration experience in Sub-Saharan Africa: A case study of the Economic Community of West African States. In: T.A. Oyejide, (ed.) *Regional Integration and Trade Liberalization in Sub-Saharan Africa*, Volume 3. London: Longman.
- Kenen, P. 1969. The Theory of Optimum Currency Areas: An Eclectic View. in Robert Mundell and Alexander Swoboda (eds), *Monetary Problems of the International Economy*, Chicago: University of Chicago Press (1969), 41-60.
- Mensah, I. 2015. Monetary and Economic Union in West Africa: An analysis on trade. *International Journal of Business and Economic Sciences Applied Research (IJBESAR)*, 8(2), 87-118
- McKinnon, R. I. 1963. Optimum Currency Areas. *The American Economic Review*. 53 (4), 717-725
- Mundell, R. A. 1961. A Theory of Optimum Currency Areas. *American Economic Review*. 51 (4): 657-665.
- Ogunkola, E.O. 2001. Policy Modelling of Regional Integration in less Developed Countries: The case of ECOWAS. *Research for Development*. 15, 44-67.
- Oyé, Casimir. 2020. The pros and cons of the CFA franc zone. *The Africa Report*. January 20, 2020.
- Rostekova, M., Palova, M. 2020. Curricular internationalization in higher education in Slovakia through the integration of content and language – experience with teaching in French/l'internationalisation curriculaire dans l'enseignement superieur en Slovaquie par l'intégration du contenu et de la langue; le cas des formations en français. *XLinguae*. 13 (1), 204-224
- Xiaodan Z., Yoonbai K. 2014. Is the Eastern Caribbean Currency Union an Optimum Currency Area? *Journal of Developing Areas*. 48 (1), 291-313.
- World Bank. 2020. The World Bank in Africa. Available at: <https://www.worldbank.org/en/region/afr/overview>
- Worldometer. 2020. Countries in the world by population. Available at: <https://www.worldometers.info/world-population/population-by-country/>

**Perumal Koshy**

Editor

Global SME News

India

Email: caushie07@gmail.com

Linkedin <https://www.linkedin.com/in/p-koshy-1220a015/>**LESSONS FROM THE PANDEMIC: STRENGTHEN NEIGHBOURHOOD SELF-DEPENDENCY THROUGH SMEs <sup>10</sup>****ABSTRACT**

The Covid-19 lockdown-induced supply side disruptions highlight the need for developing a robust manufacturing and agriculture production for each region. The Gandhian development approach and the concept of rural self-sufficiency emerge relevant in this context. Development approach based upon the concentration of manufacturing and production in a few industrial hubs is weakening the small and medium enterprise sector, whose strength lies in catering and providing for the local markets and ensuring that the needs of the neighbourhood markets are taken care of. Strengthening SMEs and their capacity to produce and meet the needs of local-neighbourhood economies is critical to rebounding from the current crisis. In this context governments may consider introducing a local manufacturing policy with significant role for local government institutions to manage essential goods production by SMEs operating in its jurisdiction.

**Keywords:** SMEs; regional development; International trade; policies;

**JEL classification:** R1, R5, O240, F63, O180

The pandemic-induced lockdown around the world underscores the need to revisit the current economic development approach based upon the concentration of manufacturing and production in a few industrial hubs. This approach is weakening the small and medium enterprise sector, whose strength lies in catering and providing for the local markets and ensuring that the needs of the neighbourhood markets are taken care of.

Strengthening SMEs and their capacity to produce and meet the needs of local-neighbourhood economies is critical to rebounding from the current crisis. A balanced development and overall progress of all regions with a focus on essential goods production within each region seems to be the main takeaway from the Covid-19 pandemic.

**Self-dependent neighbourhoods vs globalization**

With governments around the world imposing lockdown and social distancing, the post- Covid pandemic world has to accept the role of small enterprises in ensuring the smooth supply of essential commodities during all kinds of emergencies and the need for developing a self-dependent neighbourhood economy rather than global supply chain driven operations and import dependence.

While MSMEs compete for a share in global market, it is critical that products and services are available for local consumption. During the Covid-19 induced lockdown, local markets in several regions around the world faced shortages due to supply chain disruptions, particularly in areas where little

---

<sup>10</sup> This is an updated version of an article published in Global SME News titled Time to revisit MSME Reservation policy, 26 April 2020, <http://globalsmenews.com/time-to-revisit-msme-reservation-policy/>

manufacturing and agriculture cultivation happens. Across the global value chain, from manufacturers and distributors, down to consumer- and packaged-goods companies and retailers alike, all faced its fall out and consequences. (Felix, et al., 2020)

The Covid-19 lockdown-induced supply side disruptions highlight the need for developing a robust manufacturing and agriculture production for each region or locality. The Gandhian development approach and the concept of rural self-sufficiency emerge relevant in this context. (Bhualmal, 2004;Gosalia, 1979) A more decentralized manufacturing strategy is the need of the hour, which calls for a reducing dependency on global manufacturing hubs. Similar lockdowns can happen again, where there can be major disruptions in supply chains. While interdependence between different regions of the world will remain, local self-reliance with regard to consumer goods, essential medicines and food products need to be strengthened.

Although the lockdown proved to be a boon for E-Commerce businesses, orders were often delivered late. In many cases, E-commerce companies even refused to accept orders. If the supplier is in the same region or where the trucks and courier is still in operation, the delivery was smoother. But when the product had to arrive from another region/state or a country there was a major disruption in delivery. In some cases, interstate- intra-regional truck movement too, was affected.

Here comes the need for strengthening local self-reliance. Village micro and cottage industries as well as small enterprises contribute by way of supplying goods to the local markets, but they often encounter several challenges in their operations: lack of demand, competition from cheap imported products, high labour costs and power disruptions are just a few.

### High dependency on global manufacturing hubs

There is a high level of manufacturing concentration in certain pockets of the world. Just for instance, China leads the world in terms of manufacturing output, with over \$2.01 trillion in output, followed by the United States (\$1.867 trillion), Japan (\$1.063 trillion), Germany (\$700 billion), and South Korea (\$372 billion) (West & Lansang, 2018).

The Covid-19 pandemic has exposed the practical issues related to such high concentration of manufacturing in a particular region alone. During the time of emergencies these become more evident, more so during the kind of shortages witnessed during the lockdown.

In the case of Indo-China economic relationship, India depends heavily on China for the supply of a wide range of products, from simple ones like nails/tacks and umbrellas to sophisticated electronic products and pharmaceutical intermediates. (Dhar & Rao, 2020) The following table shows the dominance of China, US and Japan in the global manufacturing output.

**Top 10 manufacturing destinations**

Country	Manufacturing Output (USD in billions)	Percent of National Output	Percent of Global Manufacturing
China	\$2,010	27%	20%
United States	1,867	12	18
Japan	1,063	19	10
Germany	700	23	7
South Korea	372	29	4
India	298	16	3
France	274	11	3
Italy	264	16	3
United Kingdom	244	10	2
Taiwan	185	31	2

*Source: UNCTAD 2015; Brookings Report, Global manufacturing scorecard*

With repeated cases of zoonotic diseases and the latest Covid-19 pandemic, the need to have more local self-sufficiency of essential products is being understood. The local production of fruits and vegetables, food processing units, consumer goods and essential medicines and many other products can be done within a region. The supply shock that started in China in February and the demand shock that followed as the global economy shut down exposed vulnerabilities in the production strategies and supply chains of firms just about everywhere. Temporary trade restrictions and shortages of pharmaceuticals, critical medical supplies, and other products highlighted their weaknesses. (Shih, 2020)

### **Reservation of products for manufacturing in small scale sector**

In this context, it is appropriate to mention the reservation policy that existed till recently for production within small scale industries. The Industries (Development and Regulation) Act which statutorily comprised a reservation policy covering products for exclusive manufacture in the MSME sector, which was provided for in the Act. The Reservation policy was meant to ensure the increased production of consumer goods within the MSME sector. (DC-MSME, GOI, n.d.) Introduced in the year 1967 with 47 items, the list gradually expanded to include more than 800 items. This policy had a legal backing when the Industries Development and Regulation Act 1951 was amended in March 1984, empowering the Government to reserve items.

As a result of improved balance of payment situation, India was under obligation to remove quantitative restrictions (QRs) by 1st April 2001. (DC-MSME, GOI, n.d.) India removed QRs on over 700 items in 2001 after it lost a case in WTO against the US which had challenged these restrictions on import of large number of industrial and agricultural items. (Economic Times, 2010) Keeping up with the trend of liberalization and reforms, the government abolished the Small Scale Sector Product Reservation Policy by 2015 (DIPP, 2015). This policy was helpful and acted as a protective measure for the sector and helped large scale enterprises and corporates from encroaching into the MSME space.

In the seasons of pandemic, which may be more frequent in the upcoming days as points out in the UNEP report (2020), there is a strong case for developing a robust manufacturing base with a focus on essential goods and items that people consume on a day to day basis, essential products, consumer goods and food and beverages.

Local government institutions (LGIs) can play a role in this context and encourage small enterprises to make for their regions so as to make goods available for local communities. In this context, governments have to revisit their policies on protecting MSMEs.

With the small-scale sector primarily catering to local markets and regions, local government institutions and regional authorities such as grama panchayats and municipal governments can play a better role in protecting and promoting micro, small and village industries.

Also, the time has come to reintroduce a reservation policy for exclusive manufacturing in the MSME sector, with a focus on labour intensive technologies, to ensure local self-sufficiency and employment generation.

### **Suggestions for protecting MSMEs**

- A new broad list of products needs to be identified for small scale sector manufacturing, that must be brought under reservation for exclusive manufacturing. Each local government in the region may be given authority to identify and decide upon products that are essential for that particular region, from that broad list.
- Each local government or regional authority may be authorized to formulate policies, promotional programmes, incentives and support for these lists of sectors/products which are in demand and needed for that region.
- Central government MSME schemes and programmes for the sector must be routed through LGIs in order to ensure better implementation.

- Technology relevant for the region and industries suited for the locality, with potential for job creation needs to be identified and encouraged at the local level.
- Mandatory procurement policy for retail shops from local manufactures: A reservation policy for retail shops in the region to procure and sell a certain percentage of products manufactured within that Panchayats or in the area falling under that particular regional government.

**This approach will have the following advantages:**

- More jobs within region itself
- Products that are in demand are promoted, therefore their availability is ensured.
- Mandatory procurement requirement from local manufacturers will ensure demand for local manufacturing industry.
- When people can find jobs within the region/local areas, migration in search of employment may come down
- Less global supply chain exposure and dependency on essential supplies from other destinations

To conclude, strengthening SMEs and their capacity to produce and meet the needs of local-neighbourhood economies is critical to rebound from the current crisis. While MSMEs compete for a share in global market, it is critical that products and services are also available for local consumption. The Covid-19 lockdown induced supply side disruptions highlight the need for developing a robust manufacturing and agriculture production for each region or locality. The Gandhian development approach and the concept of rural self-sufficiency emerge relevant in this context. Governments may consider introducing a local manufacturing policy with significant role for local government institutions to manage essential goods production for SMEs operating in its jurisdiction. Further, such a policy will ensure uninterrupted trade and availability of goods for consumption even when major disruptions occur.

## LITERATURE

Bhuimali, A., 2004. Relevance of M. K. Gandhi's ideals of self-sufficient village economy in the 21st century. *Sarvodaya*, 1 Jan-Feb(5).

DC-MSME, GOI, n.d. *Policy of Reservation*. [Online]  
Available at: <http://laghu-udyog.gov.in/policies/preseve.htm>  
[Accessed 10 September 2020].

Dhar, B. & Rao, K., 2020. *India's economic dependence on China*. [Online]  
Available at: <https://www.theindiaforum.in/article/india-s-dependence-china>  
[Accessed 3 October 2020].

DIPP, 2015. *Ministry of Commerce and Industry*. [Online]  
Available at: [https://dipp.gov.in/sites/default/files/notification\\_13April2015%20%201.pdf](https://dipp.gov.in/sites/default/files/notification_13April2015%20%201.pdf)  
[Accessed 12 April 2020].

Economic Times, 2010. *India proposes to revive quantitative restrictions on imports*. [Online]  
Available at: <https://economictimes.indiatimes.com/news/economy/foreign-trade/india-proposes-to-revive-quantitative-restrictions-on-imports/articleshow/5827718.cms?from=mdr>  
[Accessed 11 September 2020].

Gosalia, S., 1979. The Gandhian model of self-reliance in the Indian. *Intereconomics*, 14(2), pp. 80-83.

I Felix, Martin, A., Mehta, V. & Mueller, C., 2020. *US food supply chain: Disruptions and implications from COVID-19*. [Online]  
Available at: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/us-food-supply->

chain-disruptions-and-implications-from-covid-19#  
[Accessed 17 September 2020].

Shih, W. C., 2020. Global Supply Chains in a Post-Pandemic World. [Online]  
Available at: <https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world>  
[Accessed 3 October 2020].

UNEP, 2020. Preventing the next pandemic: Zoonotic diseases and how to break the chain of transmission, Nairobi: UNEP.

West, D. M. & Lansang, C., 2018. *Global manufacturing scorecard: How the US compares to 18 other nations*, s.l.: Brookings Institution .



**Panorama from Richfield (Gazdagrét) towards Budaörs**

Photo © by Dr. Antal Szabó



**Hima Parameswaran**

Assistant Professor, Department of Human Resource Management, City University  
College of Ajman, Ajman, UAE.  
E-mail: h.parameswaran@cuca.ae

**CAREER TRANSITION THROUGH FOUR PERSONAL DRIVES: A CROSS-SECTIONAL ANALYSIS AMONGST HEALTHCARE, EDUCATION, AND REAL-ESTATE EMPLOYEES AS A NOVEL TACTIC IN HUMAN RESOURCE DEVELOPMENT.**

**ABSTRACT**

Individuals and organizations must be very conscious about their capabilities, commitment, contribution, and competencies in order to conquer the entire world with a different perspective in Career dynamics. The main emphasis of the research is to analyse employees own contributions to their career development and the differences in their perspective in career development plans from different sectors. Accordingly, the study was concentrated in Dubai, UAE, from three different sectors namely; healthcare, education, and real estate industry with a sample size of 100 from each sector by a pragmatic view. Hence, it utilizes both surveys, a quantitative survey with the help of a questionnaire, and a qualitative survey by interaction with managers and employees, followed by quantitative and qualitative analysis. The descriptive statistics using SPSS 20.0 and AMOS 18 confirms the relationship of career dynamics as an independent factor for individual performance towards the achievement of both organizational and personal goals. The results of the hypotheses, to understand the significance of career dynamics in career transition of employees reveals that the regulatory construct, employee competency has significant influence on career dynamics of the employees as the standardised direct effect of this construct shows significance level. The upshot clarifies the roles of employees, managers and employers in career transition; methods for enhancing diversity through career management, managing promotions and transfers.

**Keywords:** Career transition, performance, capabilities, contribution, commitment, and competencies, structural equation modelling

**JEL Classification:** F62, G32, M13, M15, P64,

**1. CAREER DYNAMICS IN A DIFFERENT PERSPECTIVE**

The metamorphic power of Human resource development lies in its ability to empower invention and discover drastic solutions to real-world problems. Originated from the deep-rooted fields of training, performance, and development, HRD has grown as a combination of both theoretical and practical view with a unique multilateral agenda of human betterment, organizational enhancement and societal development. This incorporates new emerging fields of information including social capital, knowledge management and the learning organization. When considering U.A.E., Emiratisation programs are very challenging due to differences in the career orientation, development, and choices of expatriates as opposed to Emirates. A study on career transition among employees in diverse sectors of Dubai can throw light on managing careers to upcoming entrepreneurs, existing public and private organisations. Moreover, it explains how this career development can foster employee capabilities, commitment, contribution, and competitiveness.

Today, in this 21<sup>st</sup> century, with increased mobility of people and internationalization of firms, individuals have wide array of opportunities to ripen their careers in new and exciting directions. Further, mergers, consolidations, and downsizing made a significant impact on the career outlooks. When more and

more women enter into professional world, it's a great challenge for the families to balance work and life. In this aspect, career planning acts as a spur in individual's life because it is a holistic approach to change work-related behaviour and paves way to improve personal skills, knowledge, inspirations and to achieve personal goals.

United Arab Emirates is well-known for its diverse characters. Some of them are; infrastructure, stable political system, tourism, and one of the most liberal trade systems in the Gulf region. This leads in attracting business people from around the world and a hub for industrial development. Dubai is the second wealthiest emirate in the U.A.E. after Abu Dhabi as the capital state. In the recent times, tourism has emerged as an important facet in Dubai's economy. To add feather on its cap, Dubai, the dream land has won the bid to host Expo 2020, and surely provide an impetus to its economy and employment. The population size of the Emirate of Dubai is estimated by 2,446,675 individuals at the end of 2015, of whom 1,703,355 are males and 743,320 are females with rates of 69.62% and 30.38% respectively of the total population <sup>[1]</sup>. The higher proportion of males in Dubai community (229 males per 100 females) is attributed to the fact that the majority of expatriate workers are males who are not accompanying their family members. Other features to be highlighted are; according to the reports by World Bank, U.A.E. improved by ten ranks to become the eleventh in doing business globally <sup>[2]</sup>. In Gender inequality Index, U.A.E. ranked 49<sup>th</sup> position globally by UNDP reports. Besides, an annual global report published by the Positive Economy Institute since 2013, it stated that the U.A.E. has been ranked 8<sup>th</sup> on the Positivity Index of Nations, which measures positive economy indicators in OECD member countries. As a long vision on nation's development and sustainability, recently, U.A.E. Cabinet approved a long-term visa for investors, entrepreneurs, specialized talents and researchers in the fields of science, knowledge and outstanding students. The aim is to facilitate business and craft an eye-catching and hopeful investment environment for the growth of business <sup>[3]</sup>. Furthermore, once again, it has kept its top 20 spot in the 2019 Global Talent Competitiveness Index report published by graduate business school INSEAD <sup>[4]</sup>.

In this above background, this study has lot of scope towards career development, career planning, career achievement for individuals around the world. Hence, this topic about career dynamics is relevant and reliable in different sectors in Dubai in order to contribute a person's career exploration, establishment, achievement, and fulfilment. Thus the objectives of the study are as follows;

- To identify the relationship between employee competency and career transition,
- To find the link between employee commitment and career transition,
- To measure the association between employee contribution and career transition,
- To identify the relationship between employee capabilities and career transition,
- To explore the correlation between career dynamics and employee performance.

## 2. LITERATURE REVIEW

Attainment of optimum output from employees is a serious challenge facing by many companies in this technological-driven world. Progressively, companies have recognized that this optimization can be achieved only by strategic interventions in human resource development in which one of the factors is through career development. Both traditional approach and advanced technological aspects along with psychological initiative plays major role in the career succession.

The outlook towards career always changes according to the employees' perspective. In a simple term, this is a sequence of positions held by an employee in their occupation. It gives immense experience, abilities and performance improvements in their span of life. Career is a series of interrelated jobs arranged in a hierarchy of prestige, through which persons moved in an ordered predictable sequence <sup>[5]</sup>. In other words, it is a process of progress and development of individuals that can be described as the life stories of people <sup>[6]</sup>.

Organisations need to be more responsive according to their customer's service and product demands. For this, employees' skills must be updated rather than rely on their stagnant knowledge. As a strategic move in career development, competency framework has evolved as an effective means for employee engagement.

According to Hafez and Essmail (2007) there exists a distinction between competences and competencies. Competencies refer to individual knowledge, and skills required to perform in an efficient way. It is equally important that organizational activities must be surpassed with those competencies to adapt to this competitive world [7]. Based on this aspect, the first hypothesis is;

H<sub>1</sub>: Employee competency has significant influence on the career transition.

According to Holland, a specialist in career counselling, there are six basic personality types and one's personality with a combination of needs, morals, and motives is a determinant of career choice. If a person with strong interpersonal skills, always tend to or do more in a social work rather than in a physical or intellectual activity. His Self-Directed Search (SDS) test did a lot to assess occupational orientations and preferred occupations amongst employees. Similarly, other online career assessment instruments such as "Career key" and "My Next Move" guide employees in their career management [8]. In support to career counselling, two other instruments which provides guidance and advice to employees in balancing their needs, and skills with occupational interests are Schein's Career Anchors Inventory (Schein, 2013) and Holland's Vocational Preference Inventory (Holland, 1996) [9]. Both these instruments highlighted the importance of personality traits and vocational choices with their career development. Indeed, these kind of anchors create individual's self-concept in identifying self-perceived talents and abilities. Providing advice and guidance through coaching, mentoring and training in their career ladder can fulfil employee's needs and occupational interests. They can identify the potentials and creates commitment to the organization. Hence, the next hypotheses need to test is;

H<sub>2</sub>: Employee commitment has significant influence on the career transition.

Employees with high levels of personal mastery have a strong desire to learn more about their work, and to deepen their personal vision. So they contribute more to achieve a particular position within the organization [10]. Madden and Mitchell (1993) argue that there are various procedures and processes through which professionals stay up-to-date with current knowledge, skills and environmental trends in their career planning [11]. To support this view, Owen (2004) identifies that increase in spending in corporate sponsored senior management development programs helps to improve the organizational leadership [12]. Career growth and learning is an imperative factor in continuing professional development for the reason that CPD includes both formal and informal interventions, with individualised activities that may emphasise individual or collective learning [13]. Achieving high level of proficiency by these kind of programs enhances high level of performances. Therefore, the employees can acquire a personal mastery on the organizational policies and can contribute effectively towards organizational competitiveness. In this point of view, the fourth hypotheses to be tested is;

H<sub>3</sub>: Personal contribution has a positive influence on the career transition of the employees.

Nowadays, due to internationalization, organizations are giving importance to communication, social capital and social networks to enhance group creativity. Creativity enhances the capability of an individual to perform well in their tasks. Creative work is contextualized and dependent on the capabilities, pressures, resources and socio-technical system in which employees work and incorporation of social creativity that includes the dimensions of perspective, perception, and positionality<sup>[14,15]</sup>. Moreover, it needs a participative and safe environment with space for individual thinking to have good contacts within and outside the organization. But according to Perry-Smith (2006) it is difficult to stimulate and needs a range of organizational practices. And there is little evidence to identify organizational practices that block creativity. Risk-taking as a measure of creativity has a great role in employee's career growth. Thus, creating and cultivating creativity to get best capabilities in organization is a challenging task for the top management [16]. Based on these aspects, the next hypothesis to test is;

H<sub>4</sub>: Development of capabilities are beneficial for the career transition of the employees.

Greenhaus et al. mentioned career as the series of work-related experiences that persists throughout a person's life. If a person is highly motivated or engaged in his or her job, he or she can recognize how their

own efforts contribute in achieving the company's goals <sup>[17]</sup>. If an individual is fully engaged in their tasks, their performance level also can be increased. Studies from TowersPerrin concluded that only 21% of the global workforce is engaged, while almost 40% is disengaged.<sup>[18]</sup> A survey by consultants Watson Wyatt Worldwide established that companies with highly engaged employees have 26% higher revenue per employee <sup>[19]</sup>. Nowadays, more people enjoy changes in their roles and responsibilities, and move across different occupation, which are influenced by personal or family demands and values, awareness of strengths and weaknesses, to move towards exciting and stimulating works, and to balance work and life <sup>[20]</sup>. This type of 'boundaryless' career identifies employees to fit in diverse professions. People who hold an 'authentic' career path are always candid to themselves, recognize their obstacles, seek congruence between feelings and communication, and work to accomplish continuity between the past and present (Svejenova, 2005).<sup>[21]</sup>. Cabrera, 2009 highlights about 'Kaleidoscope' career model in which organisations have fewer roles over employees' careers and the individuals themselves seek to achieve balance between their work and life for autonomy and responsibility in their jobs <sup>[22]</sup> . For older workers with their knowledge and expertise, 'portfolio-based' career arrangements in organizations offer them wide variety of choices, liberty, and self-control in their work-life. Companies could retain these talented workforces as an institutional memory (Platman, 2003).<sup>23</sup> Career management leads to employee development by various employee engagement programs. Through this, companies can express that they are interested in their skill development and, develop managers for creating a positive work environment. Today's manpower is self-directed with a psychological sense of specified goal to success and act proactively to change (Manikoth and Cseh, 2011).<sup>24</sup> The impact of this protean career provides employees a feeling of pride and accomplishment by achieving their life goals (Sullivan and Baruch, 2009).<sup>25</sup> Owing to these factors, the last hypothesis crafted is as follows;

H<sub>5</sub>: Career transition (dynamics) has significant role in employees' performance.

### 3. RESEARCH DESIGN

Detailed reviews on literature about career transition throw light into its importance in individual and organizational development which aids to the framework for a questionnaire. Accordingly, the questionnaire was self-developed and closed-ended with five-point Likert scale which consists of 35 indicators. It comprises four sections namely; demographic factors at the beginning, Career transition variables such as employee competency, commitment towards work, personal contribution and development of capabilities and final section as contribution of career dynamics to individual performance. This is clearly illustrated in Table 1 and Table 2.

**Table 1. Variables and Measures – An overview**

Sl.#	Factors	Measures	Number of factors	
Section I	Demographic variables	Gender, Age, Qualification, Experience, Sector	5	
Section II	Independent variables	a. Employee Competency	7	
		b. Commitment towards work	7	
		c. Personal Contribution	8	
		d. Development of capabilities	8	
Section III	Contribution of career dynamics to Individual Performance	a, b, c, d.	5	
I, II, III	III		5	35

*Source:* Survey and Questionnaire

**Table 2. Latent variables and its related factors**

Latent variables	Related measures
Employee competency	Q1. What is your own perspective about work related experiences and activities over the span of life? Q2. How is your achievement of goals/aims in your life? Q3. How is your involvement in work-related and other relevant experiences, both internally and externally? Q4. What is your feeling/confidence on Job-security? Q5. How is the effectiveness of training from the organization? Q6. How about the Career Counselling from the organization? Q7. How much alertness to changing market conditions and technological trends? Q8. What about the level of prioritization to job related matters?
Commitment to work	Q9. What about the level of Prioritization to family concerns? Q10. How is the level of work-life balance? Q11. How about your stress relief activities/exercises from the organization? Q12. What about awareness in health-related measures? Q13. How much degree of adaptability in diverse culture? Q14. How extent of contribution in career dynamics from your organization?
Personal contribution	Q15. How is the level of autonomy? Q16. How you receive performance feedback? Q17. How about satisfaction level about package of remuneration? Q18. What extent of feeling of competency? Q19. How is the level of professionalism Q20. What about level of bureaucracy? Q21. How about the provision of ergonomics? Q22. What about constitutional protection?
Development of capabilities	Q23. How about individual development plans? Q24. How much you follow on realistic career plans? Q25. How extent participation in career development discussions with superiors? Q26. How extend the organization communicate mission, policies, and procedures? Q27. How extend the organization provide academic learning assistance programs? Q28. How extend organization provide mentoring opportunities to support growth and self-direction? Q29. What extend assess your interest, skills and values by your own? Q30. What extend you talk with your manager about your career?
Is Career transition leads productivity?	a. Do you have high-performance groups in your work place? b. Do you get respect/valued from co-workers/work? c. How effective the talent management in your organization? d. How much employee engagement programs in your organization? e. How much happiness/enjoyment from your work including working conditions?

*Source: Literature review and pilot study*

All the identified variables are carefully selected, observed, recorded, and analysed. So, survey method is the best approach for a quantitative research with the help of a structured questionnaire. For an assorted population sample, quantitative (survey) and qualitative (interview) data among 300 employees, 100 from each sector; education, healthcare, and real estate industry were conducted. The percentage of sample is represented in Table 3.

**Table 3. Sample Profile**

Sl. #	Sectors	Frequency	Percentage
1.	Education	100	33.3
2.	Healthcare	100	33.3
3.	Real estate	100	33.3
Total	3	300	100.0

*Source: Survey*

This is followed by the demographic data and is represented in Table 4.

**Table 4. Demographic Data**

Sl. #	Sectors	Frequency	Percentage
Gender	Male	161	53.7
	Female	139	46.3
	Total	300	100.0
Age	30-40	99	33.3
	41-50	110	36.7
	51-60	91	30.3
	Total	300	100.0
Qualification	Undergraduate	28	9.3
	Post-graduation	76	25.3
	Professional	196	69.4
	Total	300	100.0
Experience	5-10	74	24.7
	11-15	53	17.7
	16-20	89	29.7
	21-25	68	22.7
	26-30	16	5.3
	Total	300	100.0
Total	4	300	100.0

*Source: Survey*

The above table simplifies sample consists of more male respondents than females, majority of respondents are from age group, 41-50, a lion's share are professionals (65%) and more respondents have experience for 5-10 years in the UAE.

In this point of view, it must be verified statistically to develop an accurate picture in creating a model for career dynamics with four mentioned variables towards a better work environment. Thus, the collected data is a combination of both qualitative and quantitative enquiry, accordingly study utilizes both quantitative and

qualitative forms of techniques in analysis part. In the first stage, it scrutinized the descriptive statistics of the measurement items and calculated the reliability and validity of the measures applied in this study. The questionnaire was weighed using Cronbach's alpha for its reliability. It describes and summarizes the properties of mass of data collected from the respondents. Subsequently, the second stage verified the proposed research model by assessing the contributions and significance of the manifest variables path coefficients. Collected data were analysed through SPSS 20.0. Along with this, parametric statistics like one-way ANOVA and Z-test were used for comparison of the factors considered between different levels of the demographic variables. A level of 0.05 was established as a priority for determining significance. Another measure, Structural Equation Modelling (SEM) takes a confirmatory approach to the analysis of a structural theory bearing on some phenomenon. It conveys two important aspects of the procedures; a. causal process under study is represented by a series of structural (regression) equations, and b. these structural relationships can be modelled to facilitate a clearer conceptualization of the theory under study. Simultaneously, the hypothesized model has statistically tested through goodness of fit measures to examine its consistency with the data. It allows the examination of a series of dependence relationships between exogenous (*independent*) and endogenous (*dependent*) variables. In the case of exogenous variable, the variability is assumed to be determined by causes outside causal model and, an in endogenous variable the variation is explained by exogenous and other endogenous variables in the causal model. Another classification of variables is latent variables (unobserved) and manifest variables (*observed*). Latent is a hypothesized (unobserved concept) that can be approximated only by observed or measurable variables.

In the analysis part, initially an input model was established using AMOS 18 graphics which were represented below as various diagrams. Here, the rectangle specifies observed factors and unobserved factors in the form of ovals. The curved double headed arrows symbolize correlations or co-variances among the unobserved variables. The straight headed arrow denotes the factor loadings of the observed variables. The small circles with arrows pointing from the circles to the observed variables indicate errors/unique factors otherwise known as squared multiple correlation of the standard error. This initial model is refined to reach the final model.

## 4. DATA ANALYSIS

### 4.1 Reliability Test

As the first part of the analysis, Table 5 gives the initial Cronbach's alpha for each of the constructs considered. So, the researcher proceeds for further analysis with the constructed measures.

**Table 5. Reliability test**

Sl. #	Variables	Cronbach's Alpha	Number of items
1.	Employee Competency	0.500	7
2.	Commitment to work	0.772	7
3.	Personal Contribution	0.754	8
4.	Development of Capabilities	0.889	8
5.	Individual Performance	0.983	5
Total	5		35

### 4.2 Confirmatory Factor Analysis

Consequently, the study analysed the measurement model of factors to test the convergent validity. Various measures in career dynamics factors were examined using measurement model of CFA. This is represented in Table 6 and, is diagrammatically represented in Figure 1 to 4.



Table 6. Model fit Indices for CFA – All variables

Variables	$\chi^2$	DF	P	Normed $\chi^2$	GFI	AGFI	NFI	TLI	RMR	RMSEA
Employee Competency	6.64	8	.58	.83	.99	.98	.97	1.02	.009	.000
Commitment	17.59	7	.01	2.51	.99	.93	.97	.98	.08	.071
Contribution	19.5	14	.15	.4	.98	.96	.98	.99	.06	.036
Capabilities	17.58	11	.09	1.59	.98	.95	.99	.99	.09	.045
<b>Recommended value</b>				<b>&lt;5</b>	<b>&gt;0.9</b>	<b>&gt;0.9</b>	<b>&gt;0.9</b>	<b>&gt;0.9</b>	<b>&lt;1</b>	<b>&lt;1</b>

All the attributes loaded significantly on the latent constructs. The value of the fit indices indicates a reasonable fit of the measurement model with data. Regression coefficients was also found in order to confirm the test.

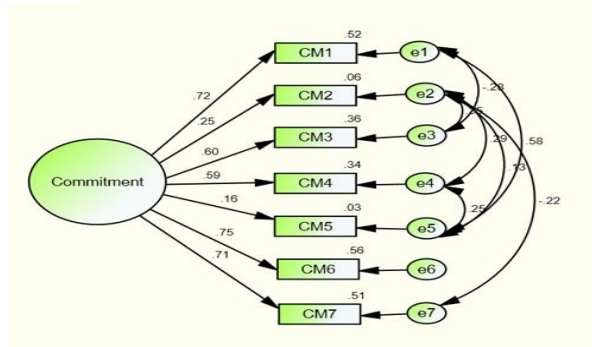
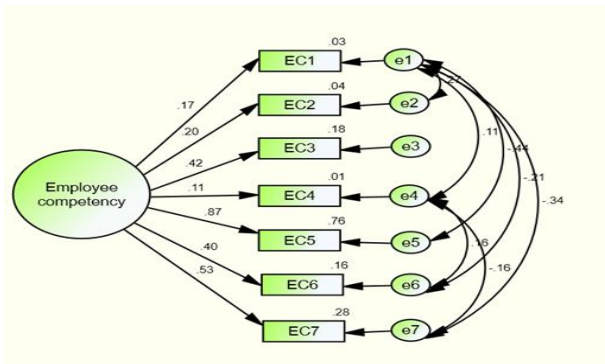
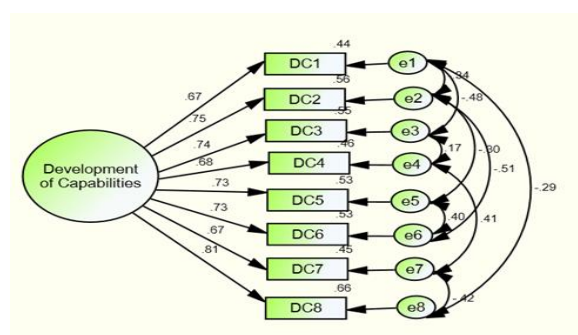
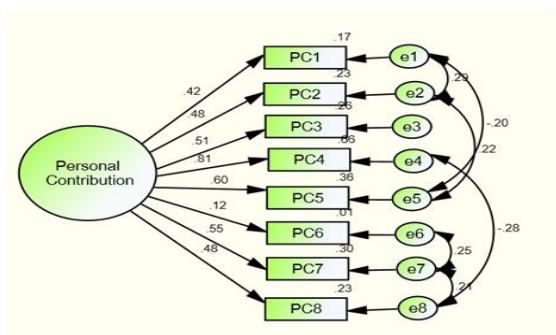


Figure 1 Model for competency and its related measures

Figure 2 Model for commitment



**Figure 3 Model for contribution and its related measures    Figure 4 Model for capabilities**

The above table and figures interpret that some variables have value <0.4, but most of the values reached its significance level for the factor analysis.

**4.3 Hypothesis test**

As a next step, the study utilized SEM to evaluate the influence of various constructs, i.e., for testing the following hypothesis on career transition (dynamics) of the employees.

H<sub>2</sub>: Employee competency positively influences the career transition of the employees.

H<sub>3</sub>: Commitment to work positively influences the career transition of the employees.

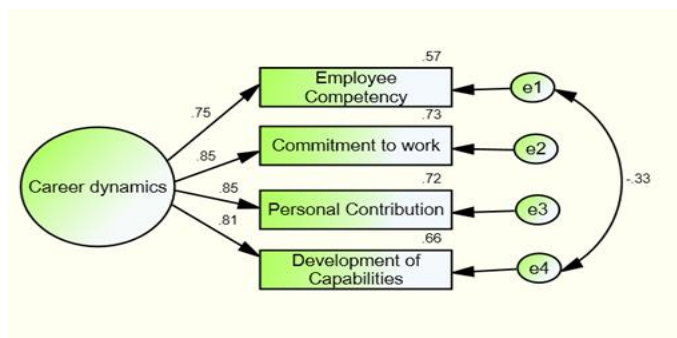
H<sub>4</sub>: Personal contribution positively influences the career transition of the employees.

H<sub>5</sub>: Development of capabilities positively influences the career transition of the employees.

The values are illustrated in Table 7 and the relationship is diagrammatically represented in Figure 5.

**Table 7. Model fit Indices for CFA – Career Dynamics**

Variables	$\chi^2$	DF	P	Normed $\chi^2$	GFI	AGFI	NFI	TLI	RMR	RMSEA
Career dynamics	.471	1	.49	.47	.99	.99	.99	1.00	.003	.000



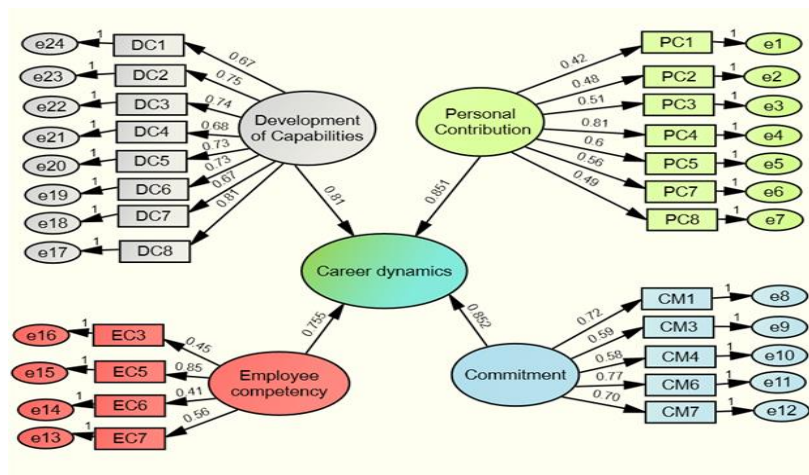
**Figure 5 Model for Career dynamics and its related factors**

This clarifies the significance of the variables to career transition.

Also, the regression coefficients are also measured and is showed in Table 8. Moreover, a detailed relationship of all latent variables and its values are clearly exhibited in Figure 6.

**Table 8. The regression coefficients**

Variables	Estimate	T	P	Variance Explained	Average variance	Composite reliability
Competency to career dynamics	0.75	16.96	<0.001	57.0		
Commitment to career dynamics	0.85	21.77	<0.001	72.7		
Contribution to career dynamics	0.85	21.71	<0.001	72.4	66.93	0.62
Capabilities to career dynamics	0.81	19.42	<0.001	65.6		
EC3 to Competency	0.45	8.39	<0.001	20.4		
EC5 to Competency	0.85	21.77	<0.001	72.6		
EC6 to Competency	0.41	7.59	<0.001	17.2	32.25	0.78
EC7 to Competency	0.55	10.78	<0.001	30.2		
CM1 to Commitment	0.72	15.71	<0.001	52.2		
CM3 to Commitment	0.58	11.65	<0.001	34.7	45.8	0.61
CM4 to Commitment	0.58	11.49	<0.001	34.0		
CM6 to Commitment	0.77	17.58	<0.001	59.3		
CM7 to Commitment	0.69	14.91	<0.001	48.8		
PC1 to Contribution	0.42	7.67	<0.001	17.5		
PC2 to Contribution	0.48	9.10	<0.001	23.4		
PC3 to Contribution	0.51	9.76	<0.001	26.3	31.9	0.54
PC4 to Contribution	0.81	19.42	<0.001	65.6		
PC5 to Contribution	0.59	11.89	<0.001	35.8		
PC7 to Contribution	0.56	10.83	<0.001	35.1		
PC8 to Contribution	0.49	9.14	<0.001	23.6		
DC 1 to Capability	0.67	13.85	<0.001	44.3		
DC2 to Capability	0.75	16.65	<0.001	55.8		
DC3 to Capability	0.75	16.53	<0.001	55.4	52.3	0.68
DC4 to Capability	0.68	14.19	<0.001	55.2		
DC5 to Capability	0.73	16.04	<0.001	53.4		
DC6 to Capability	0.72	15.89	<0.001	54.8		
DC7 to Capability	0.67	13.94	<0.001	66.2		
DC8 to Capability	0.81	19.62	<0.001	52.9		



**Figure 6 Model for significance of 4Cs in career dynamics**

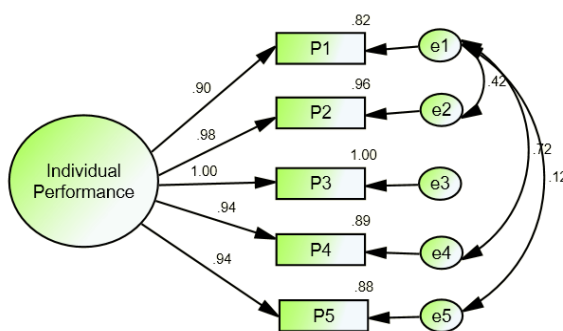
The P value in the above table proves the significance level of each construct to career dynamics.

#### 4.4 Confirmatory factor Analysis for Individual Performance

The next analysis part consists of the CFA for individual performance and is elucidated in Table 9. Consequently, the regression coefficients are also measured. Figure 7 represents a model for individual performance measures.

**Table 9. Model fit indices for CFA – Individual performance**

Variables	$\chi^2$	DF	P	Normed $\chi^2$	GFI	AGFI	NFI	TLI	RMR	RMSEA
Individual performance	.294	2	.86	.47	1.00	1.00	.97	1.00	.001	.000



**Figure 7 Model for individual performance and its related measures**

#### 4.5 Relationship between career dynamics and Individual Performance

As a last step, the study analyses the hypothesis, career dynamics has a significant relationship in employee performance. Here, the research applied Pearson correlation to identify the relationship between career dynamics and individual performance and is shown in Table 10.

**Table 10. Correlation between Career dynamics and Individual Performance**

Variables	Correlation	Lower bound	Upper bound	Z	P
Individual performance	.728	0.710	0.746	18.331	<0.001

Moreover, CFA was performed and is represented in Table 10. In addition to that regression coefficients are measured to know the significance level. Based on the measures, a diagrammatic representation also created and is exhibited in Figure 8.

**Table 11. Model fit Indices for CFA- Career dynamics and Individual Performance**

Variables	$\chi^2$	DF	P	Normed $\chi^2$	GFI	AGFI	NFI	TLI	CFI	RMR	RMSEA
Career dynamics to Individual performance	78.81	13	.00	6.06	.948	.820	.980	.953	.983	.454	.130

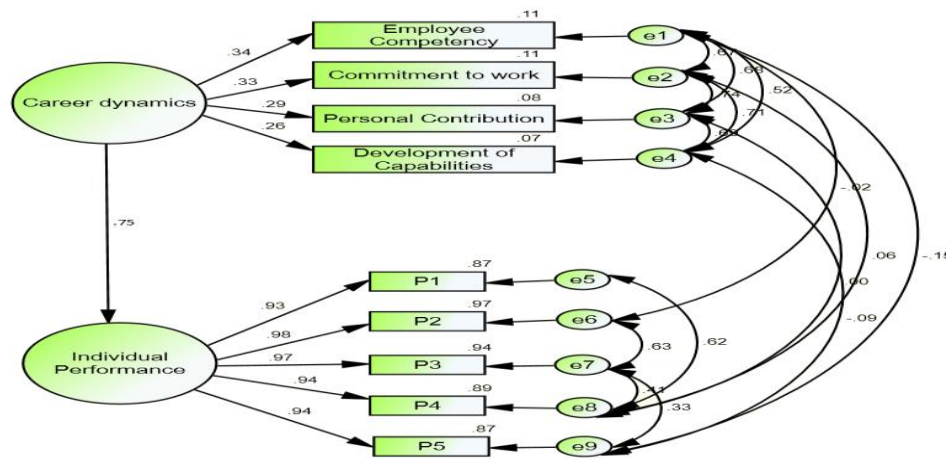


Figure 8 Model for relationship between career dynamics and individual performance

Thus the measures from the table proves the significance level for different variables. Also, it can be clearly understood from the above figure.

## 5. CONCLUSION – FINDINGS AND SUGGESTIONS

### 5.1 Findings

A detailed analysis through various tests aids to satisfy the mentioned objectives of the study that highlights the significance of 4Cs and its related independent variables, and its influence to individual performance. Result from reliability test shows that the constructs have reliability greater than 0.7 except for employee competency as 0.5 (Table 5). Confirmatory factor analysis by model fit indices (Table 6) clarifies that all the attributes loaded significantly on the latent constructs. The value of the fit indices indicates a reasonable fit of the measurement model with data. Regression coefficients for employee competency shows the constructs EC1 (perspective about work related experience over span of life) (0.17), EC2 (achievement of goals) (0.19), and EC4 (feeling about job security) (0.11) have values less than 0.4. Hence these three constructs have no significant influence on this variable. All other independent variables have value greater than 0.4. In the case of Commitment to work, CFA was similar to the above variable. Regression analysis shows that the constructs CM2 (0.24) and CM5 (0.16) has regression coefficient values less than 0.4. Hence these two constructs have no significant influence on Commitment to work. In the case of Personal contribution, PC6 has no substantial contribution on this latent variable as the value of regression coefficient is 0.11. The last dependent variable, development of capabilities, all constructs' values are above 0.4, hence, all constructs have major effect on it. All models created by using AMOS 18 were exhibited as Figures 1-4. Those significant variables must be considered in shaping the HRD of various sectors in order to develop capability to act, to generate integrity through action, to develop emotional qualities in a high-pressure work groups, to organise opportunities for change and to adapt to those changes in this turbulent world.

The results for the hypotheses, to understand the significance of career dynamics in career transition of employees from different sectors, (Table 7 and Figure 5) reveals that the regulatory construct, employee competency has significant influence on career dynamics of the employees as the standardised direct effect of this construct on career dynamics was 0.7, which is more than the recommended value of 0.4 (p value is significant). Accordingly, the hypotheses H<sub>1</sub> is accepted and concludes that employee competency positively influences the career dynamics of the employees. Similarly, for the remaining constructs the outcome proved a positive response. It is evident from the result that appropriate inventories would guide employees to perform

their jobs in a more meaningful manner and to meet with the global recession (Schein, 1996; Holland, 1996, 1985, 1997). Moreover, improving competency by career counselling with these anchoring inventories can lead employees to climb the career ladder by succession planning. In the case of commitment to work, this value was 0.852, for personnel contribution (0.851), and for development of capabilities, it was (0.810). Thus, H<sub>2</sub> to H<sub>4</sub> were accepted and satisfied the objective that all variables positively influence the career dynamics of the employees. The result highlights the significance of Continuous Professional Development for employees' self-confidence, knowledge-sharing, and cultural adaptation, which ultimately improves their contribution towards work. Both formal and informal interventions play a crucial role in this employees' contribution (Lammintakanen and Kivinen, 2012; Owen, 2004). Creating a positive environment for creating new ideas and practise those ideas are crucial for career succession. Indeed, these variables could help to identify the barriers of creating a safe and participative work place (Perry-Smith, 2006; Mumford et al., 2002). Moreover, the regression analysis from table 8 confirmed this objective as the significance level was <0.001. Thus a model by AMOS 18 was created to highlight the significance of 4Cs to career dynamics and the extent to which employees expect career dynamics personally and from their work-place (Figure 6). Career development is a comprehensive approach that encompasses adult learning both in the work place and in their personal life as an eye-opening to a protean career. It also paves way to organizational development and change through competent training and development, management development and knowledge management. The findings for next objective; that is, constructs P1 to P5 have positive influence on individual performance, table 8 revealed that the value of the fit indices indicates a reasonable fit of the measurement model with data. The regulatory construct P1 had significant influence on individual performance as the standardised direct effect of this construct on this factor was 0.904, which is more than the recommended value of 0.4 (p value is significant). Similarly, the value for other constructs were P2 (0.979), P3 (1.001), P4 (0.945) and P5 (0.940). This was confirmed by regression coefficient which is represented in table 9 and in figure 7. As a result, the study proves that career dynamics is a meaningful process or activity either for short term or long term with a potential to stimulate individual's work-based knowledge, expertise, performance, satisfaction and work-life to be conducive. This can lead to personal and team development towards the growth and sustainability not only for the organisation but also for the community, and to the entire nation. Table 10, Pearson correlation test proved the relationship between career dynamics and individual performance, as the correlation value is 0.728, which indicates that there is a significant link between these two factors. Also, SEM confirmed mathematical relationship between both factors and the results were exhibited in table 11. Thus, it is concluded that Individual Performance = 0.75 Career dynamics and furthermore, created a model which is represented as figure 8. Hence, the hypotheses H<sub>5</sub> is accepted and concludes career transition positively influences the individual performance of the employees. This proves the notion that one's belief and a strong urge in his or her career planning paves way to retain employability and relevance in the job market (Platman, 2003; Svejenova, 2005; Manikoth and Cseh, 2011). Along with, management's strategic approaches to career management create a quality work-life for employees and to meet the expectations of organizational goals. In particular, the study sheds light on the significance of career management as a self-assessment in individual performance through organizational strategic human resource development. A self-career workforce analytics with 4Cs, psychological aspects, living background, family background, and educational qualification in align with organizational goals is the need of the hour in three sectors where the study been conducted. The manifested model of Career dynamics with 4Cs leading to individual performance is an open-minded, skill-focused, self-motivated, and change management device designed to encounter contemporary global challenges and in the impending business as well.

## 5.2 Limitations for the study

As it is a cross-sectional study, only limited information could be collected. Attitudes change with demographic factors and work effectiveness. Though the interview time was very less it can be biased. Some factors found to be less significant in the analysis part. As economic factors change, this can reflect a lot of change in the response.

### 5.3 Possibilities for future research

The analysis part clearly explains the addition of some other variables, which can show a greater significance level for the respondents. Also, time period can be extended for this kind of studies. The main reason for this is due to internationalization, industrialization and volatile environment. Organizations must take initiatives towards career transition and its related factors for a competitive global advantage. Future research can concentrate on more factors related to human resource development.

### LITERATURE

- [1] Population Bulletin Emirate of Dubai 2015, Dubai Statistics Centre, Government of Dubai, [www.dsc.gov.ae](http://www.dsc.gov.ae).
- [2] Federal Competitiveness and Statistics Authority, <http://fcsa.gov.ae>.
- [3] Gulf news, March 11, 2019.
- [4] [www.thenational.ae](http://www.thenational.ae). January 21, 2019.
- [5] Wilensky H L 1964 The Professionalization of Everyone? *American Journal of Sociology*. 137-158
- [6] Baruch Y 2004 *Managing Careers: Theory and Practise*. Harlow: Pearson
- [7] Hafeez K and Essmail E A 2007 Evaluating Organisation Core Competencies and Associated Personal Competencies Using Analytical Hierarchy Process. *Management Research News*. **30(8)** 530-547.
- [8] Holland J L 1997 *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments*, 2<sup>nd</sup> edn. Odessa. FL: Psychological Assessment Resources.
- [9] Schein E 2013 *Career Anchors*. <http://www.careeranchorsonline.com>
- [10] Senge P 1990 *The Fifth Discipline: The Art and Practice of the Learning Organisation*. New York: Random House Lee-Kelley L, Blackman D A and Hurst J P 2007 An exploration of the Relationship between Learning Organisations and the Retention of Knowledge Workers. *The Learning Organisation*. **14(3)** 204-221.
- [11] Madden Ca AND Mitchell V A 1993 *Professions, Standards and Competence: A Survey of Continuing Education for the Professions*. Bristol: University of Bristol.
- [12] Owen G 2004 Mind the Gap: The Critical role of Continuing Professional Development. *Development and Learning in Organisations*. **18(3)** 7-9
- [13] Lammintakanen J and Kivinen T 2012 Continuing Professional Development in Nursing: Does Age Matter? *Journal of Workplace Learnin*. **24(1)** 34-47.
- [14] Csikszentmihalyi M 1999 Implications of a System Perspective for the Study of Creativity In R J Sternberg(ed) *Handbook of Creativity* Cambridge: Cambridge University Press.
- [15] Watson E 2007 Who or What Creates? A conceptual Framework for Social Creativity *Human Resource Development Review*. **6** 419-441
- [16] Perry-Smith J E 2006 Social Yet Creative: The Role of Social relationships in Facilitating Individual creativity *Academy of Management Journal*. **49(1)** 85-101
- [17] Greenhaus J H, Cakkanan G A and Godshalk V M 2010 *Career Management* 4 th edn. Thousand Oaks CA: Sage
- [18] McGuire D 2014 *Human Resource Development* 2ed London: Sage
- [19] <https://www.dartican.com/watsonwyatts/work-usa-survey-identifies-steps-to-keep-employees-engaged-productive>.
- [20] Tams S and Arthur M 2010 "New directions for boundaryless careers: Agency and interdependence in a changing world," *Journal of Organizational Behaviour*. **31** 629-646.
- [21] Svejenova S 2005 "The Path with the Heart": Creating the Authentic Career *Journal of Management Studies*. **42(5)** 947-974.
- [22] Carbera E F 2009 Protean Organizations: Reshaping Work and Careers to Retain Female



- Talent. *Career Development International*. **14(2)** 186-201
- [23] Platman K 2003 The Self-designed Career in Later Life: A Study of Older Portfolio Workers in the United Kingdom. *Ageing and Society*. **23(3)** 281-302.
- [24] Manikoth N N and Cseh M 2011 Career Behaviours Patterns of Professional Women: A study of Protean Careers. Paper Presented at the 2011 AHRD International Research Conference in the Americas, Schaumburg, Chicago, 23-26 February.
- [25] Sullivan S and Baruch Y 2009 Advances in career theory and research: A critical review and agenda for future exploration *Journal of Management*. **35** 1542-1571.



Snow covered pines-trees  
Givrive (Switzerland)

Photo © by Dr. Antal Szabó

## INSTITUTIONAL PROFILE

### Poland Prize

Poland Prize is a programme inviting foreign startups to start activity in Poland. Its objective is to effectively include foreign economic operators in the Polish startup ecosystem. The programme combines the idea of acceleration and soft landing for startups and puts a special emphasis on preparing foreign startups to operate in Poland and on their further development.

Poland Prize is a package of benefits

- grants up to PLN 200,000  
(1 PLN to EUR = 0.223746)
- services up to PLN 50,000 (legal, consulting, mentoring services)
- soft landing: dedicated visa pathway, assistance of a concierge in official, banking and settlement-related matters
- specialised technology consultancy
- mentoring and networking
- post-acceleration



Applications for the Program: Poland Prize is conducted by 6 experienced operators specialised in various sectors. Recruiting takes place through forms applicable on their websites searching for startups in the selected countries covering almost whole Europe, Asia and North America.



Polish Agency for Enterprise Development  
ul. Pańska 81/83, 00-834 Warsaw  
tel.: (22) 432 80 80, 432 71 25, fax: (22) 432 86 20

Source: <https://en.parp.gov.pl/>

## V4 NETWORK ON ENTREPRENEURSHIP

The main aim of the **V4 Network on Entrepreneurship** project is to set up a pool of knowledge, experts and researchers to form new, cross-country network about entrepreneurship and SMEs in the Visegrad countries.

The project is co-financed by the Governments of Czech Republic, Hungary, Poland and Slovakia through Visegrad Grants from International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe.



<https://www.visegradfund.org/>

### Activities

The project started with a **kick-off meeting** at the beginning of March. The meeting in Budapest enabled partners to agree on the main tasks and responsibilities for the upcoming one year until the project lasts.

The work continued by collaborating with partners from the other countries in the region in order to set up an **online database** of research organizations, scholars and universities dealing with local and regional enterprises. This network will facilitate knowledge exchange by creating tools of communication between them. In addition, this main output of the project prepares the basis for joint thinking, articulation of interest and recommendations as well as for further joint projects in V4 countries.

In September 2019 the project is organizing an **international conference** focusing on SMEs in V4 countries, where academics, organizations and other stakeholders will be invited to share their countries' and disciplines' knowledge. Workshop and parallel session will aim to tackle various sub-topics, such as female entrepreneurs, family businesses, young entrepreneurs, etc.

As a closure of the project, a **final workshop** will be held in Bratislava in January 2020 with the involvement of decision-makers from the Visegrad countries to deliver joint policy recommendations aiming to support them in fine-tuning entrepreneurship related policies.

### Partnership

Coordinator:

- HÉTFA Research Institute (Hungary)



Partners:

- IDEA Development Foundation (PL)
- Slovak Business Agency (SK)
- University of Economics, Prague (CZ)

Source: <http://www.sbagency.sk/en/v4-network-on-entrepreneurship#.X9NyZNhKiUI>

## STARTUP INCUBATOR PROGRAM LAUNCHES IN ORADEA (ROMANIA)

Make IT in Oradea (Hungarian as Nagyvárad), and NGO founded by local authorities and companies in Oradea, North-West of Romania, launches the **Bright Nights Incubator program** for startups, which offers mentoring and funding of up to €50,000 for technology enthusiasts who have innovative business ideas and who want to start a business in Oradea. The program has an annual budget of €300,000, granted by the City Hall.

Oradea's continuous investment in improving the quality of life of its citizens and in public infrastructure, coupled with new programs and initiatives aimed at supporting the creation of new startups are setting the city to become one of the most attractive startup hubs in Romania. With a highly developed entrepreneurial culture due to its proximity to the border and various historic reasons, having excellent healthcare facilities and offering unique cultural experiences, Oradea's future may reside in its rather "softer" skills, a combination of business development talent and wellbeing services, complementing the more techy nearby hubs of Cluj and Timișoara.

Make IT in Oradea is a non-profit association founded this fall by local companies Paymo, Helion, Smartware, Mobiversal, Roetco and local authorities, through the Oradea Local Development Agency (ADLO), in collaboration with external partners such as Orange Romania, through the Orange Fab program. The startup incubation program kicked-off on 4 December with a virtual event dedicated to students in Oradea, passionate about technology & eager to start their startup.

Bright Nights Incubator is an educational and entrepreneurial program aimed at all technology enthusiasts, young people with ideas or experienced business people, who have an innovative idea that uses modern technologies. The incubation program offers them the opportunity to test their idea and develop it to the stage of financing.

*The objective of Make IT in Oradea is to develop the creative industry in the region by setting up innovative startups in the technological sector*

The Make IT in Oradea strategy for 2021 aims at developing a local community of IT startups, in three stages: identifying and selecting innovative ideas in the IT field, transforming them into business ideas under the guidance of experienced mentors and, in the final stage, financing each selected business with amounts of up to €50,000. The program will run each year for a period of approximately 9 months.

- **December 2020 – March 2021:** Pre-selection stage, in which participants are invited to submit their idea on the platform for one of the idea competitions that will take place in the coming months.
- **April – August 2021:** Incubation stage, in which the selected teams are guided by mentors and experienced partners, so that the idea to develop to the business stage.
- **September 2021:** The financing stage, in which the business ideas selected in the final will receive financing of up to €50,000.

In the first phase, those who want to participate are invited to join the Bright Nights Incubator program to present their ideas. Both individuals and teams can join the program. There are no criteria for registration, but each idea entered will be approved in competition, in advance, by the organizers. Due to the current health context, the meetings within the program will take place online.

*Source: Eva-Viorela Sfarlea, 8 December 2020 <https://startupsinthecity.com/oradea-in-nw-romania-launches-a-startup-incubator-program-with-an-annual-budget-of-e300000-granted-by-the-city-hall/>*

## NEWS



**FIKUSZ is an annual conference organised by the Óbuda University – Keleti Faculty of Business and Management for young researchers: advanced Masters Students, PhD Students and young PhDs.**

The conference program consisted of a number of invited lectures and contributed papers. Contributions from all over the world are invited and solicited. The meeting is set out to attract scholars with different backgrounds. The language of the meeting is English.

### **The following topics were presented:**

- Business and marketing
- Finance and economics
- Human relations, Social sciences
- IT and mobile security

### **FIKUSZ '20**

#### **20 November 2020**

The conference was organized online this year. To support research collaboration, thematic online workshops are planned on topics of most interest.

Call for Papers of FIKUSZ 2020 was available at  
<http://kgk.uni-obuda.hu/sites/default/files/FIKUSZ-cfp-2020-v3.pdf>

### **For information about the event, together with details:**

- **Dr. Popovics Anett**  
 phone: +36-1-666-5195  
 E-mail: [popovics.anett@kgk.uni-obuda.hu](mailto:popovics.anett@kgk.uni-obuda.hu)
- **Dr. Kelemen-Erdős Anikó**  
 phone: +36-1-666-5195  
 E-mail: [kelemen.aniko@kgk.uni-obuda.hu](mailto:kelemen.aniko@kgk.uni-obuda.hu)

### **Plenary Session**

**Renata Przygodzka** - The state as a buyer of goods and services during COVID-19 pandemic  
**Ivan Mihajlovic, Dragana Dimitrievska, Ivana Veličkovska** - Logistic process indicator (LPI) as the measure of infrastructural and regional development  
**Ariel Mitev** - The power of collage in qualitative research  
**Vojko Potocan** - Society 5.0 and innovativeness of organizations  
**Antal Szabó** - Entrepreneurship in the covid era



## BEST PAPER AWARD OF THE FIKUSZ 2020



ÓBUDAI EGYETEM  
ÓBUDA UNIVERSITY



ÓBUDA UNIVERSITY  
EAST FACULTY OF BUSINESS  
AND MANAGEMENT

### CERTIFICATE

For Best Paper Award of the  
**FIKUSZ 2020 International Conference,  
Symposium for Young Researchers**

conferred to  
**Perumal Koshy**

for the paper entitled  
*Lessons from pandemic: Strengthen neighbourhood self-dependency  
through SMEs*

presented on FIKUSZ 2020 Conference,  
20. November 2020.

  
Ágnes Csiszárk-Kocsir Ph.D  
Vice-dean for Research

  
Anikó Kelemen-Erdős Ph.D  
Conference Chair



1054 Budapest,  
Tavaszmező utca 17.

+36 (1) 886-5201

[info@eua.uni-obuda.hu](mailto:info@eua.uni-obuda.hu)  
[www.eua.uni-obuda.hu](http://www.eua.uni-obuda.hu)

December 2020



# ATM for SMEs

## Interreg Europe



# NEWSLETTER

no. 9-10

## MICROFINANCE CAN OFFER REAL HELP TO THE SMALLEST

### EVENT IN THE COVID CRISES

**Strengthening microfinance institutions and their services to SMEs is becoming more and more important – this was the main message of the “ATM for SMEs” project dissemination conference, organized virtually on 8 November 2020. In the current economic downturn, subsidized microfinance is a powerful tool to help microfinancees survive the crisis and each entrepreneur should have access.**

The “ATM for SMEs” project aimed at improving the access to microfinance in 8 European regions. During the 5 years of the project, the partners shared good practices how to make it easier for local micro enterprises to access microfinance and other business development services. Based on the lessons learnt, 8 local policies were updated and several local actions launched.

**Péter Vonnák**, project manager from FEA underlined: the project can not only benefit regional policies and instruments, but the lessons learnt can show the path non-profit microfinance should follow in order to leverage the potentials of microfinance and achieve the utmost social benefit. December 2020.

**“Non-profit microfinance should prioritize people’s wellbeing rather than financial return: the performance of microfinance programmes should be measured from the aspect of social sustainability and quality of life” – said Péter Vonnák.**

Easy access to microfinance is especially important in critical times like the current downturn caused by the COVID pandemic. It can offer real help for survival to micro enterprises, and the project partners reported important local initiatives to mitigate the impact of the crisis. These measures varied in target group, subsidies, loan amount, but a common element was the cheap, easily accessible microloan, which is available even for the smallest enterprises.

### Main conclusions by the Lead Partner

***“If we allocate public money for addressing a social problem to which microcredit is assigned as a tool, we must definitely start from the logic of using public money. In other words, we need to focus on the problem to be solved and not on the tool itself. The socially desirable result is to ensure social justice and prosperity for the social groups who are excluded from financial services.***

*Obviously, this logic is not in line with the profit-oriented logic of financial investors. Therefore the conclusion is that communities, whether they are local communities or the European Union itself, make the mistake of acting as financial investors in the money market and not focusing on the social problem to be addressed.*

*Public money allocated for microcredit should not be used to enrich certain banks, the central fund managers or for-profit private financial enterprises. The return on program funding should be assessed at the level of society as a whole, not at the level of the financial sustainability of funds financed from public money. This can be reflected, among other things, in the ability of the target social group to pay taxes, to be self-employed or to create jobs, and in their financial prosperity.” – said Tibor Szekfü, the Managing Director of Fejér Enterprise Agency, the President of the Hungarian Microfinance Network.*

### **Public money in microfinance: recent publication by ERENET**

The involvement of public resources in microfinance is more than desirable – this is the summary of the studies published in a recent English-language paper, which aims to clarify all misunderstandings regarding the essence of microfinance. The publication of the ERENET scientific research group is available at <http://www.erenet.org/publications/profile52.pdf>

The Entrepreneurship Research and Education Network of Central European Universities (ERENET) group dedicated a publication to microfinance – importance and recent studies from Europe.

A lot of microfinance institutions operate around the world with different methods and results. Due to its expected positive social impact, more and more public money is allocated for microcredit activities by the individual member states and the European Union itself. The authors – acknowledged European experts of microfinance – would like to bring this activity and the underlying “professional secrets’ closer to the readers. – state the abstract of “Utilization of public money in microfinance” article written by Tibor Szekfü, the President of the Hungarian Microfinance Network

A remarkable study, by the expert team of Microfinanza, is analysing the impact assessment and management of microfinance programmes. Microfinanza proposes a simple methodology and data collection for impact assessment method which can be used by microfinance providers in their daily work. Impact measurement, its analysis and management, will become a key component in reporting comparable and reliable non-financial information – underline the experts.



## CALL FOR PAPER, EVENTS

### THE 24th ST. PETERSBURG INTERNATIONAL ECONOMIC FORUM 6-8 June 2021



**The St. Petersburg International Economic Forum (SPIEF)** is a unique event in the world of business and economics. SPIEF has been held since 1997, and since 2006, it has been held under the auspices of the President of the Russian Federation, who has also attended each event.

Over the last 21 years, the Forum has become a leading global platform for members of the business community to meet and discuss the key economic issues facing Russia, emerging markets, and the world as a whole.

In connection with the announcement made by the World Health Organization to declare the coronavirus outbreak a pandemic, and in the interest of preventing its spread in the Russian Federation and protecting the health, rights and legitimate interests of Russian citizens as well as Forum participants and guests, the St. Petersburg International Economic Forum Organizing Committee has taken the decision to cancel the 24th St. Petersburg International Economic Forum in 2020 and to instead hold the 24th St. Petersburg International Economic Forum in 2021.

### Contacts

St. Petersburg, Russia  
Phone: +7 (812) 680 0000  
E-mail: [info@forumspb.com](mailto:info@forumspb.com)  
Web-site: [forumspb.com](http://forumspb.com)



**SPIEF'19**  
ST. PETERSBURG  
INTERNATIONAL  
ECONOMIC  
FORUM

**6-8 JUNE**

**FRIENDS FOR LEADERSHIP ONLINE MEETUP**

**FROM SPIEF TO UN75:**

**PROJECTS OF THE NEW GENERATION A YEAR AFTER SPIEF  
AND THEIR VISION FOR THE POST-COVID WORLD**

**DATE & TIME**

18 JUNE 2020  
15:00 GMT

Join us Live!

#friendsforleadership  
#PFLOnlineMeetUp  
#SPIEFtime #UN75



### **ICSB World Congress 2021 Orientation 12-16 July 2021 Paris**

The 65th ICSB World Congress will convene a world-wide gathering of entrepreneurs and thought leaders in Paris, France.

In April 1900 Paris hosted the “Exposition Universelle”. Countries from around the world were invited by France to showcase their lifestyles. The Exposition aimed to celebrate the achievements of the past century and to accelerate development into the next. The “Exposition Universelle” of 1900 was a uniting and learning experience.

ICSB, with the inspiration of the 1900’s “Exposition Universelle” announces that next July 2021, Paris will host the ICSB 65th World Congress with the title of “L’Exposition Universelle d’Humane Entrepreneurship.”

The ICSB’s 2021 Global Conference in Paris aims to celebrate the achievements of the past century and to call upon the world for another World Exposition similar to the 1900 Paris Exposition Universelle. Time for entrepreneurship and SMEs to take the lead in ushering the world into peace, prosperity, and happiness.

ICSB invites everyone from around the world to Paris, France to showcase their creative ideas, inventions, inspirations, and achievements in entrepreneurship and the advancement of small businesses.

**Dr. El Tarabishy** is the President & CEO of the International Council for Small Business (ICSB), the oldest and largest non-profit organization across the globe devoted to advancing small business research and practices. ICSB is a coalition of more than a dozen national organizations across the globe and represented in over seventy countries.

Recognized by the United Nations and the Permanent Mission of Argentina to the United Nations, Dr. El Tarabishy worked to create a United Nations International Name Day to be dedicated to Micro-, Small and Medium-sized Enterprises (MSMEs). These Name Days are designated on specific dates, to mark particular events or topics, in order to consciously and actively promote the objectives of the organization. With his novel idea, Dr. El Tarabishy managed to work closely with the Permanent Mission of Argentina to propose a resolution to dedicate a United Nations International Name Day to MSMEs. Approved by the United Nations General Assembly, the proposal was presented by the Permanent Mission of Argentina and 54 countries; thus, 5.5 billion people acted as co-signers of this resolution.

From that day forward, June 27th has been recognized as the official UN MSME Day.

Sitting as the President and CEO of the International Council for Small Business (ICSB), Dr. El Tarabishy works to uphold the standards and initiatives of the oldest and largest non-profit organization across the globe. ICSB promotes the advancement of small business research and practices. The Council stands as a coalition of over a dozen national organizations, being represented in over eighty countries.

Source:

[https://www.eventbrite.com/e/icsb-world-congress-2021-orientation-registration-132196131187?aff=odeimcmalchimp&mc\\_eid=7ad4531369&mc\\_cid=35bc7ddfb](https://www.eventbrite.com/e/icsb-world-congress-2021-orientation-registration-132196131187?aff=odeimcmalchimp&mc_eid=7ad4531369&mc_cid=35bc7ddfb)



## EASTERN ECONOMIC FORUM

**The Eastern Economic Forum** was established by Presidential Decree of the Russian Federation Vladimir Putin in 2015 to support the economic development of Russia's Far East and to expand international cooperation in the Asia-Pacific region.

**Yury Petrovich Trutnev**, Deputy Prime Minister of Russia and Presidential Envoy to the Far Eastern Federal District addressed this Forum as following: <sup>11</sup> „This year, as we celebrate the Forum's 5<sup>th</sup> anniversary we have an opportunity to look back on everything that has been achieved since 2015. It was the first time when **Vladivostok** hosted the trendsetters from Russian and international business communities, government officials, foreign dignitaries, researchers, and experts – in other words, everyone who was prepared to cooperate with Russia and work in the Russian Far East; everyone, who was ready to launch new production facilities and develop those already in place; everyone, who aimed to create new jobs, construct roads, housing, and hospitals – namely improve the life of our Eastern territories. The goals we set 5 years ago appeared unattainable back then. We discussed a broad range of topics: expectations and development prospects, creating new economic regimes and improving the investment climate, passing legislative initiatives and changing legal framework, putting new social infrastructure in place and helping regions reach their potential – in other words, we were talking about the future. Some were hopeful, some remained skeptical, yet there was only one thing that mattered: we were ready to act as one. And today, that future has become our present.

The President of the Russian Federation **Vladimir Putin** designated the development of the Far East as a national priority of the entire 21<sup>st</sup> century. At the behest of the President, a whole new economy is being created in the region. Large companies as well as small and medium-sized businesses can count on tax breaks, administrative preferences, concessional loans, and support from the state development institutions.

A lot has been accomplished during the last 5 years: over 40 legislative initiatives that sustain investment activity and improve the social sphere have been passed; 20 advanced special economic zones and 5 free ports have been put in place. These measures resulted in over 1,780 new investment projects worth over RUB 3.8 trillion, and 230 new enterprises appeared. The government provides targeted infrastructural and financial support to the investors. Over 70,000 people received free land and now are building houses and farms on their 'Far Eastern hectares'.

17 different countries invest in the Far East including China, Japan, the Republic of Korea, Australia, New Zealand and Vietnam. Since 2014, nearly 32% of all direct foreign investment came to our region.

The Far East itself has expanded: Zabaikalsky Krai and the Republic of Buryatia joined the Far Eastern Federal District, while the Ministry for the Development of the Russian Far East now oversees an additional region: the Russian Arctic Zone.

When it comes to the social sphere, the “Unified Subsidy” mechanism has provided existing measures with additional stimulus. 57 centres of economic growth have received funding for the construction of schools and nurseries, hospitals as well as medical and obstetric stations, cultural centres and sports facilities. These centres are home to over 80% of Far Easterners.

<sup>11</sup> Source see at <https://forumvostok.ru/en/about-the-forum/>

A fair amount of good work has been done. Economic growth in the FEFD exceeds 4%, which is two times greater than the Russian national average. However, we are now faced with another objective: increasing economic growth in the Russian Far East to 6% per year. We also must figure out how to improve the quality of life in the Russian Far East and in the Arctic so that it exceeds the Russian national average. These objectives have been set by the President of the Russian Federation Vladimir Putin.

Our goal is to make the Russian Far East more accessible to investors and comfortable for the people that live here, providing them with the confidence that their dreams will become a reality in the nearest future.

Many topics that were brought up at previous Forums ended up serving as the foundation for the development and passing of legislation, the implementation of new business support measures, and the improvement of the Far East's social welfare. I am confident that this Forum will continue contributing to the open dialogue between businesses and authorities, experts and researchers, sociologists and demographers.

I would like to wish Forum guests and participants all the best. The Russian Far East is open for cooperation: we value each partner, every opinion and every initiative that helps develop our country!

**Events at the Forum** traditionally took place in the form of panel sessions, roundtables, televised debates, business breakfasts, and business dialogues devoted to Russia's relationships with various countries.

The Eastern Economic Forum will taking place in **September 2021 in Vladivostok**. The business programme includes a number of business dialogues with leading partner countries in the Asia-Pacific region, and with ASEAN, a key integration organization uniting dynamically developing nations in Southeast Asia.

## CONTACT:

### **Roscongress Foundation**

12, Krasnopresnenskaya Nab., Moscow, 123610, Russia

Phone: +7 (499) 7000 111

[info@forumvostok.ru](mailto:info@forumvostok.ru) and [forumvostok.ru](http://forumvostok.ru)



FAR EASTERN FEDERAL UNIVERSIRY,  
where the Far Eastern Economic Forum takes place since 2015.



**The address of the ERENET Secretary sees below:**

**Dr. Antal Szabó**, Scientific Director

**Helga Matusek**, Secretary

**HUNGARIAN YOUTH ENTERPRISE SUPPORT SOCIETY**

**ERENET**

H-1141 Budapest, Szugló u. 134., Hungary

Phone: (+3630) 399 7067

E-mail: [helga.matusek@gmail.com](mailto:helga.matusek@gmail.com) and [erenetszabo@gmail.com](mailto:erenetszabo@gmail.com)

<http://www.erenet.org>

**ERENET Secretary for South-Eastern Europe is the following:**

**INSTITUTE OF ECONOMIC SCIENCES**

**Ms. Vesna Pejovic**, SEE Secretary

11000 Belgrade, Zmaj Jovina 12, Republic of Serbia

Phone: (+381 11) 2623-055, Fax: (+381 11) 2181-471

E-mail: [office@ien.bg.ac.rs](mailto:office@ien.bg.ac.rs)

<http://www.ien.bg.ac.rs>

**ERENET PROFILE**

ISSN 1789-624X

