

# International Business with New Challenges and Entrepreneurial Opportunities

**Editors:**  
**Emin Akçaoğlu & Rainer Wehner**

**Würzburg International Business Forum  
6th International Business Conference**

**CONFERENCE PROCEEDINGS**

Würzburg, 15 - 16 June 2023



# Conference Proceedings

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6<sup>th</sup> International Business Conference 2023**

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and Entrepreneurial Opportunities

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# Contents

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Keynote Speakers	
International Advisory Board	
Organisation Committee	
Foreword	1
<b>Opening Speeches</b> (Transcription)	5
Rainer Wehner	
Robert Grebner	
Turgut Özkan	
Stephanie Baumgarten	
Diederich Bakker	
Emin Akcaoglu	
<b>Keynote Speeches</b> (Transcription)	
Populism, Export Intensity, and Political Strategies <b>Alfredo Jiménez</b>	11
Challenges in Foreign Trade <b>Kurt Treumann</b>	15
<b>Proceedings of Plenary Session I</b>	
Global Security 2050 - Information and Energy <b>Peter Csillik &amp; Anna Forgacs</b>	21
The Impact of Thailand - European Union International Trade on Thai Economic Growth: The Empirical Data Evidence Approach <b>Anucha Wittayakorn-Puripunpinyoo</b>	27

Why SMEs are overlooked in FDI promotion and facilitation, what are specific instances of SME-neglect, and what can be done about it? 31  
**Martin G. Kaspar**

Examining the Net Promoter Score (NPS) for Convenience Store: Is NPS Impacted by Consumer Demographics? 35  
**Musa Pinar, Tulay Girard & Faruk Guder**

## **Proceedings of Plenary Session II**

Media Communication and International Entrepreneurship in Southeast Asia 39  
**Sascha H. Funk**

FDI Inflows in Turkey between 1990-2022: Sectoral Trends and Entry Modes of Multinationals 45  
**Emin Akcaoglu & Okan Tunsoy**

Developing Multicultural Leaders for International Entrepreneurship: An Examination of Effective Leadership Styles 49  
**Jessica Mantel**

Chinese Management Philosophy and German Based Subsidiaries 55  
**Steffen Hillebrecht**

The influence of political conflicts on Foreign Direct Investments – an impact study on Taiwan 59  
**Rainer Wehner & Emin Akcaoglu**

## **Proceedings of Plenary Session III**

Readiness for Digital Sales: A Comparison of German B2B SMEs and LEs 67  
**Heiko Fischer & Sven Seidenstricker**

Pre-implementation of the ERP System in a Small to Medium Production Company in Poland – A Case Study 74  
**Stawomir Kłós**

Competitive Strategies, Nonmarket Strategies, and Firm Performance in Romania and Poland 80  
**John A. Parnell, Sebastian Vaduva & Silvia Fotea**

Mainstreaming sustainability and promoting Innovation in SMEs: A time for new Chances!  
**Harald Bolsinger** 84

Unlocking the Innovation Dilemma. A simple Formula to clear up Innovation Status  
**Gerhard Hube** 87

#### **Proceedings of Plenary Session IV**

Cross cultural comparative study of sustainability awareness in European education system: A Case study on Italy, Germany, and Romania  
**Elia Francesca Pacelli** 93

Open Innovation Paradigm as Sustainability Booster Along Companies' Supply Chain  
**Sabrina Salsano** 99

Borderlines of Banking Crisis for Canada, China, Germany, India, Japan, Russia, United States of America, United Kingdom and Turkey  
**Halit Targan Unal & Hakan Kaya** 107

Cultural Differences and Entrepreneurial Needs  
**Tiina Brandt, Isaac Wanasika, Diederich Bakker, Rainer Wehner, Gouher Ahmed, Mukhammadfoik Bakhadirov, Hugh Julian Liu, Liu Rong, Yukie Tsuzuki, Mikus Dubickis, Stephen Treacy, Sami Al Kharusi, Maria Gabriela Silva, Andreea-Maria-Gabriela Militaru, Greeshma Kondalu, Helena Markova & Rocco Acocella** 115

**Panel Meeting** (Transcription) 125

Emin Akcaoglu  
Diederich Bakker  
Alfredo Jimenez  
Musa Pinar  
Kurt Treumann





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# Foreword

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Entrepreneurship, innovation and internationalisation are substantially interrelated. In an increasingly competitive world economy these are getting more importance. In recent years, entrepreneurship has been highly emphasized as a crucial topic in tackling the problems of unemployment and economic recession. Within this context, international entrepreneurship in internationalisation of companies gains a special role. Currently, policymakers in many countries and international organisations focus on international entrepreneurship for job creation and economic growth. This is particularly important these days as the global economy still faces difficult times.

Small companies (or small and medium sized enterprises [SMEs] in general) are entrepreneurial in their nature. SMEs are not always growth oriented individually. Many small business owners do not aim to grow the company size at all. But since the number of SMEs in any economy is overwhelming, they contribute substantially to GNPs and also to employment. Many of these firms are family owned. Corporate governance issues have interesting aspects in family owned-firms. The unification of ownership and management enables the top management to make opportunistic investments by relying on intuition. Therefore, such firms are more flexible in

comparison with shareholders-owned and managerially-controlled firms to adapt to changing environments, to enter new markets or, to introduce new products. Perhaps because of this attribute, family firms do tend perform better in adverse economic conditions.

Increasing economic integration among nations forces companies to be involved in international business much more than earlier. In this respect, foreign direct investment (FDI) has also become as important as export business. In fact, FDI is currently has a pivotal role for international trade flows. At present two third of the world trade volume is under the control of multinational companies. Interestingly, multinational companies are not generally large or big companies as is supposed by many. They are rather smaller companies involved in FDI and other foreign operation modes.

So far, the internationalisation of SMEs and family-owned small firms and also small multinationals have been studied relatively lesser than the potential. In this respect, the WIBF's 6<sup>th</sup> International Business Conference aims to focus on international business with new challenges and entrepreneurial opportunities in the current world.

The conference has already established itself as a global forum aiming at assessing

the impact of, and generating discussion regarding, these recent developments in order to reach a deeper understanding of the topical areas.

This year's conference was organised with the partnership of

- Doğuş University, Istanbul, Turkey
- IHK Mainfranken, Germany
- GASMERC – Global Alliance SME Research & Cooperation and

- TNCCS - Transnational Corporations Council of Studies, Canada

We thank all our partners, particularly Doğuş University, and its Rector Prof. Dr. Turgut Özkan for their support. The final acknowledgement goes again to Prof. Dr. Robert Grebner, President of THWS, and Prof. Dr. Axel Bialek, Dean of Faculty of Economics and Business Administration at THWS. Without their support and encouragement, this year's conference would not have been possible.

Emin Akçaoğlu & Rainer Wehner  
Editors & Co-Chairmen of WIBF



# Opening Speeches



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# Opening Speeches of the Würzburg International Business Forum's 6<sup>th</sup> International Business Conference

Rainer Wehner, Co-Chairman of Executive Board, WIBF & Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

Robert Grebner, President of Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

Turgut Özkan, Rector of Dogus University, Istanbul, Turkey

Stephanie Baumgarten, Deputy Dean of Faculty of Economics and Business Administration, Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

Diederich Bakker, Head of GASMERC & Hanze University of Applied Sciences

Emin Akcaoglu, Co-Chairman of Executive Board, WIBF & Manisa Celal Bayar University, Turkey

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## **Rainer Wehner:**

Hello. I am sure you agree that we tape the session and also that we make some pictures for the webpage. Thank you. So dear guests, it's a great pleasure for me to welcome you to our sixth International Business Conference. I'm really proud to announce this and welcome you here in the frame of the Würzburg International Business Forum at the Technical, the New Technical University in Würzburg.

The topic is more actual than it can be. It's international business with new challenges and entrepreneurial opportunities. Besides the fact that I'm, as I said, proud to announce the sixth conference. I'm really glad that after countless online sessions we are back to the normal and can meet face to face today. Especially I look forward to our gala dinner where we can sit together and chat with a nice glass of wine. So despite this opportunity, we decided to hold the conference in a hybrid mode to offer some of the young academics with a limited ability to travel, the chance to present their research findings. I'm really glad to have some of my master's students from Italy to join this conference online. So before I hand over the word to my President, Professor Dr. Robert Renner, I want to say welcome and thank you to Robert. He was with us this opening session every year, sometimes here in Würzburg. Well, every second year we are somewhere abroad at a partner university. Let me use the opportunity to welcome the Rector of Dogus University. I learned Turkish Mr. Turgut Özkan, who is hosting next year's conference. So next year with the seventh International Business Conference, we will be in Istanbul, Turkey. So then I want to welcome the Vice Dean of our Faculty, Professor Stephanie Baumgarten. The Dean himself has an urgent last minute meeting. And the Chairman of GASMERC Professor Diederich Bakker would have been also with us today. However, Diederich cannot make it

unfortunately. He called me an hour ago, and told that he had a Chinese delegation spontaneously coming. But he will be with us in the afternoon to present a paper.

And last but not least my friend and Co-chairman of the Würzburg International Business Forum, Professor Emin Akcaoglu from Manisa Celal Bayar University in Turkey, is with us. Without him I would not been able to organize the conference alone.

Furthermore, special thanks to our two keynote speakers. First of all, Alfredo Jimenez. Professor Jimenez, is a colleague and friend from KEDGE Business School in Bordeaux. Alfredo please correct me: He is a specialist in the field of political risks. Thank you for taking the trip from south of France to here. And from the Chamber of Commerce, Mr. Kurt Treumann. He is the head of Foreign Trade Department of the Chamber of Commerce in Würzburg.

All in all, I want to thank my students for their support and our technical staff who helped me a lot with all that cameras and technical equipment. So, 45 academics from ten different countries participate in the conference onsite or online in the capacity of speakers, authors, co-authors or just listeners. We have 20 papers that will be presented in the upcoming sessions. And thank you very much to all of you who took the effort to join this conference.

Now I want to hand over the word to my President, Robert Grebner, who was so kind to find the time for some welcome words.

## **Robert Grebner:**

Thank you, Rainer. It's a pleasure to say welcome to so many different people from different countries. We are very proud to have people from the United States here, not because of this conference, but because of other reasons, too.

I think you know what I mean. And I'm proud to have the Rector Turgut Özkan at camp. He, unfortunately cannot be here to enjoy the wine and beer in this evening in our nice city Würzburg. But eventually you're invited to visit us for another reason. If you have time, please come to Würzburg. And so we can meet each other physically. Yes. Thank you Rainer for organising this conference. And as he said, he will organise this conference every two years in Würzburg. And it's an important conference. We have transformed a normal university of applied sciences to a technical university of applied sciences. What does that mean? For example, for the Department for Business Administration? The Department for Business Administration will change the name, and that's more American than German to be the THWS Business School. It will be so, because our university has been developed very internationally in the last ten years. Now we have more than 2500 international students from more than 100 countries all over the world, within 9300 students in total. So this is a very impressive development for a German university. We offer more than five programs, special programs, totally taught in English. That's why we have so many international students here. Because we cannot offer international programs in German. The German language is very hard to learn for non-Germans. So that was the trick ten years ago to offer bachelor programs totally taught in English. Of course, these are mostly engineering programs, but also international business. And that's the reason we are very interesting for companies. Not only around Würzburg and Schweinfurt, but in all Germany and Bavaria. These companies don't produce things only in Franconia or Bavaria, but all over the world.

And they are very internationally too. And they have much of opportunities now to get employees from outside Germany because Germany, like other European countries too, have a lack of people. And this is one good method to bring people to Germany, to Europe from outside, offering them a bachelor's degree. And of course, as you can imagine it's a hard work. These are young people. Only 18 years old at the time when they are leaving their families, for their first time being in Germany. So we have a lot of effort and a lot of persuasion. But it's always about time and a lot of fun to play with these programs. And of course, another aspect is our national students and international students which are here today. Thank you for being here. Our students have a great opportunity to have easy contact to international people, and other cultures. And they can learn to cooperate internationally.

Yes. So thank you again. And because I only have five minutes, I will stop here to hand over to the next speaker. But surprise. I will attend the dinner tonight. Thank you for the invitation. And then we have time for more discussion about our university if you like; or about the economy of Germany and the ecosystem where we are in. And that's a last sentence: A very important part of our university that we feel very close to companies on the one side and very close to channels

like the industry and Handelskammer. And they help us a lot to integrate our young students to companies and also integrate companies to our research areas. So this is a very important part of the type of university of applied sciences. Okay. So, thank you.

### **Rainer Wehner:**

Now I want to hand over the word to Rector Turgut Özkan of Dogus University.

### **Turgut Özkan:**

Thank you very much. I hope my voice is coming to you. Is there a problem about my voice? No.

Okay. Dear Distinguished Rectors, Dear Esteemed Speakers and Colleagues, Dear Students, Dear Guests and members of the Audience; as one of the partners of the conference, as Dogus University, I would like to convey my greetings and love to all participants and contributors from Istanbul, Türkiye.

Distinguished delegates; I would like to express my sincere gratitude and on behalf of Dogus University I welcome you to the Würzburg International Business Forum's 6th International Business Conference.

It is my great pleasure to welcome you to this meeting of Würzburg International Business Forum's 6th International Business Conference. I am very grateful to the University of Applied Sciences, for their support to this meeting, which was held jointly with Dogus University.

I would like to express my special thanks to the other institutions that contributed and supported this important conference. But I have important colleagues whom I cannot pass without thanking: Prof. Dr. Rainer Wehner, Prof. Dr. Robert Grebner, Prof. Dr. Axel Bialek, Prof. Dr. Diederich Bakker and my dear friend Prof. Dr. Emin Akcaoglu.

I am both honoured and delighted to be with you today to participate in the opening of this remarkable event. Today we have an excellent opportunity to meet academics and practitioners from around the world.

In this context, first of all, I would like to thank the Conference Organizing Committee for preparing a very interesting and contributing program and for making great efforts to bring us together.

As we all know, the main theme of the "6th International Business Conference" is "International Business with New Challenges and Entrepreneurial Opportunities". We will exchange information and ideas on analysing global patterns and forces that influence small firm internationalisation, international entrepreneurship, and sustainable innovation management and will question what the future holds for all of us in the context of international business.

We all know that in an increasingly competitive world economy entrepreneurship, innovation and internationalisation are getting more important thus

concepts, frameworks, theories, methodologies and insights should be discussed both by professionals and leaders for a mutual and better understanding.

By organizing this conference which gives voice to such a diverse and rich program, our academic institutions prove that they aim to scrutinize contemporary issues in their scientific work, that our academics are not only caught up in theory-talk but are especially preoccupied with the many challenges in global, international and national settings.

Before I finalize my speech, on behalf of Doguş University, I would like to take the opportunity to once again thank to organizing committee and all institutions, all speakers for their contributions and to all members of the audience for joining us today. And I wish you all — us all — the very best for a most successful conference. Greetings from İstanbul, Türkiye. Thank you.

### **Rainer Wehner:**

Thank you, Rector Ötzkan, for your speech. We are delighted and we are looking forward to come to you next year. Thank you so much. Now I want to hand over the word to the Deputy Dean of the Faculty, Professor Stefanie Baumgarten.

### **Stephanie Baumgarten:**

Dear Prof. Grebner, Dear Rainer, Dear Emin and dear guests from Turkey, dear keynote speakers, dear students and dear audience. On behalf of the Faculty of Economics and Business Administration, I would like to welcome you to this year's International Business Conference. We are very delighted that we can host this event again. And looking at the audience, it's a real pleasure to have all the experts here representing, as we've already heard, different countries, different in their countries of interest and different perspectives. So thanks to all of you online and onsite for being with us today. And at this conference, we will explore the topic of challenges and entrepreneurial opportunities related to international business and to the stimulating prospects related to that. And this theme of the conference closely relates to the strategy and also the values of our faculty. We currently have roughly 35 professors here. We have additional guest lecturers and we have 2000 students from all over the world with our faculty and we as teachers and preventers- we are strongly committed to supporting the students in developing an entrepreneurial mindset so that you are able and students are able to take advantage of the entrepreneurial opportunities. And I was willing to act on these opportunities. Why at the same time being prepared to cope with the related challenges, the associated with drawbacks, and the frustration which sometimes there is as well. And for this learning, surely it is important for us to focus on the international setting and international perspective. And this is reflected in the content and the

structure of our study focus. We have in total five bachelor programs and three master programs. We have several courses being taught in English. And as we already heard and like our faculty, we have two programs; one bachelor program and one master program, which are fully taught in English language. And the international setting is all through linked to the origin concept as well. And in our cooperations that we have with universities and companies worldwide, we also have more than 100 programs. We have international guest lecturers. So all of you in the audience, you are more than welcome to join our team. We have international students, and we have events like today's where we bring together experts from different backgrounds, from different nations. As we gather today for this conference, I think we all acknowledged that the global landscape has faced profound disruptions with digitalisation, artificial intelligence, the geopolitical shift in general, and also the changing consumer preferences have disrupted established business models, but at the same time created new avenues for innovation and growth. And in the sessions we are going to have today and tomorrow, I think we will hear and learn a lot about the international dynamics and also how we can capitalise on them to shape new ideas and to get new inputs for our research and also for our students and for the practice as well.

To shed light on this topic. We have a great panel of speakers. We have our great keynote speakers. So thanks also from my side for being with us. And I'm confident that you can build on your rich experiences and research when sharing your valued insights with us. So that's the discussions, the presentations will inspire us and empower us and to take on the risks of international business and to seize the entrepreneurial opportunities that are related to it. And to me, this event is not just a gathering of experts. It's a platform. And you have seen that in the previous five years, a platform where new ideas are born, where collaborations are built and partnerships that we already have are nurtured. And so in my opinion, we have a great event and we should all take advantage of that. And now to conclude. And I would like to thank all of you for making this possible. And thanks to the participants online and on site. Thanks for our partners, the Chamber of Commerce and the other universities, our sponsors thank all the students for supporting and organising this event. And a huge thank you to these guys here, Rainer and Emin, I think what dedication and commitment over the past years to have ensured that we have this platform where we can start things together, where we can research and grow together. So I wish you all the best of enriching discussions. Thank you for being here.

### **Rainer Wehner:**

Thank you, Stephanie. Now we have the great pleasure to welcome the chairman of GASMERC. It's a network of small and medium sized enterprises. Live from Groningen in

the Netherlands. Our old friend and colleague, Professor Diederich Bakker. How are you?

**Diederich Bakker:**

Yes. Good morning and greetings everyone. Thank you for the kind introduction. I'm doing great in the sunny, beautiful student city of Groningen. Greetings to everyone. The students, the faculty, the presenters, the panel, dear colleagues from Würzburg. And yeah. Greetings from the GASMERC, the Global Alliance of SME Research and Collaboration. What we try to do is being lived now at the sixth Würzburg International Business Forum, and that is to bring together researchers, like minded researchers around the globe who have one thing in common: The advancement of the knowledge of SMEs in innovation and internationalisation and our school of thought. And many of you, I think, share this school of thought is to see the correlation between internationalisation and how internationalisation can enhance innovation, which is one of the key - let's say critical resources - in SME advancement. And, the previous speaker has just highlighted a few, let's say, disruptive elements that we are all facing. So it is more relevant than ever that people come together now physically and also in a hybrid mode. So for me, it's really great to participate for the sixth time, sometimes in person, sometimes digitally like now, in this great conference. So also a great compliment from my side, from our side, from GASMERC to the organisers. It's always really nice to see the efforts that are put in. And, it's about coming together, I think, and it's about having exchanges. So yes, exchange research, knowledge and thoughts and results of ongoing and finalised papers and research projects. But it's also to discuss and to cooperate and to make new connections. So I think the contribution of this conference now, which is almost, which is probably one of the most dedicated to this topic of innovation, internationalisation for SMEs has really found a place in the academic landscape. And therefore, I'd like to wish you all a great time in Würzburg. I wish I could be there. Such a beautiful place and an inspiring event once again. So success! And until very soon, have a great conference and I will be listening carefully and hopefully see some of you

later on doing my presentation on entrepreneurial skills in ten different countries worldwide. So all the best. Thank you very much.

**Rainer Wehner:**

Thank you Diederich, thank you very much for being with us, taking the time. Now I want to hand over the word to my colleague and friend Emin.

**Emin Akcaoglu:**

Hello. It's very nice to see you once again. In fact, I have been together with my colleagues at THWS for the last seven years. And in fact, during this period, I have seen many significant developments at this esteemed institution. Particularly in terms of the internationalisation process of this university. And obviously, the leader of this process has been President Professor Robert Grebner. He has transformed the university of applied sciences into an international technical university of applied sciences. He has also supported us for our conferences. I would also like to really thank him for his support throughout the organisation of all our conferences for the last six years. And in fact, all the members of the faculty at THWS have supported us so much, too. Particularly I should mention Professor Bolsinger and Professor Axel Bialek. And I'm glad to have Professor Kiesel here and the other colleagues, particularly Marcus and Dominique. Because without their support, it wouldn't have been possible to organise this conference for so long. In fact, we are here for the sixth conference. As I said before the next year's conference is going to be in Istanbul and Dogus University will host the conference with the support of Professor Turgut Özkan. I want thank Professor Özkan for his support since the early years.

And of course, I would like to thank Professor Rainer Wehner, my friend and colleague so much! Because without Rainer we wouldn't be able to found the Würzburg International Business Forum, and organise these conferences for so many years. Thank you very much Rainer. It is great to have you!

# Keynote Speeches





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# Keynote Speech – I:

## Populism, Export Intensity, and Political Strategies

Alfredo Jimenez, KEDGE Business School, Bordeaux, France

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All right. It's really a pleasure to be here. And thank you very much for coming. First of all, I would like to thank you for inviting me to this event, also providing that place to happen. It's really important for us. As you mentioned, I have a status. I grew up in the city of Salamanca, which happens to be a twin sister. It's a beautiful place to be able to go there to find the largest facilities for people in this world. So I'm not going to introduce myself again after such a long distance. And particularly political race is my main topic. Since I did manage to attend. But since then I've been working on. And this actually is the second time, when invited to participate in this event, last time it was online just. So, so at this time, to be able to do that all the time in my speech was on political race, on how the different literatures, perspectives relations are being developed and how they are intertwined. It was mostly a theoretical and conceptual presentation. That's why this time I've chosen to speak about empirical work and activities on the topic of populism, which I think is one of the most trending topics these days and not on business. And I highly encourage you to consider if you are looking for a research topic to work on the future. And then finally, populism tends to think about strategies.

It goes almost without saying that populism is increasingly fashionable. Almost everywhere in the world we have right now, you can in the graph in the slide how it is in Europe, but also everywhere. And these are very populist political leaders worldwide increasingly attracting attention from scholars. And that's why in this work I focus on this phenomenon. Populistic leaders have a significant impact on how firms operate in markets, because populism triggers political uncertainty and therefore companies need to adjust to this fundamental challenge. How can firms minimize their exposure to this political uncertainty? Well, there's a very interesting paper by the Devinney and Hartwell in which they propose three different potential set of actions that firms can undertake in order to reduce never to eliminate waste, to reduce their exposure to political to political settlement.

The first group of actions is what they call forecasting. These are actions dependent on their ability to make informed decisions, basically collecting information to be able to make decisions. Then they suggest forestalling actions. And these are actually designed to restructure the

firms. So basically, that's indicated. For example, they can invest outdoors. They can engage in political lobbying or political campaigns. And finally, the third group of actions are what they call absorption activities. These are actions that are intended to internalise certain data sources within the firm structure. For example, by engaging in joint venture with local parties that might be aligned with the political parties on them. Or we think the local economy depends on the firm. One option that has not been explored yet in the literature in papers is explored. And that's why in this paper, my colleagues, we talk about support can be an action we can take in order to reduce this exposure to populist threats. And this is because important allows firms to increase the flexibility. And also at the same time, especially if they are big enough or not, up today, specific countries that can increase the dependence on the whole country. At the same time, export activities are aligned with another trend in the literature, which is the statistics which. I will spend a bit more on in the subsequent slide, but basically it is the trend in the literature shows that when things don't go well at home, sometimes firms sometimes try to find foreign markets in order to overcome the limitations they find themselves.

In addition to this, we also explore how the relationship between populism and export intensity is moderated by some factors. First, my first perception. Most studies use objective measures of whatever is whatever. But what about the perception that distance can be sunk in? The perception of the distance by the managers can be something else. So countries coming far from close, if not objectively, but if the manager sits differently, that also triggers decisions based on these assumptions. And second, we also explore the extent of investment in political ties with the local government officials because of the more politically connected environment is that can also have the decision conflicts. So basically some are eating paper. Our main goal is to explore whether the level of populism in the home country affected from Mexico intensity and how this relationship might be moderated by the perception of political stability investment.

Now I'll explain a little bit more. How does this affect companies? There are many definitions of populism, and so I'm going to go through them. I think more or less we all

understand what populism is. But I'll explain a little bit the characteristics, how they affect the economy and therefore the complex populism and all of them to be able to support by attacking the status quo in the country. Claiming that institutions to serve elites, they try to change the rules of the game in society. There's no longer safeguards and it's hard to solve. Political settlement in is interesting because political uncertainty is increased. That reduces the accuracy of information available. That makes it more difficult for the firm to calculate and forecast their decision. It is well known that populism has built on this information to undermine the credibility of institutions and sources. And sometimes populism is also inclined to take quick decisions, sound bite solutions to complex problems, and to overturn what their political predecessors have done.

So overall, political uncertainty is a major threat for a person to navigate. It's less.

To minimise the exposure, as I will say for firms, many try to increase exports because they rely are more concessional flexibility in case of changes to the rules of the game. They also may improve the impact on the national payment and therefore firms' dependency. So if their home country regulation is also gaining some leverage with the one country government. And as I was saying also, this aligns very well with the notion of institutional despotism, which claims that when there is a misalignment between what the firm needs and what they find the domestic market. This triggers internationalisation in several ways because it's a way to circumvent it, get away from these mutations or these restrictions that they want. So overall, in this in this research work here, both of the high level likely departments full of intense.

He also bore a moderate sized 74 on. First of all, we argue that perceptions of the political stability might matter, might shape how the relationship is and the political instability. As political instability increases, their relationship is likely to be stronger. When political stability is weak, institutions are less likely to mitigate the threat of these attempts to laterally modify the rules of the game and therefore that trigger that companies search for solutions when political stability is strong. This tells us information is more collectables stable, is more reliable, is more likely that firms will foster adoption of common practices, imitate each other, leading right to focus on operational efficiency because they can rely on their forecast. But when political instability is high, companies can try to find solutions. We try to differentiate from each other. Intensifying export markets as a way to get away from the situation. And therefore, our second hypothesis is the greater the perception of political instability from the impact of populism on export and test. Finally, we also explore our political ties in the literature. Most of the papers associate political science will likely have a positive impact on science. Basically, we are well connected. Maybe there's a change or something like that, but in general we are connected. Supposed to be good

friends. But if we go deeper then this response to separate effects that sometimes help each other and reinforce itself. But in this case, they don't. And I think that's what makes this hypothesis particularly interesting. The two attacks on political science are what they are called doctrine, and that enables that the former allows firms to be insulated from external pressures or from potential threats that are going to to because they are well worth the latter and enhance the control or access to resources. Because you are connected, you have easier access to information, relative abundance, parents, etc..

On the one hand, the buffering effect of political tide might lead to think that those companies that are better connected might be more protected from populism threats and therefore easier to interact with the government. Less likely, therefore, to stay connected. On the other hand, the enabling effect was also positive in general also helping the company the opposite effect because in this case the net effect means the company is more likely is an effective facility, the company is more likely to be able to export. They can get dependence on licensed export. They can get financial capital loans, credits, guarantees, etc., subsidies, information, even confidence. There are some papers showing that the confidence of the firms to engage. The impact therefore can go in either way and which one is stronger might be a matter of empirical analysis. But we expect perhaps the enabling effect of political ties to be more pronounced. And this is for several reasons.

First, both companies offer protection is very clear, but firms are noticing that the conditions in the market are deteriorating more and more. There might be a point in which the case might not be enough. Second, protection might not last forever. Or, as I said before, they become even a liability in case of political change. And the protection might come at the price as well, because they might increase dependency on the government. It might increase agency problems because they get the protection of the government. We expect you to do that based on their political agenda. They might expect the politician is appointed there and their positions might go against the business goals that you might have. So the protection might not be totally free. And therefore we expect the increases to trigger the organisation's search for solutions to media matters which include outside connections. And therefore, we expect, although we have knowledge of it, to go both ways, but we expect the example of greater investment equally applies. You can probably name half of the population what we're calling from before we have. So basically, he's not built for the modern proposed population density, the two watersheds that.

Methodologically speaking, our goal is not to take too much time or surpass one or both and not get too much into reflex. Of course we can stop all questioning, right? We can step all the details. What do we do? Basically, the data comes from the World Bank Enterprise Survey. It uses more than 17,000 observations from 26 countries. These countries are

emerging countries, based on what is available in the survey. We basically follow previous literature for the dependent variable. We use export intensity as the percentage of firms for, let's say, or cosine or the independent variable. It might be more interesting because interest from populism is relatively new and not well known for those few papers. But there is a database for global living database by our day converts. And then you basically analyse the speeches of politicians and they conduct word analysis. It's a bit complex, maybe not much detail, but they analyse the responses of the politicians and they get a score or the level of popularity based on the quality of the leaders of the countries. For the moderating variables we use perceive political instability, which comes from the World Bank Enterprise Survey database and for the investment political ties. We also take it from the main database. And in this case is the general managers amount of time interacting with each.

These are the countries, as you can see something countries in sample. These are the descriptive statistics. And these are they're so small. Sorry for the small font that basically in all the models we find strong support for the impact of populism on export intensity as well as of the two moderators. When we include them separately, we gave them simultaneously in the regressions. But all the regressions is also controlled for inclusion to control, for the fact that perhaps firms are more likely to source for that kind of export. They want to go too much into the details, but we can discuss that if you are interested for the two motivations that clearly show that the relationship is stronger when the two moderators find. We also conducted under Western studies. And quickly here we that multilevel methods because our data comes on three levels from industry on country levels, because populism might be dissimilarity perceived across countries. We also apply one procedure proposed by Jensen in which we compute populism and regress it on political posturing, verbal and in symbols. We also exclude specific countries and India, because the country accounted for the majority of observations just from driving results. And we get consistent results across models. And of course we have limitations. We like limitations precisely because I think they suggest that future areas of research for those of you interested in stopping or not sure what is good for your masterpieces or something like that of almost, we explore experts, but one of the many paths that could be explored.

There are so many other outcomes, for example, that can be affected by populism from survival rates for four months, FDI, even investments here. I have to say something. I was coming yesterday on the train and on the train I was reading and I was reading several days of the Academy of International Business, and they're going to read the Academy of Management Annual Conference in August in Boston. And there's a professor in Vienna being proposed for the price, the International Distance, the International Management Division, whose paper is entirely focusing on performance. So perhaps performance has already been

taken, but there are many other firms that are interested and about foreign direct investment.

But there is a recent paper last week published a global strategy journal on foreign investment location choice. So again taken. But there are foreign investment levels, foreign investment stocks, all that. Or just specific regions. So we can explore. Maybe overloading in the world is like this spot in Latin America. Maybe we'll try. Another limitation is that we compute from X for intensity. But we don't know where that is supposed to go. So the nature of that, of course, might not be that might be different when you go to Europe. When they go somewhere else. We don't have data or we serve this paper respectfully.

And on top of that, we don't have data in the world, in the world of Enterprise survey on whether the export intensity is due to a decrease in domestic sales or to an increase in export sales or a combination of both. In any case, although it would be better to know Antony's recipe to tango, there is one other or both. It is true that the overall logic is the same. Populism is a certainty and that leads to increasing local sales and increasing exports both for farming. We don't investigate different varieties of populism. We treat populism as a single threat. It is different, but there might be nuances in the type of populism that is. A recent paper on right wing populism. Spreading right wing populism is different than that. And finally, as I said, our country is what it is in the database. We have 36 countries in countries where all of the contexts are poorly developed countries. That is something that could be explored in future that I highly encourage you to see through whatever topic. It does. More and more papers are being published and more and more populism is affecting more and more countries. We have an election coming back next year. So I don't think it's a topic that we've brought up any time soon. Thank you very much for your attention. Thank you again to the conference organisers. It's really a pleasure to be here. You got any questions now or later during the breaks.

## **Speaker's Biography:**

Dr. Alfredo Jiménez has a Master's degree in Business Economics Research and a PhD in Business Management. He is currently Professor at Kedge Business School in Bordeaux. Previously he was Associate Professor at the University of Burgos in Spain. His research interests are focused on the process and determinants of success in the internationalization strategy of firms. His current lines of research include the impact of institutional variables, political risk, cultural and psychic distance and corruption on foreign direct investments and entrepreneurship. He is also working on a research line devoted to virtual team and multi-cultural team management and dynamics. He has published several papers in international journals including the Journal of International Business Studies, Journal of World

Business, Business and Society, International Business Review, Journal of Business Research Technological Forecasting and Social Change, Journal of International Management, Management International Review, and European Journal of International Management. He has also been a visiting scholar in different institutions in Norway,

Germany, Australia, Singapore, Italy, Ecuador and Mexico, as well as participating in the X-Culture Project as a member of its Advisory Board and instructor. He is project reviewer for the Spanish Ministry of Economy and Competitiveness and for the Government of Ecuador and Poland.

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## Keynote Speech – II:

### Challenges in Foreign Trade

Kurt Treumann, IHK Würzburg-Schweinfurt Mainfranken, Germany

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Thank you very much for the warm welcome.

Today I want to talk to you about the challenges in foreign trade.

First of all, I want to give you a short overview about the current press. Here you can see that crisis is everywhere. There are dependencies like magnesium as a critical raw material. Or think about the car manufacturers like Porsche and Mercedes being dependent on solutions by Google or Apple. You can see what happened with regard to the Corona crisis. With a large concentration of ships, the situation was like a big “parking spot” in the Bay of Shanghai. All the yellow spots on the blue sea are ships. Or recall the container ship “Ever Given” which got stuck and blocked the traffic behind. Or think about the B-word “Brexit” and headlines like the new word “slowbalization” with the snail and the globe on the back. So let’s concentrate of globalization’s status quo: The nationwide survey “Going International 2023” by the DIHK was created with the support of the 79 Chambers of Industry and Commerce (IHKs) in Germany. Around 2,400 foreign-active companies based in Germany took part in the survey from 30 January to 15 February 2023. The proportion of companies that have felt an increase in barriers to their international operations got up from 32 percent in 2017 to 56 percent in 2023. Here you can see that from the year 2017 to 2023 companies suffered more and more the pressure of trade barriers. The question is, in what kind of areas are companies most exposed to? So first of all – no wonder - that I need to mention the sanctions in connection with the Russian war against the Ukraine. Up till now we have 11 sanction packages. All in all, if you go inside, it's not a pleasure to work with it because of the complexity. So - but not only sanctions are the problems for our companies. There are also local certification and safety requirements and for example, also higher custom duties. So where do the trade barriers come from? First of all, - no wonder – it is Russia. All the sanctions against Russia and Belarus. Also, Russia was not the most important export market for us it was very important as a supplier for energy and raw materials. At present we see that lots of exports are going now to Turkey. It could be that Turkey is an example for platforms for some exports maybe going afterwards to Russia. There is a big problem. The thing is if the exporting

good falls under the sanctions and the German company has knowledge that the goods will get in the end to Russia via Turkey, China or the United Emirates, for example. Which markets or regions are the most burdensome in this respect of trade barriers? So in the face of the geo political challenges, many companies are reviewing their international business already. The economic consequences of the Corona pandemic, such as trade barriers and mentioned disruptions of global supply chains and logistics have prompt companies to adjust their supply chains. So no wonder that 51% of companies attempt to open up new markets. 84% of the companies planning to enter markets, are particular looking sales for their goods and services. But due to the disruption in international supply chains, companies are increasingly keeping more goods on stock in order to be less dependent on just in time deliveries.

Further on the survey said that the most important markets are those of the Eurozone and other European countries and Switzerland and Norway as well. Then, of course, there are the established markets of North America and the U.S. Just out of this survey afterwards I will tell you that there are some other markets as well which are important in future...

Smaller companies in particular are currently struggling with their foreign commitments. The energy price crisis and the slowdown of the global economy are reflected in the planned foreign investments of industrial companies. As already mentioned, there are increasing obstacles to international exchange of goods. While 44 percent of industrial companies still wanted to invest abroad at the beginning of 2022, at the beginning of 2023, it was only 41 percent. This is the lowest proportion since 2009. That was 40 percent. And we all know what happened in 2008 and 2009.

So what are the motives of companies regarding their foreign investment? First of all, it is cost savings. It is worrying that the motive for cost-cutting is gaining ground again among companies that want to invest abroad. 32 percent are planning to invest for this reason - as many as in 2008 during the financial market crisis. Overall, there is a clear sense of uncertainty among companies when it comes to their investments: Action is being slowed down at home

and abroad. So especially smaller companies suffer. So my expectation already is that they are currently struggling with their foreign commitments. On the slide you can see the black line which shows companies with less than 500 employees, the blue line with companies with more than 1000 employees and the yellow line which comprises all the companies. Here you can see activities around the establishment and expansion of sales and customer service abroad. This motive lost importance at the beginning of 2023. Small and medium sized companies and big players – for all of them this motive lost importance.

So what are the trends in 2023? War in the Ukraine is going on, there is the pressure of inflation, chip production and insufficient infrastructure and climate change. And as mentioned before, whoever you ask – there is skills shortage.

By 2030, 3 mio. skilled workers could be missing in Germany. It is obvious that there is overall a declining and aging workforce potential which is a bottleneck in key industries. But no wonder this is not a German problem only, it is international already. The problem with the lack of workforce is getting more problematic. In many cases German embassies cannot follow the requests for all the visas on time.

What kind of other trends are obvious? Our companies suffer the trend of protectionism. and there is the trend regionalization like RCEP. So our position for example as exporters will change. In future many markets will only demand special solutions. Still in 2023 there is the dependency of strategically important goods and individual producer countries. And the rise of energy prices, breaks in supply chains. So the fight for raw materials will get tougher. Especially - I'm talking about the Germany's position which is characterized by its dependency. We are very much dependent on raw materials because we don't have enough. Particularly Germany is dependent on China for these raw materials. So among the top five most important suppliers for seven out of nine critical raw materials like cobalt, boron, graphite, silicon, magnesium, lithium, niobium, rare earths, titanium is China. But Germany wants to remain successful. There must be a changed course. I would like to mention five areas. First of all, there must be a concerted industrial policy with clear investment priorities. Second there must be a focus on innovations and technologies. Third the spirit of entrepreneurship must be promoted. And last but not least sustainability across the organization must be prioritized. So what does it mean? There is a disruption, of course. Few technologies come into play more and more and they will replace a row of classic products. That is a fundamental transformation. For example, think about the car manufacturers and what changes they suffer within a fundamental transformation.

There was a survey that looked at upcoming markets. Africa - no continent will change more in the coming years. So it is worth to take a closer look to Nigeria, Tanzania or Ethiopia in the near future. The problem is – especially for the small and medium sized companies. There are 54 markets

on the African continent. Quite a good number of them are opaque markets and diverse with complex framework. Asian competitors increase their shares in trade and investments there. In many cases there are no really good information about these countries or markets. Some of these markets are in some cases in a battle between each other. All this makes it really complicated to get into touch with these markets and be successful. So our companies are really struggling with this. African markets, nevertheless will get more and more important if you think for example about the growing population and the sun as a source of energy. My duty as an employee of the Chamber of Commerce is to provide our companies a variety of services to start to get inside business. Then there is the US. There is an upwind for relationship with the U.S.-side. On the other side the U.S. keeps on the track with strong national interests which leads easily further into the America-First-Politics or the Inflation Reduction Act - shortly named protectionism. Security in the world is not guaranteed so much anymore. The U.S. seems to be a little bit tired of being the world's police. China politics is the big question and the U.S. will surely expect backing by the EU. We are so much economically dependent on China and the U.S. as well. Regarding China, there is a balancing act. Of course it is a competitor and should also be seen as a partner. But it's obviously a systemic rivalry. China seeks for being a part of the leading group such as mobility, payment systems, AI or facial recognition software solutions. There is a decoupling on the markets, but we are dependent on China on most of their products because it's a big market for us and it will still be a big market. It doesn't matter if there is a "China plus One Strategy. China will persist as a very important export market for Germany. But it is also a market for sourcing and production. As I mentioned, lots of important raw materials come from China.

Then there is Asia / Asia Pacific. This region contributes a major growth of the world's population. First of all let me mention, India. So at present the Indian giant awakens. More than two decades in the past - at this time when I was starting my job - I noticed talks like "an Indian elephant is still asleep". But now the time is really good for India. And then there is the rising star Vietnam. Vietnam is busy in producing these days. China plays an important role in this region. The regional competition is getting more intensive. Then we have the European Union which is 30 years old. The EU is more important than ever. We had some "battles", of course like the "B-Word" Brexit. The Brexit was and is of course negative. But till the end of this process, the EU stood together. And still the most target region for foreign investments of German industrial companies is the EU. So within Single European Market we are really close connected even with the burden of bureaucracy. Let me mention that the Single Market of the EU is much more important than any other FTA. The situation at present is that the proportion of industrial companies that want to invest in China is decreasing at present. German industry is getting involved in

the rest of Asia. There is also significant growth in North America. And the EU remains important. Most important export countries of the Bavarian economy are United States, Austria, China, France, Italy, Netherlands and UK. Highest import values to Bavaria are China, Austria, Czech Republic, Italy, Poland, Hungary and United States.

What would be our role next? Europe could be a strong player. That would be pretty nice. Europe could also be a weak player. Or Europe could be crushed in the battle between China and the U.S. It is unlikely that China and the U.S. will work side by side. So I hope that Europe will maintain a strong role inside foreign trade. But, we never know. Maybe it will go down. The U.S. will claim to leadership that is clear. In this “play” the EU will define more it’s role as a “junior partner” of the U.S.. It is likely that China will try to assert an alliance to Russia and also will claim the leadership in key technologies. So, I make it short, but this is very important for you, the German business model differs from other countries. The share of foreign trade and economic output is suspiciously high. I mentioned that there is a question of security in connection with the U.S. and that we are very much dependent on energy and raw materials especially those of importance. So Russia is not anymore our supplier. And then there is China. We are very much economically connected with China with regard to import and exports which makes us very much dependent. But also China is in a way dependent on Germany.

I’m quite coming to the end. For example, Angela Merkel’s ex economic consultant said: “If you really want to

do something in China, you have to act out of a position of strength.” This is our problem too, because all the time we feel Germany is like a victim. But keep in mind that this information lives in the coming future. Our task is to do our jobs as good as possible but in a faster speed.

Thank you for your attention.

## **Speaker’s Biography**

Mr. Kurt Treumann started his career in private German enterprises. Later he moved to the German Chamber of Industry and Commerce (IHK), for which he has been working for more than two decades. He studied economics at Verwaltungs und Wirtschaftsakademie Wuerzburg (VWA) and completed his studies as Betriebswirt (VWA) in 1999. Kurt Treumann started to work for the IHK as a consultant for International Affairs. In 2012 he became Referent, and he has been the Director for International Affairs / Bereichsleiter International since 2014. Mr. Kurt Treumann is responsible for the promotion of internationalization of Mainfranconian companies through the provision of various types of services such as export- and import consultancies, market development projects, events and meetings, international business travels, certification, and confirmation of special documents relating to foreign businesses. He has developed, organized and attended a number of official participations at international trade fairs for SMEs all over the world.





# Proceedings of Plenary Session I



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# Global Security 2050 - Information and Energy

Peter Csillik, Karoli Gaspar University of the Reformed Church, Hungary  
Anna Forgacs, Budapest Business School, University of Applied Sciences, Hungary

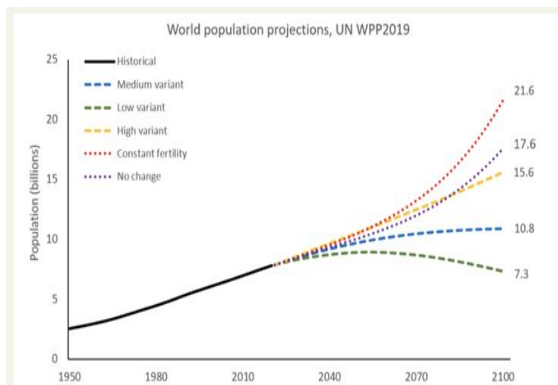
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*The title suggests that many of the false fears like overpopulation, energy or climate crises are solvable. By 2050, global population dynamics and energy consumption will probably be stagnant, energy efficiency will have improved for 200 years, the unit cost of computing will have fallen by 38% per year since 1900, and the rate of robot expansion will be 10% per year. Solving the climate crisis does not require asceticism, it requires foreign policy and foreign economic instruments of the group of developed and democratic countries (the enlarged NATO) to reduce the share of coal/hydrocarbon energy and maintain the current world order through carbon taxes and carbon subsidies. Let us briefly outline some of the theorems of anthropology and positive psychology that may help us to get our bearings.*

## Population and technological development

The UN World Population Prospects (2019), which shows the analyses produced by the UN, presents many scenarios, with the global population in 2100 expected to be between 7.3 billion and 21.6 billion. This upper bound of the 1:3 estimate (constant fertility) implicitly assumes that humans, by their very nature, are not adaptive.

**Figure 1.** Population projection by UN



### Human nature and happiness

In his seminal work, Arnold Gehlen (1988) showed that man is an acting being, a responding being, a being exposed to nature and not a specialized being. He is morphologically

characterized by his inability to run fast or to exert great force, his appearance resembling that of a baby monkey, an incomplete being. Any other animal can learn its full repertoire of movements very soon after birth, while humans can learn new movements (for example skiing) even at the age of 50. Humans are not instinct-driven, their instincts are degenerated, they are raised on instinctive stumps, regulated by culture, and rarely develop what we call character before the age of 40. The whole-body surface of a human being is bare and capable of absorbing stimuli. We can touch our body at any point and this stimulus is consciously registered in the brain (spinal cord). In contrast, a tick, for example, can distinguish between only two states: if something that emits lactic acid passes underneath it, if it does, it falls from the tree and burrows into the animal, if it doesn't, it waits in the tree for decades. Humans have a phantasy of movement, the touch of their hands and the vision sent by the eye are combined in the brain, so they can "see" by touching with their hands, like a surgeon when he is rummaging around in the human body with his instruments. Language is a critical tool, sound is emitted and heard, and the two sensations interact. The decisive turn is when the subject and the predicate (e.g. the sun is shining) construct an independent reality, an inner outside that can be transformed, triggering a reflection that takes the individual out of the immediacy of the here and now.

Gehlen's anthropological reasoning is still valid today; humans respond to cues, the number of births (total fertility rate, TFR) is strongly related to welfare (pcGDP or human development index (HDI)) and/or well-being, as people's thoughts and actions are influenced by their assessment and search for happiness. In the 20th-21st century, too many children (when the chances of a child surviving are many times higher than before) impoverish the family, uses all free energy and money, and thus the child's education, training and access to a good job are not solved.

The modern definition of happiness was given by Seligman (2011), the creator of positive psychology movement, demonstrating its key role in human activities and human health through hundreds of experiments. According to Seligman, the concept of happiness has five elements:

- 1) the experience of pleasant things (e.g., pcGDP or HDI);

2) the experience of flow, when our skills and the challenges of the task are in harmony, i.e. we are not bored or anxious, but gradually develop our skills to meet greater and greater challenges. Csikszentmihályi (1997) was one of the co-founders of positive psychology;

3) spirit that goes beyond us (Nowadays - going backwards in time - it could be: a) the imagery of the Green Planet, b) the Chinese for centuries have been taught and expected to conform to Confucian good morals, on which their empire, their aspiration for being a world power was built, it was the case in 500 BC, in 500 AD or in 1500 and 2000 AD; c) the Jewish-Christian-Islam religions, all based on a monotheistic faith, today the warring tendencies have calmed down in some places, for example the war between Catholics and Protestants for 400 years by now, but some are still alive today like Sunni and Shiite);

4) achieving recognition from peers (relatives and friends), their moral and financial support.

5) success in what we do (anything from doing well in the district running championships to winning the Nobel Prize).

**Table 1.** Total population, 10000 BC-2100 AD

Year	Population (Millions)
-10000	4,5
-7100	9
-5400	18,8
-4063	37,5
-2700	75
-1354	150
1	300
1610	600
1850	1200
1945	2400
1989	4800
2100	10500

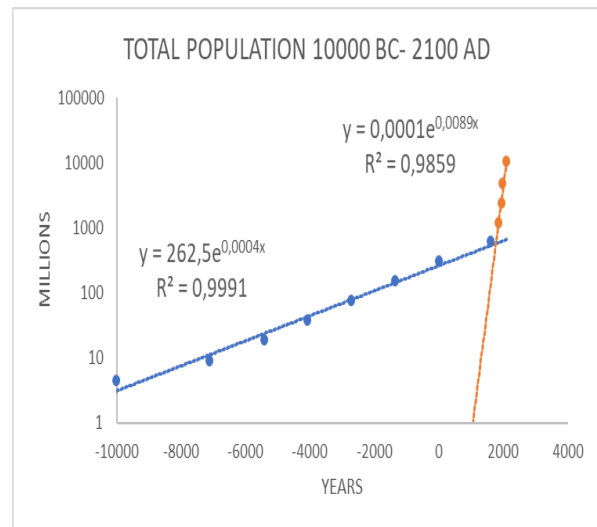
**Population, TFR and development**

What we do have evidence of is a negative relationship between higher happiness components such as pcGDP or HDI and TFR mean. The higher the pcGDP (or HDI) in a country, the lower the TFR. (Whether we look at the evolution of the TFR with the 2021 HDI or the 2018 pcGDP as independent variables, we find a strong medium correlation, with HDI R2 =0.79 and pcGDP R2 =0.63.)

Based on the data examined, Myrskylä, Kholer and Billari (2009) found that the relationship between TFR and HDI is U-shaped, with TFR increasing again above a given HDI level until it approaches 2.1. More recent data do not show a U-curve. Perhaps the Planet will empty out over time? If we look at the Romer (1990) model, fewer people

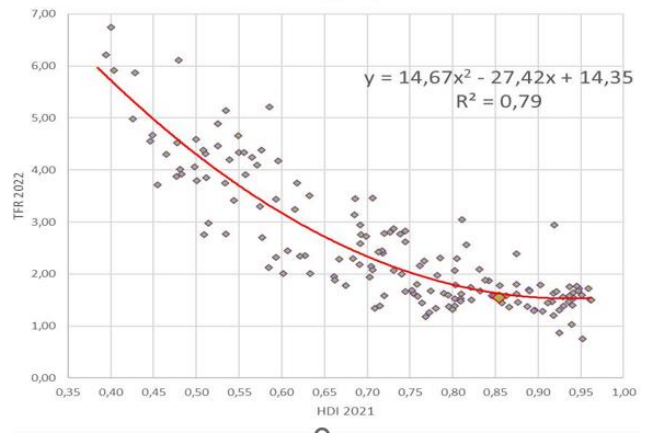
may lead to lower pcGDP (because fewer people are engaged in R&D). With falling pcGDP, TFR may also rise, and form a stable population cycling around a trend, with high living standards. According to the latest UN (2022) mid-range projection of global population, it peaks at around 10.5 bn around 2085 and then starts to decline. To understand the process a little better, let's take a look at the past. If we look at global population trends between 10000 BC and 1600 AD, population grew by 0.04% per year (R2 =99.9); and between 1600 and 2020 by 0.89% per year (R2 =98.6%), twenty two times as much.

**Figure 2.** Total population

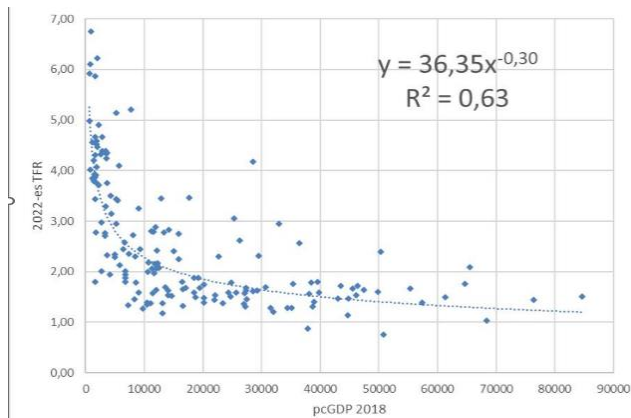


In the majority of countries where pcGDP is over 15,000 USD, the total fertility rate (TFR) has fallen below the replacement level of 2.1. The HDI (a composite indicator of consumption, healthy life years and years of schooling completed) was around the critical level of 0.7.

**Figure 3.** TFR and HDI in 159 countries, 2022



**Figure 4.** TFR and pcGDP in 159 countries, 2022



Source: Bolt, J. and Luiten van Zanden, J (2020)

**Technology, energy, information and sustainability**

The technological level between 10 000 BC and 400 AD can be estimated in part by how many people the land was able to support and how much knowledge was accumulated. In modern times, a different estimate must be attempted.

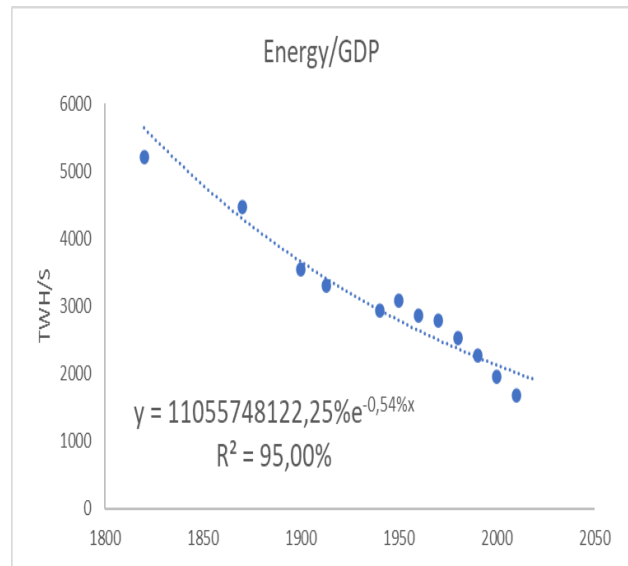
**Table 2.** Energy, GDP, Energy/GDP, 1820-2020

Year	Global GDP th billion \$	Global energy TWH	Energy/GDP TWH/\$
1820	1,202	6264	5210
1870	1,924	8592	4466
1900	3,419	12131	3548
1913	4,739	15676	3308
1940	7,806	22869	2930
1950	9,251	28564	3088
1960	14,62	41814	2860
1970	23,867	66411	2783
1980	34,727	87993	2532
1990	47,044	106638	2267
2000	63,101	122745	1945
2010	91,33	152966	1675
2020		167781	

In the shorter term, the intriguing questions are whether too many greenhouse gases (GHGs) will not raise global temperatures above a given level, whether the technology is available to ensure that global energy demand does not increase with stagnating populations and improving technology, and whether countries that rely on coal to gain a false competitive advantage by using cheaper and dirtier energy can be persuaded to use more expensive renewables

and nuclear energy in their internal energy mix. To do this, it is worth looking at the global energy/GDP rate (1820: 5210, 1913: 3308, 1970: 2730, 2010: 1675 TWH/\$) which has been falling rapidly over the last 200 years (the 'half-life' was 150 years in 1820-1970, 100 years in 1913-2010).

**Figure 5.** Energy to GDP, 1820-2020



Energy needed to produce a unit of GDP has been declining by roughly 0.5% per year for 200 years; while the other key component, the cost of computing to process information, is falling exponentially. According to Kurzweil - Moore's law (Kurzweil, 2006), the cost per unit (per second) of computation fell by 38% per year between 1900 and 2020, and this rate is expected to remain high. Starting in 1900, the first element of the process was the Hollerith card, used to process US census data faster, followed by relays in the 1940s to help crack the Enigma code in the UK. Vacuum tubes were used in early computers in the 1950s, followed by transistors in the 1970s and integrated circuits at the turn of the century. Nowadays, superchips are used and quantum computers are being developed.

This allows us to redefine what is meant by a change in technology (TFP). If the more calculations per second can be taken in terms of GDP produced (i) and the less energy is needed to produce a unit of GDP (e), then  $TFP=(i/e)$  can be the technological level. Let pcGDP be a function of TFP, human capital (h) and physical capital (k) per capita and the wider natural environment (n), then  $y=(i/e) \times (h \times k \times n)^{1/3}$ , where k can be decomposed again into information and energy. Presumably, there is more information in a robot than in a press machine, h is almost pure information and n is mostly energy. New thinking can be initiated if we replace the traditional capital/labor duality with the information/energy duality in the 21st century. The i/e value

is growing fast.

Global energy demand is projected to stagnate within a lifetime, with stagnating population and improving energy ratios (McKinsey, 2022) Initially still high share of dirty energy (coal, hydrocarbons) can be gradually greened (price per unit of solar panels by 10% per year, from \$100 to \$0.5), lithium battery prices (from 2013 to 2022) have fallen by 20% per year (IRENA,2020).

**Table 3.** Robot density 2020 and HDI/TFR 2021-22 in some countries

	HDI/TFR	Robot density
Korea	1,0854	932
Singapore	0,9072	605
Japan	0,7676	390
Germany	0,6145	371
Sweden	0,5664	289
United States	0,5664	255
China	0,6536	246
Denmark	0,5515	246
Italy	0,6938	224
Belgium	0,5901	221
Netherlands	0,5748	209
Austria	0,6214	205
Spain	0,7037	203
France	0,505	194
Slovenia	0,5639	183
Switzerland	0,6422	181
Canada	0,5388	176
Slovakia	0,5388	175
Czechia	0,5236	162

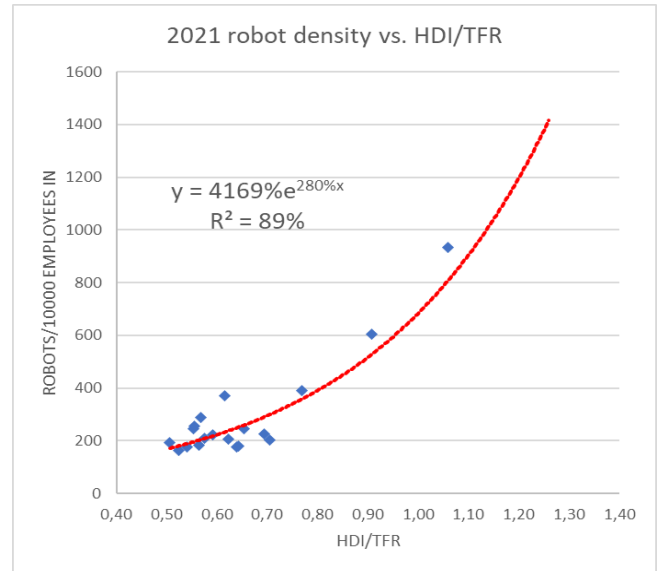
Source: IFR (2021), UN (2022), World in Numbers (2021)

The evolution of the robot density over time and regions can be estimated from the above. Cross-sectional data show that the higher the HDI/TFR ratio, the higher the density of industrial robots per 10,000 manufacturing employees; fitting an exponential trend to the data yields a correlation of  $R^2=0.98$ . The explanation is clear, the fewer children and the richer the country, the more demand for robots and the easier it is for companies to afford to buy them. The global trend is characterized by the fact that 97,000 industrial robots were sold in 2004, which has increased by 10% per year between 2004 and 2020 (IFR,2021).

The threat of a global climate crisis is now largely gone, there will be no need to move from big cities to villages that can be cycled through in 20 minutes, no need to stop rising

living standards (the no-growth theory has failed), and it will still be possible to build a family home and buy fashionable clothes. 200 years ago, one tenth of the global population was protected from starvation, today it is 90%. The cause of the problem lies elsewhere.

**Figure 6.** Robot density and HDI/TFR, 2021



## Sustainability and world order

If things are fine globally, what should be a cause for concern? People want to be happy.

### *Sustainability and happiness*

Every year, around 150,000 people in about 150 countries are asked to rate their happiness on a scale of 0-10 (World Happiness Report, 2022). If we compare these results with the UN's 17 sustainable development goal for each country, we find a good - moderately strong - ( $R^2=0.65$ ) match. If a government is wise and wants its people to be happy, it has something to do (if it is a democracy, government can be elected or removed accordingly by its people).

### *Energy, technology and the new world order*

It is at the intermediate level (between the individual and the global) where the problems may lie. How the new world order is evolving is the wrong question to ask; the right question is: what must be done to prevent autocratic powers that support violent coordination from having the opportunity to transform the world order. The concept of world order can in fact be traced back to the writings of Kissinger (2015), Mearsheimer (2018) and Mitchell (2017).

Back to basics, what about the use of dirty energy (hydrocarbons)? One competitor (enlarged NATO) with a good number of members (EU countries, Canada, USA, Australia, Korea, Japan) is showing a willingness to prefer green technology over black technology (iron can be produced with electricity and coal, but the latter emits far more GHGs). To get companies to go with greener technology - beyond the marketing effect of ESG - we need ever tightening carbon quotas, carbon taxes and carbon tariffs.

**Table 4.** UN Development Goal achievement and happiness survey results

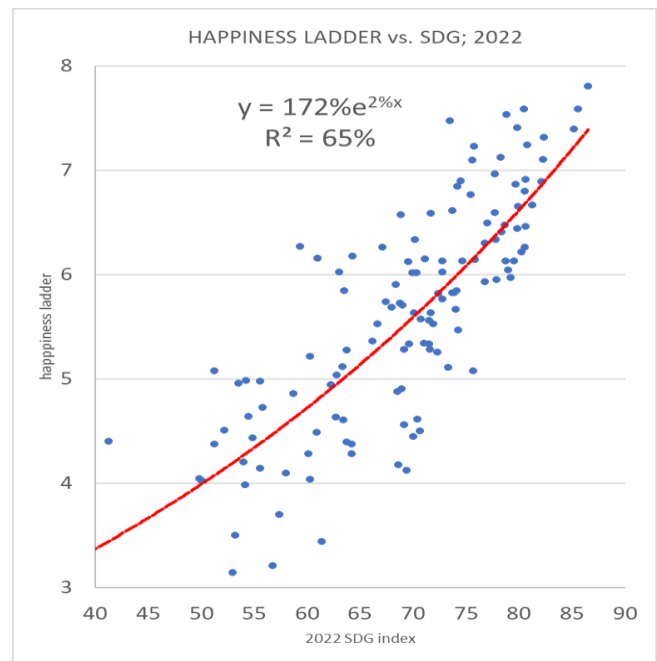
Country	2022 SDG Index Score	Happiness Ladder	Country	2022 SDG Index Score	Happiness Ladder	Country	2022 SDG Index Score	Happiness Ladder	Country	2022 SDG Index Score	Happiness Ladder	Country	2022 SDG Index Score	Happiness Ladder
Finland	86.5	7.8	Singapore	71.7	6.6	Honduras	63.1	6.0	Nepal	66.2	5.4	Ghana	63.4	4.6
Czech Republi	80.5	7.6	United Ari	68.8	6.6	Uzbekista	69.9	6.0	Armenia	71.1	5.3	Oman	69.2	4.6
Denmark	85.6	7.6	Uruguay	77.0	6.5	Malaysia	70.4	6.0	Tajikistan	69.7	5.3	Niger	52.2	4.5
Iceland	78.9	7.5	Slovak Rep	78.7	6.5	Portugal	79.2	6.0	Algeria	71.5	5.3	Tunisia	70.7	4.5
Israel	73.5	7.5	Estonia	80.6	6.5	Korea, Rep	77.9	6.0	Albania	71.6	5.3	Kenya	61.0	4.5
Netherlands	79.9	7.4	Spain	79.9	6.4	Greece	76.8	5.9	Indonesia	69.2	5.3	Sri Lanka	70.0	4.4
Sweden	85.2	7.4	Italy	78.3	6.4	Mauritius	68.4	5.9	South Afri	63.7	5.3	Uganda	54.9	4.4
Norway	82.3	7.3	Chile	77.8	6.3	Thailand	74.1	5.8	North Ma	72.3	5.3	Chad	41.3	4.4
Switzerland	80.8	7.2	Mexico	70.2	6.3	Mongolia	63.5	5.8	Venezuela	60.3	5.2	Cambodia	63.8	4.4
Luxembourg	75.7	7.2	Malta	76.8	6.3	Kyrgyz Rep	73.7	5.8	Lao PDR	63.4	5.1	Benin	51.2	4.4
New Zealand	78.3	7.1	Pakistan	59.3	6.3	Moldova	73.9	5.8	Georgia	73.4	5.1	Myanmar	64.3	4.4
Austria	82.3	7.1	Poland	80.5	6.3	China	72.4	5.8	Guinea	51.3	5.1	Bangladesh	64.2	4.3
Australia	75.6	7.1	Nicaragu	67.1	6.3	Vietnam	72.8	5.8	Ukraine	75.7	5.1	Gambia, The	60.2	4.3
Canada	77.7	7.0	Latvia	80.3	6.2	Paraguay	67.4	5.7	Gabon	62.8	5.0	Mali	54.1	4.2
Ireland	80.7	6.9	Bahrain	64.3	6.2	Monteneg	68.8	5.7	Nigeria	54.2	5.0	Egypt, Arab Re	68.7	4.2
United States	74.6	6.9	Guatemala	61.0	6.2	Jamaica	69.0	5.7	Cameroor	55.5	5.0	Togo	55.6	4.1
Germany	82.2	6.9	Kazakhsta	71.1	6.1	Bolivia	68.0	5.7	Mozambi	53.6	5.0	Jordan	69.4	4.1
Belgium	79.7	6.9	Serbia	75.9	6.1	Russian F	74.1	5.7	Iraq	62.3	4.9	Ethiopia	58.0	4.1
Cyprus	74.2	6.8	Cuba	74.7	6.1	Bosnia ar	71.7	5.6	Morocco	69.0	4.9	Uberia	49.9	4.0
United Kingdo	80.6	6.8	Japan	79.6	6.1	Colombia	70.1	5.6	Iran, Islar	68.6	4.9	India	60.3	4.0
Lithuania	75.4	6.8	Croatia	78.8	6.1	Dominica	70.8	5.6	Senegal	58.7	4.9	Madagascar	50.1	4.0
France	81.2	6.7	Brazil	72.8	6.1	Ecuador	71.5	5.6	Mauritan	55.8	4.7	Zambia	54.2	4.0
Slovenia	80.0	6.6	El Salvadc	69.6	6.1	Peru	71.9	5.5	Burkina F	54.5	4.6	Tanzania	57.4	3.7
Costa Rica	73.8	6.6	Hungary	79.0	6.0	Phillippin	66.6	5.5	Hamibia	62.7	4.6	Malawi	53.3	3.5
Romania	77.7	6.6	Argentina	72.8	6.0	Bulgaria	74.3	5.5	Turkey	70.4	4.6	Botswana	61.4	3.4
												Zimbabwe	56.8	3.2
												Sierra Leone	53.0	3.1

Source: [Dashboard.sdgindex.org\explorer](https://dashboard.sdgindex.org/explorer)

Some parts of the world (China, India, Russia, Iran and Saudi Arabia) are well supplied with coal and hydrocarbons and have ambitions to use them, the "green can wait". Since their living standard may depend on exporting cheaply produced domestic black technology to NATO countries, there is a chance that they will be weaned off it by an extensive system of carbon tariffs, raising the carbon tariff so high that it is no more advantageous to use black technology than green. (Countries willing to cooperate can get green energy subsidies, typically in the form of cheap, mass-produced, easily moved, quickly installed, so-called small-scale nuclear power plants that can supply the entire energy needs of a city of a million people for 6 years without grid connection.) Another element is the super-chip, essential for military purposes; its production and sale must be controlled, and even access to nuclear power plants must be restricted to citizens of countries of the other block to prevent the technology falling into the wrong hands. Russia is dangerous, driven by nostalgia for the superpower title it

had a few decades ago and Eurasian Slavophiles (from Dostoevsky to Dugin) found their perceived global role in that superpower title. China is a more distinctive threat, the technological leader of the world for a millennium and a half (until about 1500), with gunpowder, porcelain, paper, giant ships with cassettes, giant coal mines, etc. showing a capacity for innovation that the Chinese emperor (at the suggestion of bureaucrats, guild masters fearing for their power) was able to prevent (just as the wave of innovation in Western Europe was taking off at the time of the discovery of America). What is driving Iran (Sunni revolution in the Mesopotamian landscape) to become the new nuclear power in the Middle East, we may understand. China has reconciled Iran and Saudi Arabia, India also sees a chance to join the so-called other country block - already a serious warning to the enlarged NATO, a more active foreign policy (including a targeted energy aid policy) is needed to prevent China from turning those countries into allies.

**Figure 7.** Happiness and the Sustainable Development Goals



## Summary

Demographically - technologically there is a good chance to reduce the global risk level substantially; the century-long information/energy rate acceleration is well calculable and partly predictable. Some other lessons: 1) Global population declines after 2085, 2) Global energy consumption does not increase after 2050. 3) HDI (pcGDP) is reciprocally related to TFR, 4) Robot density can be predicted by HDI/TFR ratio, 5) The UN 17 sustainable development goals achievements are similar to the happiness



level of countries 0-10. The main question is what to do politically?

Politically – regarding the world order there is a chance that China-centred dictatorial regimes (Russia, Iran) and their fellow travelers (hesitant India and Brazil) will gradually increase their power relative to the power of enlarged NATO ; whether the democratic and developed countries of the enlarged NATO or the fast developing and typically undemocratic BRIC and its fellow travelers win the global race depends on two things: (a) closer cooperation within enlarged NATO, (b) further improving and better protecting the key techniques of the enlarged NATO alliance countries.

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# The Impact of Thailand - European Union International Trade on Thai Economic Growth: The Empirical Data Evidence Approach

Anucha Wittayakorn-Puripunpinyoo, School of Agricultural and Cooperatives, Sukhothai Thammathirat, Parkkred, Nonthaburi Province, Thailand

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*Over 20 years, Thailand and the European Union international trade had been and still is an important part of most economies. Also, it has been one of the Thai economic drivers. The research objective was to measure the impact of Thailand - European Union international trade on Thai economic growth, to verify trade and economic growth theory. It empirically tests the international trade theory that trade can act as an engine of economic growth in the Thai economy. Monthly time-series data were collected from the year 2003 to 2022 accounting for 20 years. The Econometrics model was conducted applied multivariate regression Analysis was applied for data analysis. The findings showed that Thailand and European Union international trade had a significantly positive impact on Thai economic growth. Statistically, it expressed that the increase of 1 percent in Thai export value to the European Union led to an increase of 0.145 percent. Similarly, the increase of 1 percent in Thai import value from the European Union led to an increase in Thai economic growth by 0.119 percent. Theoretically, Thailand and European Union international trade could have functioned as one of the economic drivers in the Thai economy.*

## Introduction

Globalization has made world economies more intertwined, and international trade is an important part of most economies. It gives consumers more options and increases competition, forcing businesses to produce more cost-effective and high-quality goods, which benefits these consumers. International trade was critical to the global economy's rise. Global events both influence and are influenced by supply and demand, and thus prices, in the global economy. International trade is the buying and selling of goods and services between businesses in different countries. (Heakal, R., 2023). The international marketplace buys and sells consumer goods, raw materials, food, and machinery. It enables countries to expand their markets and gain access to goods and services that would otherwise be unavailable domestically. The market has become more competitive as a result of international trade. This ultimately

leads to more competitive pricing and a lower-cost product for the consumer.

International trade is mostly declared with an export which is a product, which is sold to the global market, while an import is a product that is purchased from the global market. The current account section of a country's balance of payments accounts for imports and exports. Global trade enables wealthy countries to make better use of their resources, such as labor, technology, and capital. Different countries have different assets and natural resources, such as land, labor, capital, and technology. This enables some countries to produce the same goods more efficiently; that is, faster and at a lower cost. As a result, they may be able to sell it at a lower price than other countries. If a country cannot produce an item efficiently, it can obtain it by trading with another country that can. In international trade, this is known as specialization (Heakal, R., 2023).

Due to the theory of comparative advantage, each country would eventually recognize these facts and abandon efforts to produce the more expensive product domestically in favor of engaging in trade. International trade not only increases efficiency but also allows countries to participate in a global economy, which encourages foreign direct investment (FDI). In theory, economies can thus grow more efficiently and more easily become competitive economic participants. For the receiving government, FDI is a means of bringing in foreign currency and expertise. It increases employment and, in theory, leads to an increase in the gross domestic product (GDP). For the investor, FDI means increased revenue from company expansion and growth.

For a business, the benefits of international trade include a larger potential customer base, which means more profits and revenues, possibly less competition in a foreign market that has not yet been accessed, diversification, and potential benefits from foreign exchange rates. It is caused by differences in certain areas of each country. Differences in technology, education, demand, government policies, labor laws, natural resources, wages, and financing opportunities typically stimulate international trade.

As the work of Antunes, S. J (2012). stated that Trade flows, according to growth theory, are an important determinant of a country's growth rate because they enable

technological progress, which is a critical factor in productivity and competitiveness gains, fostering both economic performance and economic growth.

Economic growth refers to an increase in the quantity and quality of economic goods and services produced and consumed by a society (Roser, M, 2023). Economic growth is extremely difficult, frequently measured as an increase in household income or inflation-adjusted Gross Domestic Product (GDP), but this is not the definition of it, just as life expectancy is a measure of population health but not the definition of population health. Income measures are only one way to understand economic inequality between countries and how prosperity changes over time. As Roser, M, (2023). Pointed out that an economy's Gross Domestic Product (GDP) is a measure of total output. It is the monetary value of all final goods and services produced within a country or region during a given period. Comparisons across time and borders.

Economic prosperity and long-term economic growth are relatively recent achievements for humanity, according to long-term social history. In this entry, we will also look at more recent times and examine regional inequality, both in terms of unequal levels of prosperity today and unequal economic starting points for emerging from the poverty of the pre-growth past (Roser, M, 2023).

In this research work, the researcher attempted to measure the Impact of Thailand - European Union international trade on Thai Economic Growth by applying the historical empirical data evidence collected from the Bank of Thailand database. The historical data were continuously collected from the monthly data from the year 2003 to 2022. This accounted for 20 years and 12 months. So, the total number of data was 240 observations.

## Research Objective

The main research objective was to measure the impact of Thailand - European Union international trade on Thai economic growth, to verify trade and economic growth theory. It empirically tests the international trade theory that trade can act as an engine of economic growth in the Thai economy.

## Materials and Methods

### Data Collection

The monthly time-series data were collected from the Bank of Thailand database from the year 2003 to 2022 which was composed of the value of export and import and the Gross Domestic Product of Thailand. These data were adjusted by the inflation rate.

### Data Analysis

The Econometrics model was conducted applied

Multivariate Regression Analysis was applied for data analysis to measure the impact of Thailand - European Union international trade on Thai economic growth. The functional form of the double natural logarithm equation was expressed as:

The Impact of Thai export to the European Union on Thai economics Growth

$$\ln(GDP_t) = \alpha + \beta_1 * \ln(Exp_t) + \beta_2 * \ln(GDP_{t-1}) \text{ -----(1)}$$

Where:

$GDP_t$  stands for the Gross Domestic Product (GDP) of time t. (\$ Billion)

$Exp_t$  stands for the Thai export value to the European Union of time t. (\$ Billion)

$GDP_{t-1}$  stands for the Gross Domestic Product (GDP) of time t-1. (\$ Billion)

The Impact of Thai import from the European Union on Thai economics Growth

$$\ln(GDP_t) = \alpha + \beta_1 * \ln(Imp_t) + \beta_2 * \ln(GDP_{t-1}) \text{ -----(2)}$$

Where:

$GDP_t$  stands for the Gross Domestic Product (GDP) of time t. (\$ Billion)

$Imp_t$  stands for the Thai import value from the European Union of time t. (\$ Billion)

$GDP_{t-1}$  stands for the Gross Domestic Product (GDP) of time t-1. (\$ Billion)

The elasticity of GDP response to Thai export value to European Union of time t could be calculated as the formula (Greene, W. H., 2002):

$$\epsilon_{expt} = \frac{(\% \Delta \text{ of GDP}_t)}{(\% \Delta \text{ of } expt)} \text{ -----(3)}$$

Where:

$\% \Delta$  of  $GDP_t$  stands for the percentage change of Gross Domestic Product (GDP) over time t

$\% \Delta$  of  $expt$  stands for the percentage change of Thai export value to the European Union of time t

The elasticity of GDP response to GDP of time t-1 could be calculated as the formula (Greene, W. H., 2002):

$$\epsilon_{GDPT} = \frac{(\% \Delta \text{ of GDP}_t)}{(\% \Delta \text{ of GDP}_{t-1})} \text{ -----(4)}$$

Where:

$\% \Delta$  of  $GDP_t$  stands for the percentage change of Gross Domestic Product (GDP) over time t

$\% \Delta$  of  $GDP_{t-1}$  stands for the percentage change of Gross Domestic Product (GDP) of time t-1

The elasticity of GDP response to Thai import value from the European Union of time t could be calculated as the formula (Greene, W. H., 2002) :

$$\varepsilon_{impt} = \frac{(\% \Delta \text{ of GDP}_t)}{(\% \Delta \text{ of } impt)} \text{-----}(5)$$

Where:

% Δ of GDP<sub>t</sub> stands for the percentage change of Gross Domestic Product (GDP) over time t

% Δ of *impt* stands for the percentage change of Thai import value from the European Union of time t

## Results and Discussion

Part I. The Impact of Thai export value to the European Union on Thai economic growth could be expressed in table 1:

Table 1. The Impact of Thai export value to the European Union on Thai economics Growth

Dependent Variable: $\ln(GDP_t)$		
Independent Variables	Coefficients	T-value
Intercept ( $\alpha$ )	-0.513	-0.953***
$\ln(Exp_t)$	0.145	1.986***
$\ln(GDP_{t-1})$	0.853	19.932***
F		635.334***
$\bar{R}^2$		0.986

\*\*\* Statistical Significance at 99 percent

Source: The Researcher's Calculation

The multiple regression could be written as:

$$\ln(GDP_t) = -0.513 + 0.145 * \ln(Exp_t) + 0.853 * \ln(GDP_{t-1}) \text{-----} (6)$$

Part II. The Impact of Thai import value from the European Union on Thai economic Growth could be expressed in table 2:

Table 2. The Impact of Thai import value from the European Union on Thai economic Growth

Dependent Variable: $\ln(GDP_t)$		
Independent Variables	Coefficients	T-value
Intercept ( $\alpha$ )	-0.377	-0.574***
$\ln(Imp_t)$	0.199	1.398***
$\ln(GDP_{t-1})$	0.746	5.850***
F		571.153***
$\bar{R}^2$		0.945***

\*\*\* Statistical Significance at 99 percent

Source: The Researcher's Calculation

Table 1 and equation (6) explained that both Thai export value to the European Union at time t and Gross Domestic Product (GDP) at time t-1 had a positive impact on Thai economic growth. Statistically, It was shown that the positive

impact of Thai export value to the European Union on Thai economic growth. This meant that the increasing amount of goods and services Thailand exported to the European Union would lead to an increase in Thai economic growth. With the positive impact on Thai economic growth, Thailand's export to European Union would be one of the economic drivers in the Thai economy. On the other hand, there was a positive impact of GDP of time t-1 on Thai economic growth. The last year of GDP was also one of the economic drivers for Thai economic growth.

The multiple regression could be written as:

$$\ln(GDP_t) = -0.377 + 0.199 * \ln(Imp_t) + 0.746 * GDP_{t-1} \text{-----} (7)$$

Table 2 and equation (7) explained that both Thai import value to the European Union at time t and Gross Domestic Product (GDP) at time t-1 had a positive impact on Thai economic growth. Due to the research results, It was shown the positive impact of Thai import value from the European Union on Thai economic growth. This meant that the increasing amount of goods and services Thailand imported from the European Union would lead to an increase in Thai economic growth.

With the positive impact on Thai economic growth, Thailand's import from European Union would be one of the economic drivers in the Thai economy. On the other hand, there was a positive impact of GDP of time t-1 on Thai economic growth. The last year of GDP was also one of the economic drivers for Thai economic growth.

Part III the Elasticity of GDP response to Thai export value to European Union of time t and Thai import value from the European Union of time t could be expressed in table 3

Table 3 The Elasticity of Economic Growth of Thailand respond to Thai Export and Import Value to European Union

% Δ of GDPt	
% Δ of expt	0.145
% Δ of impt	0.199

Source: The Researcher's Calculation

According to table 3. The research results expressed the response of Thai economic growth to the Thai export and import value to the European Union. The increase in Thai export value to European Union by 1 percent led to Thai economic growth of 0.145 percent. Similarly, the increase in Thai import value from European Union by 1 percent led to Thai economic growth of 0.199 percent.

Theoretically and statistically, the research results verify that both Thai export and Import value to European Union had a significantly impact on Thai economic growth in the Thai economy.

The research results were consistent with the work of

Farahane, M.J. & Heshmati, A. (2020) who studied trade and economic growth: theories and evidence from the Southern African Development Community. They also found that the formation was the need to accelerate, foster, and encourage the region's growth. Their results indicate that during the period covered by their study, export expansion stimulated growth, and more openness to trade reduced it. In addition, the research outcomes were consistent with Antunes, S. J (2012). Who stated that in growth theory, trade flows are an important determinant of a country's growth rate since they allow technological progress, which is a crucial factor in productivity and competitiveness gains, fostering both economic performance and economic growth.

## Conclusion

The empirical data evidence over 20 years of the Thai economy, international trade had been and still is an important part of most economies especially Thailand and the European Union. It enables countries to expand their markets and gain access to goods and services that would otherwise be unavailable domestically. Thai export and import value to European Union had a significantly positive impact on Thai economic growth. Theoretically, international trade between Thailand and European Union could have functioned as one of the economic drivers in the Thai economy. Furthermore, international trade has been the source of income and employment in the Thai economy.

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# Why SMEs are overlooked in FDI promotion and facilitation, what are specific instances of SME-neglect, and what can be done about it?

Martin G. Kaspar, Fränkische Industrial Pipes, Germany

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*Despite Foreign Direct Investment (FDI) being widely recognized as a key driver for economic growth and employment generation, and despite SMEs constituting the majority of firms in pretty much any national economy (and thereby providing the majority of employment), we can observe a consistent neglect of SMEs in FDI investment promotion and facilitation strategies. This article seeks to explore the practical forms of such neglect and starts to flesh out initial policy proposals to address these.*

## Background and Research Gap

SMEs typically operate with limited financial resources and managerial expertise compared to MNEs. This is especially true in the field of FDI (e.g. setting up greenfield projects). Recent research shows that internationalization efforts by SMEs are in decline. Not only on account of SMEs being affected disproportionately by the pandemic, but due to a worsening international context for internationalization. The World Investment Report (UNCTAD, 2021) shows clearly that FDI-activity by SMEs was in decline well before COVID-19. It is in particular a deteriorating international policy environment, protectionist and regulatory overshoot and growing trade tensions, all raising the level of risk and complexity, which are bedeviling SMEs.

Over the past decades, national governments have set up Investment Promotion Agencies (IPAs) to help foreign investors overcome what is termed Liability of Foreignness (Zaheer, 1995) or Psychic Distance (Evans et al., 2000; Hakanson & Ambos, 2010). Based on this research, the argument emerged that foreign investors need to overcome information asymmetry, positing that governmental intervention into the market is acceptable due to rectifying this ‘market failure’. Filippov & Hofheinz (2016 – p. 24) defined ‘information asymmetry’ as one party having more or better information than the other, which creates an imbalance of power in transactions. Information asymmetry being the theoretical counter-point to perfect information, which is a key assumption in neo-classical economics. It can however be argued that information asymmetry is biggest for SMEs, and that the argument for government intervention therefore necessitates that we support those the most which

face the biggest such asymmetry. Anecdotal and research-based evidence (UNCTAD, see above) however suggest that SMEs are falling behind and that IPAs tend to focus their efforts on larger companies / FDI projects in so-called target segments. Systemically overlooking SMEs not only happens in terms of assigning of resources, but also on a meta-level, in terms of extant investment promotion procedures.

## Research Gap

Despite an extensive SME-literature, and a vast body of literature on FDI / internationalization, there are many questions left unanswered at the point of intersection – i.e. SME-FDI. The dominating theory in the field - the process model of internationalization by Johanson & Vahlne, (1977, 1990, 2009), assumed internationalization to be a series of incremental decisions (and steps), by which firms reduce host country uncertainty. The notion of the establishment chain, explains a successive rise of engagement from export, independent agents, own sales subsidiary and finally own manufacturing sites. It is however silent on how those latter steps are operationalized. In this article we seek to address the research gap of the current state of knowledge about SME problems in FDI projects and how IPAs could address these.

International business literature on SMEs largely focusses on export activities (Leonidou, 2004; Leonidou, Katsikeas, & Piercy, 1998), and explain the scarcity of SME greenfield with a preference of non-equity entry modes (Lu & Beamish, 2006). What we are lacking though is an understanding how we can rectify the latter situation.

This gap of the practical “doing” is addressed in this article. To that end we first outline the factors contributing to this systemic neglect of SMEs, briefly outline the implications this oversight has, and then discuss a number of measures which should help overcome this problem, closing with a best-practice case-study.

## Why does this matter and what are the implications?

It is well established, that SMEs aren’t merely smaller versions of MNEs, but instead operate in significantly different ways. This difference is particularly marked in

terms of internationalization projects.

This is, or ought to be, important for the FDI community, given that SMEs constitute the larger part of national economies. For instance, 99.7% of all German firms are SMEs (Simon, 1996) and employ in excess of 60% of the German workforce (Günterberg, 2012). The Mittelstand is regularly described as “the backbone of the German economy”. Non-the-less SMEs are systemically disadvantaged vis-à-vis the MNEs in the FDI context.

In academic research this phenomenon has tangentially been described as either “liabilities of complexity” (Gorostidi-Martinez & Zhao, 2017) or “liabilities of smallness” (Stoian, Dimitratos & Plakoyiannaki, 2018), notions based on the earlier theory of liability of foreignness (Zaheer, 1995). What we are currently lacking though is the operationalization of these problems and policy recommendations to address these. This article therefore seeks to identify the ex-ante problems and devise countermeasures. While, owing to the heterogeneity of FDI projects, it is difficult to suggest the “correct” type of policy support for SMEs, the intention is to develop a tool-box of measures addressing the key issues felt by SMEs.

Continuing to overlook SMEs in Foreign Direct Investment (FDI) promotion and facilitation, would increasingly risk FDI inflows for a host nation, resulting in missed opportunities for economic growth and employment opportunities. On a theoretical and policy level this is also important, as overlooking SMEs essentially goes against the very reasoning for the existence of IPAs (addressing market failure – which clearly is at its most acute with SMEs).

## **Operational instances of the systemic neglect of SMEs in FDI-Facilitation**

### ***Information Asymmetry and Market Access Barriers***

The most widely cited argument for the existence of IPAs (effectively a government interference into the free play of the market), is to alleviate the information asymmetry for foreign firms seeking to invest in the host market.

SMEs, usually lacking procedural FDI know-how as well as market-specific knowledge, would benefit most from IPA support. Their lack of general managerial know-how and prior experience, is usually further exacerbated by the ownership structure of SMEs. Particularly family-owned are SMEs inseparable from the owners’ / founders’ values, beliefs, and level of knowledge. With most SMEs only starting to engage in FDI projects, there typically is little experience. Worse, there is a surprisingly large number of SMEs unaware of the existence of IPAs (or other actors who could help them in the highly complex FDI projects). Furthermore, SMEs crucially lack knowledge about aspects such as the legal framework and obligations for firms operating in this jurisdiction.

By de-emphasising facilitation and after-care support

over fiscal and financial incentives, IPAs often deprive SMEs of the service most needed by them. While IPAs mostly succeed in distributing general information about the host country, this is often more on the level of marketing information, rather than the highly granular data points needed to build a business plan.

### ***Administrative Burden and Regulatory Complexity***

It is well established that SMEs are at a resource disadvantage, compared to MNEs (Erramilli & D’Souza, 1993, 1995), which in turn limits the options of SMEs in internationalization projects (Buckley, 1989; Johanson & Vahlne, 1977). Being restricted to low-investment / low-complexity modes is typically a function of this scarcity.

The significant administrative and regulatory complexity associated with FDI projects, therefore has traditionally represented a substantial barrier for SMEs to pursue greenfield projects (e.g. administrative barriers such as work permits, double taxation regulations, permanent establishment rules, etc.)

With SMEs already lacking market specific knowledge and struggling to navigate the complex regulatory processes, the currently established additional layers of ESG-rules, European taxonomy, supply-chain laws (e.g. the German Lieferkettensorgfaltspflichtengesetz, as well as planned EU supply chain legislation) brings the burden of compliance costs and bureaucratic requirements to levels that not only disproportionately disadvantage SMEs, but effectively preclude them from participating in internationalization.

Neither in terms of regulatory / policy measures (e.g. easing the requirements), nor in terms of practical help (e.g. facilitation) IPAs and host country governments are doing much to alleviate this situation

### ***Bias Towards High-Value Investments***

Maybe the aspect driving this disbalance most forcefully is the metric of success by which IPAs are measured by ministries and Prime Ministers Offices. In most cases this is attracting the biggest possible investments (measured in investment sums and jobs created), within the constraints of a given set of staff and budget (largely a measure of efficiency).

### ***IPA related problems beyond resource-constraints***

There are quite obviously resource-constraints, which results in host country support structures not being able to support every company that expresses interest in it, in equal measure. Choices need to be made where scarce resources of IPAs are invested in – a choice which nearly uniquely falls on the side of MNEs.

However, the even bigger short-coming of host countries is in policy choices made. Arguably a larger share of issues inhibiting SMEs stems from non-resource-constrained aspects. Key amongst which, are policy-makers’ choices in the design of national FDI policies. These are

usually created with the requirement of large MNEs in mind. The most obvious example being the structuring of FDI incentives (minimum investment sums, number of jobs created, to qualify for incentives). In fact, the emphasis on fiscal and financial incentives in their own right, (rather than spending resources on facilitation and after care activities) favours the needs of MNEs instead of SMEs.

MNEs, who are characterized by multiple foreign subsidiaries, tend to have a wealth of experience in setting up foreign entities and greenfield projects. For SMEs on the other hand, it is often their first or second project of that kind. Consequently, their needs differ markedly in what they seek from IPAs. While large MNE's interest primarily revolves around optimizing their financial results by securing as big an incentive deal as possible (often through "location beauty contests" and consequently engineered bidding competitions of different jurisdictions), SMEs need as much practical hand-holding as possible to succeed in the complex field of FDI projects. Spending tax Euros / dollars on incentive payments rather than strengthening IPA staff to provide practical support systemically disadvantages SMEs (failing to provide what they most need, and offering a benefit whose thresholds they mostly fail to reach). In that sense most IPAs are currently set up in such a way that they are effectively largely irrelevant for SMEs.

## **Policy Recommendations for more inclusive FDI Promotion and Facilitation**

Investment Promotion and Facilitation policies essentially fall into Inward Investment Policies, seeking to attract FDI from foreign nationals into the home nation. Policy measures are fiscal and financial incentives (mostly granted in the form of tax holidays), access to financing (e.g. KfW loans) and streamlined regulatory processes to ease the administrative burden. On the Outward Investment Policy side (supporting home country firms investing abroad), we usually count strong programs facilitating access to finance (e.g. through loan-guarantees), or the international equivalent of streamlined processes – namely international trade and investment agreements.

To address the above identified unique challenges and needs of SMEs policy makers ought to tailor policies and programs to facilitate SME-participation in FDI.

Information provision, (and thereby addressing information asymmetry) remains one of the key tasks of an IPA. To be relevant though information needs to be specific and highly granular, allowing SMEs to research cost structures and obligations in the pre-investment phase (typically to build business plans to determine whether to go forward, establish financing needs and an initial road-map of tasks). Such information tends to comprise costing

information (labour and social security costs, electricity costs, rent & lease rates, tax rates etc.)

With the decision being taken, and the SME moving forward, the next major information need revolves round procedural or company implementation information (e.g. what is needed to set up a company, which permits, approvals and registrations are necessary, what is needed to complete them and where are these to be done)

This latter point leading to two aspects which would especially favour SME investments. Firstly – apart from information about such processes, dedicated specialists in IPAs helping SMEs to complete regulatory and administrative requirements. Owing to their resource constraints, as well as their lack of FDI procedural knowledge, SMEs would benefit significantly from such hands-on support. Secondly, in terms of institutional infrastructure, so called One-Stop-Shops make the usually highly complex process much easier. Typically, FDI projects entail interaction with a multitude of ministries and government bodies (often also at federal, regional and municipal level), which merely in terms of logistically visiting all of these, entails a significant investment in time and cost. One-Stop or One-Window structures combine all bureaucratic steps in one location, allowing a much more efficient processing of these steps.

Most importantly however the systemic neglect of SMEs in FDI promotion and facilitation needs to be addressed by ending the bias towards high-value investments and MNEs, due to a reform of ministerial success-KPIs and a concerted effort to put SMEs onto an IPA agenda. Programs need to be developed to address SMEs needs and the focus of IPA work ought to be re-oriented away from incentives, towards capacity-building initiatives, and support mechanisms that are accessible and tailored to SMEs. To illustrate these measures, a case study of the Best Practice example of the Irish Industrial Development Authority (IDA), who has developed initiatives specifically tailored to attract FDI from SMEs (with a dedicated entity) should be pursued in greater depth.

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# Examining the Net Promoter Score (NPS): Is NPS Impacted by Consumer Demographics?

Musa Pinar, Valparaiso University-Indiana, U.S.A.

Tulay Girard, Pennsylvania State University-Altoona, PA, U.S.A.

Faruk Guder, Loyola University Chicago, IL, U.S.A.

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Net Promoter Score (NPS) has been claimed to be one of the best single-item predictors of customer retention (de Haan et al. 2015) and one of the most widely used customer feedback metrics in business (Morgan et al. 2005). It is a method to predict customer purchase and referral behaviors (Rowe, 2021), and it helps firms find loyal users (Rajasekaran and Dinesh, 2018).

A typical survey question to calculate NPS is: “On a scale of 0 to 10, how likely is it that you would recommend [organization, product, service] to a friend or colleague?” The responses are classified as detractors (scores of 0-6), passives (scores of 7-8), and promoters (scores of 9-10). NPS is determined by subtracting the percentage of detractors from the percentage of promoters.

While NPS serves as an effective method for measuring the level of customer satisfaction (Reichheld, 2006, 2011), there is considerable debate about NPS’s predictive value for customer retention and profitability (Keiningham et al. 2007; Pollack and Alexandrov 2013). Prior studies recommend additional research to determine the key drivers and their relationships with NPS (e.g., Burnham & Wong, 2018; Korneta, 2014).

The literature includes no prior research that indicates how NPS is impacted by the customers' demographics. In the context of convenience store business, this study determines the NPS, examines the effects of customer demographics on NPS, and identifies the key drivers of NPS and their potential influence on NPS.

## Methodology

A survey instrument was developed and included questions on customer demographics and key drivers of NPS (satisfaction, mind share, repeat purchase, friendliness and helpfulness of employees, emotional bond, and likelihood of recommending). The pretested survey was prepared as a link that was sent to the entire list of loyalty members. A total of six thousand ninety-nine usable surveys were obtained for analysis.

**Table 1.** Sample Characteristics

Description	Frequency	Percent
Gender	2493	41.3
Male		
Female	3394	56.2
Prefer not to disclose	155	2.6
Household income		
< \$15,000	441	7.4
\$15,001-\$30,000	776	13.1
\$30,001-\$45,000	914	15.4
\$45,001-\$60,000	953	16.1
\$60,001-\$75,000	731	12.3
\$75,001-\$90,000	677	11.4
\$90,001-\$105,000	489	8.3
> \$105,000	943	15.9
Age		
18-25	176	2.9
26-35	546	9.1
36-45	1043	17.3
46-55	1520	25.2
56-65	1579	26.2
> 65	1161	19.3

The convenience store had a high NPS (42.5), similar to the NPS for most industries as reported in the benchmarking studies. Customer demographics had significantly different effects on NPS. Males purchased more frequently, and younger customers had a higher NPS than older customers.

Correlation results showed that recommending the convenience store was significantly correlated with the key drivers of NPS included in the study. In addition, the

regression analysis identified that repeat purchases, satisfaction, emotional bond, loyalty program, mindshare, and helpful employees had significantly predicted the likelihood to recommend the convenience store.

## Implications and Suggestions

Because NPS is widely accepted to be among the best single-item predictors of customer retention (de Haan et al. 2015) and the most widely used customer feedback metrics (Morgan et al. 2005), the findings of this study also support that measuring NPS is a useful metric for businesses to track consumer satisfaction and feelings about their brands.

Our results show that capturing regular customers, offering loyalty programs, and repeatedly using loyalty cards are significant factors to increase the likelihood of being recommended and NPS. Therefore, companies entering new markets, domestic and/or international, could develop strategies to attract new customers.

The findings of this study could help domestic or international companies to identify the effects of consumer demographics and the key drivers on NPS, which could be utilized in improving NPS and leading to higher recommendations to increase sales and profits.

This study can be further extended by surveying the customers who are not members of the loyalty program of the company and other convenience stores in the USA and different countries.

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# Proceedings of Plenary Session II



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# Media Communication and International Entrepreneurship in Southeast Asia

Sascha H. Funk, Thammasat University, Bangkok, Thailand

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*Amidst the rapid digital revolution, media communication dynamics are evolving profoundly, leaving a noticeable impact on various sectors, including entrepreneurship. These changes have been particularly significant for entrepreneurs seeking to harness these advancements to scale their businesses globally. This paper delves into the nexus of media communication and international entrepreneurship in Southeast Asia - a vibrant region witnessing significant economic growth and becoming a global magnet for entrepreneurial ambitions.*

*This research offers an extensive exploration of the current literature and empirical data to comprehend the unique dynamics of media communication in Southeast Asia's international entrepreneurial arena. It navigates the trials and opportunities that are unique to media communication-driven international entrepreneurship in the region, investigating factors such as the digital media platforms predominantly used, the nuanced cross-cultural communication skills required, and the innovative marketing strategies being adopted.*

*In addition, it scrutinizes the complexities of the entrepreneurial environment in the region. Factors such as language barriers, differential access to funding and technological infrastructure, and evolving regulatory norms are considered in detail.*

*This study goes beyond just examining the potential of media communication to enable cross-border entrepreneurship; it illuminates how these influences are reshaping the international business landscape in Southeast Asia. With the empirical insights it provides, the research holds valuable implications for entrepreneurs, policymakers, and academics alike, offering a deeper understanding of the transforming dynamics of international business in the context of Southeast Asia and potentially beyond.*

## **Introduction: The Crucial Role of Media Communication in Facilitating Entrepreneurship in Southeast Asia**

In an era where digital technology has rapidly changed the landscape of communication, media plays a pivotal role in facilitating the growth and sustainability of

entrepreneurial ventures (Krambia-Kapardis, 2016). Its potential to reach wide audiences, shape public sentiment and provide an interactive platform for the exchange of

ideas are unmatched. This extensive reach, combined with the immediacy of information dissemination, places media communication as a key player in shaping the entrepreneurship landscape. Particularly in Southeast Asia, an area characterized by high internet penetration and a rapidly growing digital economy, the role of media communication in entrepreneurship is even more pronounced. This paper aims to provide a thorough examination of how media communication functions as a catalyst in this context, specifically exploring how entrepreneurs in Southeast Asia are leveraging media communication for a range of business-related activities such as marketing, branding, and customer engagement.

### ***Emergence and Growth of International Entrepreneurship in Southeast Asia***

Southeast Asia, with its vibrant economic growth, rapidly increasing population, and a business environment ripe with opportunities, presents an intriguing setting for international entrepreneurship (Javalgi, White, & Ali, 2011). International entrepreneurship - the process of discovering, creating and managing ventures across national borders - is a challenging yet rewarding endeavor. Entrepreneurs in Southeast Asia, despite facing a number of obstacles such as limited access to finance, inadequate infrastructure, and regulatory constraints, are persistently harnessing the potential of the region and achieving considerable success (Aoyama & Lloyd, 2018). In this evolving and dynamic entrepreneurial ecosystem, media communication has evolved as a powerful tool for these entrepreneurs. It enables them to connect with potential customers, explore new markets, and promote their products and services on a global scale in cost-effective ways (Garg & Moorthy, 2020). This paper will delve into these phenomena in detail, exploring the complexities and unique aspects of the interplay between media communication and international entrepreneurship in Southeast Asia.

## ***Unraveling Research Questions and Pursuing Objectives***

Guiding this research is a central question: How does media communication influence the trajectory of international entrepreneurship in Southeast Asia, and what unique challenges and opportunities does this intersection present? To dissect this question and draw out meaningful insights, the objective of this study is to construct a thorough understanding of the role, impact, and potential of media communication in the landscape of Southeast Asian entrepreneurship. The paper aims to unravel the nuanced interplay between media communication and entrepreneurship in this region and shed light on how this dynamic relationship shapes the regional entrepreneurial ecosystem.

## ***The Far-reaching Significance and Potential Contributions of the Study***

This study aims to break new ground in the literature on media communication and international entrepreneurship by offering an extensive exploration of the role of media communication in Southeast Asia's entrepreneurial landscape. By integrating empirical evidence and theoretical perspectives, the study aims to provide actionable insights for policymakers, practitioners, and entrepreneurs operating in the fields of media communication and entrepreneurship. Moreover, it hopes to inspire further scholarly inquiry into the role of media communication in promoting entrepreneurship, ultimately catalyzing the growth of SMEs in emerging economies like Southeast Asia. By bridging gaps in current knowledge and offering strategic recommendations, this research holds the potential to make significant contributions to understanding and enhancing the entrepreneurial ecosystem in Southeast Asia and beyond.

## **Literature Review**

Literature on entrepreneurship and media communication generally underscores the pivotal role that media communication plays in the realm of entrepreneurship. Authors such as Autio, Sapienza, & Almeida (2000) and Krambia-Kapardis (2016) have extensively discussed how media communication influences the creation and development of entrepreneurial opportunities, aiding in the transmission of information and knowledge across various stakeholders. Importantly, they propose that the media also has a vital role in shaping public attitudes towards entrepreneurship, which can significantly impact entrepreneurial intentions and success.

It's crucial to understand that entrepreneurship involves identifying, evaluating, and exploiting opportunities to create new products or services (Shane, 2003). Media communication forms a bridge between entrepreneurs and the various stakeholders they need to engage with – be it

investors, consumers, or potential partners. A strong media presence can boost the visibility and credibility of an entrepreneurial venture, thus enabling it to attract the necessary resources for growth.

In addition to traditional media such as newspapers and TV, the growth of digital media has transformed the landscape of entrepreneurship. Scholars like Van der Meer, Wetzels, & Kleijnen (2011), and Bozdog (2011) discuss how digital media has revolutionized the way entrepreneurs do business. In particular, social media platforms and digital marketing strategies have become invaluable tools for reaching global audiences, promoting products or services, and engaging with customers. Moreover, digital platforms have opened up new avenues for entrepreneurs to access vital information, validate business ideas, and even source funding (Chapman & Raman, 2011).

However, these changes also introduce new challenges. Entrepreneurs now face fierce competition in the digital space, and they must continually adapt to rapidly evolving technologies and changing consumer expectations (Autio, Sapienza, & Almeida, 2000). It's not enough for today's entrepreneurs to simply have a good product or service – they must also know how to navigate the digital world effectively.

## ***Media Communication and International Entrepreneurship in the Southeast Asian Context***

Turning one's attention to Southeast Asia, a region known for its cultural diversity and dynamic economies, one can see that its entrepreneurship landscape is shaped by a unique combination of cultural, economic, and institutional factors (Javalgi, White, & Ali, 2011). The region's entrepreneurial spirit is evident in its bustling marketplaces, innovative startups, and supportive government policies. However, entrepreneurs here also face obstacles such as limited access to capital, regulatory complexities, and in some places, underdeveloped infrastructure (Etemad & Grover, 2016; Aoyama & Lloyd, 2018).

Emerging research in the context of Southeast Asia demonstrates the region's untapped potential in media communication-driven international entrepreneurship. Studies are beginning to explore the intersection of media communication and entrepreneurship, examining how this interaction shapes the entrepreneurial landscape and the challenges and opportunities it presents for entrepreneurs (Krambia-Kapardis, 2016; Liu, 2018). Rapid technological changes, cultural nuances, and differing levels of information accessibility are among the challenges confronting media communication-driven entrepreneurship in this region. Despite these hurdles, opportunities abound for entrepreneurial innovation, stakeholder relationship building, and market expansion (Chapman & Raman, 2011).

The present study seeks to contribute to this burgeoning body of research by examining the role of media communication in shaping international entrepreneurship in Southeast Asia. By providing a more detailed understanding

of this topic, the author hopes to generate insights that are beneficial to both theory and practice.

The interplay between media communication and entrepreneurship in Southeast Asia also warrants discussion in relation to international entrepreneurship. As per the scholars such as McDougall and Oviatt (2000), international entrepreneurship is the process of identifying, evaluating, and exploiting opportunities across national borders. In the current global business environment, media communication plays an essential role in facilitating such international entrepreneurial activities.

In the Southeast Asian context, the advent and spread of digital media platforms have reshaped the way businesses interact and reach out to their global audiences. Entrepreneurs can harness social media, e-commerce platforms, mobile apps, and digital marketing strategies to connect with consumers, clients, and partners across different countries and cultures (Naude, Zaefarian, Tavani, Neghabi, & Zaefarian, 2014). These platforms help entrepreneurs in disseminating information, advertising products or services, and building international networks, which are critical for the success of international entrepreneurship (Zhou, Wu, & Luo, 2007).

### ***Challenges for Media and International Entrepreneurship in Southeast Asia***

However, using media communication for international entrepreneurship is not without its challenges. Cultural and language differences, differences in internet and media usage, and varying media regulations across countries pose significant barriers (Contractor, Kundu, & Hsu, 2003). For instance, entrepreneurs need to adapt their media communication strategies to resonate with the cultural norms and language preferences of their international audiences. They also need to comply with different countries' media regulations, which can vary significantly and be quite complex. Understanding and overcoming these challenges is crucial for entrepreneurs to successfully use media communication for their international entrepreneurial endeavors.

While there is growing literature on the role of media communication in entrepreneurship, research on media communication-driven international entrepreneurship in Southeast Asia is relatively scarce. Therefore, this study aims to bridge this gap and contribute to the understanding of how media communication is used and the challenges encountered by entrepreneurs in their international entrepreneurship efforts in the Southeast Asia region.

In summary, understanding the role and challenges of media communication in international entrepreneurship, particularly in the diverse and vibrant context of Southeast Asia, is both relevant and timely. By focusing on this area, the present study aims to generate deeper insights and offer practical implications for entrepreneurs, policymakers, and scholars in the field.

## **Methodology**

### ***Research Design***

This study employs a mixed-methods research design, which incorporates the strengths of both quantitative and qualitative methodologies. This integrative approach was deemed appropriate because it provides a holistic perspective on the role of media communication in entrepreneurship. The quantitative component involved an online survey targeted at entrepreneurs in Southeast Asia, soliciting their insights on the role of media communication in their business operations, and its impact on their international entrepreneurship activities. The qualitative component, on the other hand, involved conducting detailed interviews with a selected subset of entrepreneurs. These participants were chosen based on their demonstrated success in leveraging media communication in their international entrepreneurship endeavors.

### ***Research Instrument: The Questionnaire***

The questionnaire employed in this research is a key tool for gauging the respondents' use and perception of media communication in their entrepreneurial activities and how it influences their international entrepreneurship endeavors. It consists of two parts:

Part 1 focuses on demographic information such as the participants' age, gender, nationality, type of business, and years of experience in entrepreneurship. This section is important for understanding the sample's demographic distribution and for stratifying the results based on these demographic factors.

Part 2 includes questions related to the entrepreneurs' use of media communication. It is comprised of multiple-choice and Likert scale questions that measure the frequency of media communication use, the types of digital media platforms used, the perceived effectiveness of these platforms, and the challenges encountered in using media communication. A sample question could be: "On a scale of 1-5, how significant has the impact of digital media been on your ability to reach international markets?"

The questionnaire was pre-tested on a small sample to ensure clarity and appropriacy of the questions, and necessary revisions were made based on the feedback received.

### ***Research Instrument: The Interview***

In addition to the questionnaire, qualitative data were gathered through semi-structured interviews with a select group of entrepreneurs who have successfully utilized media communication in their international entrepreneurship endeavors. This purposeful sampling strategy aimed to elicit deeper insights and experiences not easily captured by survey responses.

The semi-structured format allowed for a more flexible

and organic conversation, while ensuring essential topics were covered. Questions were designed to encourage participants to delve into their perceptions and experiences of using media communication in their businesses, exploring both its advantages and challenges. Some topics explored included their choice of digital platforms, strategies for engaging with international audiences, and their experiences in overcoming any communication-related obstacles.

Each interview, conducted either in person or online depending on participant preference, was anticipated to last between 45 minutes to an hour.

### ***Data Analysis***

In analyzing the quantitative data, the author employed both descriptive and inferential statistical techniques. Descriptive statistics were used to summarize and understand the basic features of the data, such as measures of central tendency and variability. Inferential statistics were used to make inferences about the larger population based on the sample data. Techniques such as correlation analysis and regression analysis were employed to identify relationships between variables and to predict outcomes.

The qualitative data, comprising interview transcripts, were subjected to a rigorous thematic analysis. This involved a careful reading and re-reading of the transcripts to identify common patterns and themes. The process was iterative, starting with initial coding, followed by theme development, review, and definition. This inductive approach ensured that the themes emerged directly from the data and accurately reflected the experiences and perspectives of the participants.

## **Results and Analysis**

The investigation demonstrates the significant role media communication serves in fostering the success of international entrepreneurship in Southeast Asia. The data collected strongly suggests that entrepreneurs who proficiently employ media communication in their business strategies are more likely to be successful in international markets.

### ***Aspects of Media Communication-Driven International Entrepreneurship in Southeast Asia***

The examination of the collected data reveals that media communication-driven international entrepreneurship in Southeast Asia is identified by the usage of a wide variety of digital platforms. Entrepreneurs make use of platforms such as social media, e-commerce, and mobile apps as key tools for conducting their international business endeavors. They also leverage media communication to nurture and uphold relationships with key stakeholders, encompassing customers, suppliers, and partners.

### ***Comparative Study of Media Communication-Driven***

### ***International Entrepreneurship in Southeast Asia and Other Regions***

The research ventured to compare the characteristics of media communication-driven international entrepreneurship in Southeast Asia with those in other regions, such as Europe and North America. The findings showed that while the utilization of media communication is widespread across all regions, there are discernible regional differences in the choice of platforms and strategies adopted by entrepreneurs.

## **Discussion and Conclusion**

### ***Overview of Findings***

This investigation established the critical role of media communication in bolstering international entrepreneurship in Southeast Asia. The evolution of digital media has fundamentally transformed entrepreneurship, granting entrepreneurs unrivaled opportunities to broaden their businesses across borders. Through the analysis, the author distinguished various elements of media communication-driven international entrepreneurship in Southeast Asia, including the extensive use of social media, ability to communicate cross-culturally, and the application of innovative marketing strategies. However, the author also discovered several challenges that media communication-driven international entrepreneurs face, such as language barriers, restricted access to capital, and a limited technological infrastructure.

### ***Implications for Theory and Practice***

The results of this research offer significant theoretical and practical insights. Theoretically, one contributes to the body of knowledge concerning the interplay between media communication and international entrepreneurship. This work helps unpack the nature of media communication-driven international entrepreneurship in Southeast Asia, illuminating the unique characteristics and challenges associated with it. Practically, the results offer guidance for entrepreneurs seeking to optimize their use of media communication to bolster international business activities. Moreover, the findings can help policy-makers design and implement strategies to support such entrepreneurs, ultimately promoting economic growth in the region.

### ***Limitations and Prospects for Future Research***

Despite its contributions, this study also has some limitations. One of these is the geographical focus on Southeast Asia, which may limit the applicability of the findings to other regions. Future studies could extend this research to other geographical areas to provide a more comprehensive global perspective. Another limitation is the use of a mixed-methods research design, which while advantageous in capturing a holistic view, may not allow for precise causal conclusions. To further substantiate the



findings from this study, future research could involve a quantitative experimental design to more definitively ascertain cause-effect relationships between variables.

Lastly, although the author attempted to include a diverse range of entrepreneurs in this study, there may be inherent selection bias in the sampling method, which could limit the generalizability of the findings. Future research could utilize more rigorous sampling techniques to ensure a more representative sample.

## Conclusion

To conclude, this study provides meaningful insights into the nexus between media communication and entrepreneurship in the context of international business operations in Southeast Asia. By outlining the unique characteristics and challenges of media communication-driven international entrepreneurship in this region, the study offers useful knowledge that can be leveraged by entrepreneurs and policymakers alike. Furthermore, the study helps to bridge a gap in the existing literature on this topic, thus contributing to the broader understanding of the role and impact of media communication in international entrepreneurship. As the world becomes increasingly interconnected and digitalized, studies like this one will continue to gain relevance and importance.

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# FDI Inflows in Turkey between 1990-2022: Sectoral Trends and Entry Modes of Multinationals

Emin Akcaoglu, Manisa Celal Bayar University, Turkey  
Okun Tunsoy, Baskent University, Turkey

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*The aim of this study is to identify FDI inflows in Turkey between 1990-2022. It is a case study based on secondary qualitative data which were gathered over the secondary sources such as published statistics and review of financial news, and relevant reports. It should also be noted that this paper is a shortened conference version for discussions. The detailed final version will be submitted for publication at somewhere else.*

**Keywords:** Turkey, FDI, MNCs.

## Introduction

The topic of foreign direct investment (FDI) inflows has been at the top of the agenda of the Turkish economy. FDI inflows in Turkey have always been in a fluctuating manner historically. In some years the level of inflows was significantly high while in some other years it was significantly low. Mainly this was related to the fact that Turkey has not really been able to attract green-field FDI in big chunks, but rather FDI over foreign acquisitions. And, in many cases such acquisitions were related to the sale of very large institutions such as banks or privatization of large-scale state-owned companies or assets. Though, in recent years, FDI inflows reflect a declining trend, of course, foreign capital inflows into Turkey will not stop. On the contrary, it should be expected that foreign capital inflows will always be in the agenda; because the Turkish economy has already crossed the critical threshold in the international economic integration process.

In other words, similar to some other major developing countries such as the BRICS nations, Turkey is an important FDI host though the total foreign capital attracted so far cannot be really comparable with the major BRICS members. However, historically Turkey has always been a significant host for foreign multinationals from particularly various European industrial countries such as Germany, and the Netherlands. The country has a special geographical position between three continents, Asia, Europe and Africa. It has also young and dynamic population that is attractive for manufacturing and service companies looking for large markets. Hence, Turkey is a good location for market-seeking FDI not only for its own market potential, but also

as a base for the regional markets in the MENA region as well as the countries in the Caucasus, and Iran etc. (Tunsoy and Akcaoglu, 2022).

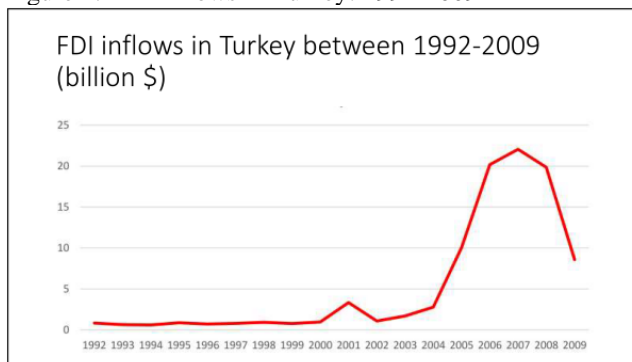
In this paper, we aim to clarify FDI inflows in Turkey between 1990-2022, and analyze the reasons behind. To that end, this is a country case study, mainly based on secondary data. The data used are rather qualitative, and gathered over the secondary sources such as published statistics and review of financial news, and relevant reports.

## FDI inflows in Turkey: 1992-2009

Foreign direct investment inflows in Turkey between 1990-2009, especially during the period between 1992-2002, remained at very low levels. This was caused by some negative developments in the world and in Turkey. For example, the Gulf crisis and war in the 1990s, along with the economic crisis in Turkey in 1994, adversely affected the inflow of foreign capital during this period.

When we examine the sectoral distribution of FDI inflows to Turkey before the 1990s, we observe that traditional sectors such as automotive, tourism, textile, clothing, and food took the lead. However, after 1990, while the amount of foreign direct capital coming began to increase, new industries attracted foreign capital such as telecommunications, processed materials, electronic parts, biotechnology, and logistics.

Figure 1. FDI inflows in Turkey: 1992-2009



In the 2000s, the amount of FDI inflows rose,

particularly after 2004. This was not surprising as the period between 2000 and 2007 witnessed continuous growth in the Turkish economy. During these years, foreign investors were attracted particularly to industries such as information and communication technologies, processed materials, biotechnology, chemicals, and machinery. Then Turkey's full membership negotiations with the European Union also played a crucial role in attracting foreign capital. Additionally, the then governments' economic policies and successful control of chronic inflation further boosted investor confidence.

Moreover, privatizations undertaken especially after 2006 also contributed to the increase in foreign capital inflows. Notably, within this period, a significant parts of shares of Türk Telekom (to Oger Telecom, United Arab Emirates), Telsim (to Vodafon, Netherlands), Denizbank (to Dexia, Belgium), Finansbank (to NBBG, Greece), and Petrol Ofisi (to OMV, Austria) were sold to foreign investors.

In this period, banking and other financial services such as insurance were major industries for FDI inflows in the country mainly over acquisitions. The 1990s were the years when competition for the financial sector increased rapidly all over the world, starting from industrialized countries. Therefore, in this period, banks and other financial companies in developed countries sought new markets due to competitive pressure in their local markets, market saturation and decreasing returns. This meant opening up much more than before. In other words, competitive pressure necessitated cross-border growth. The cost of resisting growth is loss of competitiveness; and even in the case of relatively small companies, it was soon threatened with 'acquisition'. It is not difficult to see the behavior patterns created by these conditions in the strategies of banks or insurance companies that entered the Turkish market through acquisitions, and domestic companies that changed hands. What is important now is to foresee the consequences of this new situation in the Turkish financial sector and to make the necessary preparations for the new emerging conditions. (Akcaoglu, 2005a; 2005b, 2006).

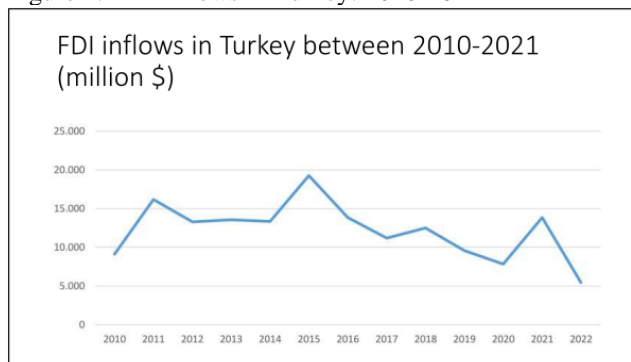
However, the mortgage crisis that started in 2008 and spread worldwide had a negative impact on Turkey as well, leading to a significant decrease in foreign direct investments coming into the country.

## FDI inflows in Turkey: 2010-2021

The amount of foreign capital coming to Turkey for direct investments started to increase in the 2000s. In the first half of this decade, the trend was fluctuating. And in 2016, the FDI inflows in the country decreased 30 percent in comparison with the previous year due to the global recession. The coup attempt in 2016 was probably also effective on this outcome, as it caused political uncertainty. The total FDI inflows in 2016 was 13,835 million dollars.

The Covid-19 pandemic affected the whole world in 2019, and its effect on FDI was significant. In line with this worldwide trend, the FDI in Turkey in 2019 decreased by approximately 25 percent compared to 2018 and amounted to 9.6 million dollars. The amount of capital came in 2020 was 40 percent lower compared to 2018. This situation was combined outcome of the pandemic, as well as the political uncertainty and economic problems in the country.

Figure 2. FDI inflows in Turkey: 2010-2021



The sectoral distribution of foreign direct investment inflows to Turkey between 2010 and 2016 indicate that in this period, foreign investors mainly targeted the service industries. Such investments amounted to half of the total FDI inflows. This was followed by manufacturing with approximately the other half (49 per cent). The remaining 1 percent was for the agricultural sector. FDI in the services was mainly in finance and insurance activities (60 percent of the total).

In manufacturing, energy production such as electricity, gas, etc. was the major area attractive for foreign investors. For example, the largest foreign investment in this area was 6.3-billion-dollar refinery (Star Refinery) investment made by the Azerbaijan State Oil Company-SOCAR. In fact, this was the largest foreign investment made in Turkey.

Interestingly, the foreign real estate purchases in the period of 2010-2016 was also significant, as it constituted approximately 24 percent of the total amount of foreign capital inflows. Due to low global growth and long-term fiscal tightening practices in the EU, which is the largest export market for Turkey, the FDI inflows from the EU countries decreased nearly 20 percent between 2012-2014. This outcome reduced the European demand for the Turkish goods and negatively affected foreign direct investment inflows, especially in the automobile sector (UNCTAD, 2013). On top of this, the geopolitical problems experienced in neighboring Syria negatively affected Turkey's risk perception among foreign investors (CBRT, 2016).

In 2016, Turkey started to support activities related to R&D and innovation to attract more foreign capital. In this context, the Project-Based Incentive System and the Law No. 6745 on Supporting Investments on a Project Basis was

enacted. With these regulations, the objective was to provide project-based state aid to investments, to reduce dependency on foreign sources (imports), to provide support for investments that transform technological platforms, bring innovation, research and development, and added value. In this respect, the major target areas were transportation (i.e. rail systems such as high-speed trains), renewable energy, oil processing refineries, medical technologies and supplies, chemicals, defense industries, etc. To that end, the state support provided to investors includes areas such as employment, finance (i.e. to cover energy costs), bureaucratic procedures, and infrastructure etc. They also include VAT exemption, customs duty exemption, qualified personnel and employer's insurance premium support.

Some of the remarkable foreign capital investments came to Turkey in the period of 2010 – 2016 are as follows:

The acquisition of Denizbank by Sberbank, Russia's largest state bank for 3.5 billion dollars in 2012. Spanish Banco Bilbao Vizcaya Argentaria S.A. (BBVA) acquired approximately 40 percent of Garanti Bankası for \$2.5 billion. French airport operator Aeroports de Paris acquired 38 percent of TAV Airports Holding for 874 million dollars. Nearly 96 percent of Mustafa Nevzat Ilac Sanayii, one of the most rooted pharmaceutical companies in Turkey with a history dating back to the Republican period, was sold to Amgen from the USA, one of the largest biotechnology companies in the world, in 2012 for 700 million dollars. Qatari entertainment company beIN Media Group bought Digiturk, Turkey's largest pay television network. Delivery Hero bought "Yemek Sepeti" in 2015 for approximately 590 million dollars. The acquisition of Yemek Sepeti by Delivery Hero was also recorded as one of the largest acquisitions in Turkey. Mayhoola for Investment of Qatar bought 31 percent of Boyner Perakende ve Tekstil for 330 million dollars. 24 percent of Anadolu Efes's shares were acquired by UK-based SABMiiler Plc, which has global investments in luxury consumption and retail sectors.

As is exemplified, during this period a significant part of the FDI inflows in Turkey was over acquisitions, not green-field transactions. Therefore, it can be claimed that the incoming foreign capital was not really contributing to the country's net capital accumulation.

In the second half of the 2010s, industries such as communication technology, internet and mobile services, transportation and manufacturing became the focus of attention of international investors. For example, in 2018, Un Ro-Ro, one of Turkey's leading logistics companies, was acquired by the Danish shipping and logistics company DFDS (Det Forenede Dampskibs-Selskab) for 950 million Euros. Another case was Alibaba's, one of the biggest ecommerce companies in the world, acquisition: Chinese Alibaba made a strategic investment in Trendyol for 728 million dollars. In addition, Taiwan Cement Company acquired 40 percent of OYAK Cement's shares for 640 million dollars. Turkish "Gram Games" company, which

also operates in the internet and mobile services sector and whose games won the first place in the American and European mobile platforms, was acquired by the American company Zynga, which makes and develops world-famous video games, for 250 million dollars.

When all these direct investment cases are considered collectively, we observe that a significant part of FDI inflows Turkey in the 2010s were through acquisitions, not green-field investments (Deloitte, 2019 Annual Turkish M&A Review Report; 2019).

In this period, one of the major source of foreign capital inflows in the country was over real estate acquisitions. Table 1. clearly indicates that the increase of the foreign real estate acquisitions accelerated significantly as a percentage of the total FDI inflows between 2009-2020.

Table 1. Foreign real estate acquisitions in Turkey

Years	Total FDI Inflows (net) (\$ million)	FDI Inflows without Real Estate Acquisitions (\$ million)	Real Estate Acquisitions (\$ million)	FDI Inflows without Real Estate Acquisitions (% in total)	Real Estate Acquisitions (% in total)
1923-2002	10.800				
2003-2004	4.589				
2005	10.031	8.190	1.841	81,65	18,35
2006	20.185	17.263	2.922	85,52	14,48
2007	22.047	19.121	2.926	86,73	13,27
2008	18.269	15.332	2.937	83,92	16,08
2009	8.585	6.803	1.782	79,24	20,76
2010	9.095	6.601	2.494	72,58	27,42
2011	16.182	14.169	2.013	87,56	12,44
2012	13.744	11.108	2.636	80,82	19,18
2013	13.563	10.514	3.049	77,52	22,48
2014	13.337	9.016	4.321	67,60	32,40
2015	19.263	15.107	4.156	78,42	21,58
2016	13.835	10.566	3.269	76,37	23,63
2017	11.042	6.399	4.643	57,95	42,05
2018	12.822	6.907	5.915	53,87	46,13
2019	9.266	4.287	4.979	46,27	53,73
2020	7.733	3.330	4.403	43,06	56,94
<b>Total</b>	<b>234.388</b>				

## Discussion

The weight of foreign capital in Turkey has historically been far beyond what is generally assumed. It should be noted that many products produced in Turkey today are started to be produced by enterprises established or participated by foreign capital. Today's Turkish economy is also intertwined with foreign capital. The import substitution policies followed from the 1960s to the 1980s created a structure that paved the way for foreign capital companies to enter Turkey, especially in terms of private capital accumulation, and the conditions of our time were built on that period. Therefore, it is doubtful to what extent even the 'developmentalist' understanding of the import substitution period was manufactured domestically. All of this makes me question the validity of the concept of 'national capital' in terms of countries like Turkey that have been integrated into the world economy without completing the industrialization process. The phenomenon that is traditionally described as 'national capital' is so intertwined with foreign capital that it is no longer easy to determine who is local and who is

foreign. This is true for our country as well as for other countries. Especially in Turkey, not a day goes by that foreign partnerships for domestic companies are not on the agenda.

There are only three years in which foreign capital coming to Turkey has attracted attention: 2006 (20.2 billion dollars), 2007 (22 billion dollars) and 2008 (19.5 billion dollars). The peculiarity of these years is that both large-scale privatizations such as Türk Telekom and large-volume handovers, especially in the private sector such as bank sales, were experienced in these years. Therefore, foreign capital inflows, which have reached record levels, are not actually based on new investments.

Therefore, foreign capital comes more or less, but this does not create an increase in the existing capital stock. Because, in fact, assets that were previously owned by domestic companies or the state are bought by foreigners. Of course, it can be argued that such inputs can provide various contributions. But if there is a 'big noise' about this, shouldn't we look at the productivity of foreign capital entering the country or what it adds to the country's total capital stock? Similarly, we have to wonder what is added to the transfer of technology, or to the know-how in the areas from which foreign capital generally comes, shouldn't we?

So what happened that foreign investors who turned to Turkey with such appetite in those years did not show the same interest in the following years? Although it seems possible to attribute this situation to the effects of the global financial crisis, which has been intensifying especially in Western countries since 2007, it is clear that it would not be right to confine the issue only within this narrow framework.

Perhaps first of all, we should ask the following question: Which geographies prefer those that want to make new productive investments or that are based on relatively advanced technology and have the potential to generate greater added value? The answer to this question will also be the answer to the question "Whatever and how Turkey can attract 'qualified and new' foreign capital investments".

The answer to this question is of particular interest to Turkey's "infrastructure". Yes, of course, macroeconomic stability, for example price stability, is also important for foreign companies. But beyond these, the existence of very important issues that need to be considered should not be overlooked. For example, the quantity and quality of "man-made assets" in a country are perhaps much more important than macroeconomic stability. When MNCs make their 'investment decisions', they approach the issue in two stages: In the first stage, they consider aspects such as the degree of freedom of investment and foreign exchange legislation, together with macroeconomic variables. In the next, and perhaps even more important, second stage, they look at the nature of the 'human-made' assets in the potential investment country.

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# Developing Multicultural Leaders for International Entrepreneurship: An Examination of Effective Leadership Styles

Jessica Mantel, Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

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*International entrepreneurship brings upon special challenges, like multicultural teams. As startups grow, they need to find a successful leadership style. The strong connection between employee satisfaction and therefore performance is undeniable. This literature analysis considers both different leadership styles and psychological biases to recommend best practices in the IE context. The paper concludes that participative-characteristic leadership promises best results, while individual team preferences have to be respected and additional methods such as psychological empowerment offer further benefits.*

## Introduction

### *International Entrepreneurship*

International entrepreneurship (IE) has various facets. It summarised all entrepreneurial activity crossing country borders, therefore also including established companies undertaking such projects. Further, ventures starting out on an international basis are obviously included in the term international entrepreneurship just as much as domestic startups quickly growing internationally to find suitable talents (Shaker & Gerard, 2017).

Research has found that specifically those ventures operating on an international basis from almost their inception derive a real competitive advantage from their cross-border activities. That is since the incoming resources just as much as their sale of products are immediately directed at multiple countries (McDougall, Shane, & Oviatt, Explaining the formation of international new ventures: The limits of theories from international business research, 1994). Therefore this paper will mainly focus on such rather than established international companies' entrepreneurial activities.

Contrasting domestic entrepreneurship with its international version, strategic and structural differences appear. IE generally pursues more aggressive entry strategies and more diverse market segments. They control several distribution channels and achieve a higher visibility, penetrating a larger number of geographical areas (McDougall, International versus domestic

entrepreneurship: New venture strategic behaviour and industry structure, 1989).

IE is framed by numerous contextual developments. The digitalisation allowing Industry 4.0 to rise, globalisation leading to higher dependencies, New Work asking for more flexible workplace solutions. More and more IE players are using the benefits of these trends, meaning there are more multicultural teams to be lead even within small ventures.

### *Leadership in General*

Leadership is defined as the process of one individual influencing a group of individuals in a specific manner to achieve a common goal (Northhouse, 2004). Theories around effective leadership have been around since the ancient Greek, but interest is peaking once again in recent years with new trends arising (Bolden, 2004): A new distribution of power, psychological empowerment and different styles of directing employees (Iqbal, Anwar, & Haider, 2015) has led to a variety of leadership style nuances with a different justification each.

In startups, there usually is no set leadership style in the beginning. Focus is on the core business and the founders set the tone with their personality, vision and inspiration. The atmosphere is coined by risk-taking, supporting new ideas, trial-and-error, openness for failure and a passion for the idea with shared resources towards one major goal (Burns, 2016). As soon as the team starts growing, new structures have to be introduced to continuously guarantee success though.

### *Purpose of the Paper and Research Design*

The aim of this paper is to establish which leadership style is most effective in international entrepreneurial companies as they grow to larger teams. The paper takes into consideration psychological knowledge and a multicultural background of international ventures. The research collects data from interdisciplinary expert papers and books. The samples were selected for both recency reasons when current developments matter and stability reasons when essential findings were made a while ago.

This paper is going to give an overview of existing literature on leadership styles as well as psychological biases

and their intersections. Next, the methodology of the analysis will be described before findings of the analysis will be presented. A discussion of the relevant points will be conducted before an actionable summary will happen in the conclusion.

## Literature review

### *Challenges of Leading IE Teams*

Current contexts with a rise in remote work allow people from different cultures to collaborate more easily. IE uses these opportunities to bring together the best talents as needed. These culturally heterogenic groups, however, do not just bring along advantages (Ely & Thomas, 2001). The demographic differences in gender, ethnicity and age will indeed contribute a wide array of experiences and problem-solving strategies (Ancona & Caldwell, 1992). Though they will also hinder seamless communication, establishing trust and development of work norms (Bettenhausen & Murnighan, 1985), leading to a more conflict-filled group atmosphere overall (Jehn & Mannix, 2001). Cultural models by Schein (1990) and Hofstede (1984) have helped categorise cultures to better understand how

Multicultural groups are more heterogenic with demographic differences among the individual team members, e.g. in ethnicity, gender, age (Behfar, Kern, & Brett, 2006)

(McGrath, MacMillan, & Scheinberg, 1992) contrasted entrepreneurs and non-entrepreneurs in eight countries. Their findings indicated that there is an underlying pattern of values shared by entrepreneurs despite the cultural diversity of their origins.

### *Leadership Styles*

The following paragraphs will describe different leadership styles with their implications on team work effectiveness and entrepreneurial success, specifically in multicultural settings.

**Authoritarian Leadership Style:** The authoritarian leadership style is what used to be classically assumed as leadership in the past and is clearly based on Theory X, with a work-centred view. The focus lies on performance, with a one-way top-down communication of expectations. Personal needs are barely respected, leading to lower job satisfaction and consequently lower output. There is little participation, which allows for quick decision making and clear hierarchical structures, but little flexibility. Financial reward is the only form of extrinsic motivation (Luthans & Doh, 2006).

Job satisfaction being one of the antecedents of performance, the purely authoritarian leadership style is nowadays often recognised as too impersonal (Siddique & Siddique, 2020). Personal attention and consideration are

great promoters for job satisfaction, which in turn increases performance (Bass & Riggio, 2005).

**Paternalistic Leadership Style:** The paternalistic leadership is a derivative of the authoritarian style. While still mainly work-centred, there is more concern for the employees. This leads to longer retention periods and organisations caring for their team members also in non-financial forms of compensation.

In such leadership situations greater motivation on the employee's side is established via a trust-based relationship with the leader. The emotional and motivational meaning of relations at work is recognised. It allows for two-way communication, even if direct influence on decision making is not intended (Erben, 2008). Hawthorne's studies demonstrated that the social system at work and recognition alone lead to an increased productivity (Mannevu, 2018).

**Participative Leadership Style:** As the name suggests, team members in a participatively managed group can take part in debates and have a valid say in decision making processes. While this may slow down in time critical situations, more considerate and informed decisions can be made. Employees experience a far greater feeling of motivation, moderated by the responsibility for their own work. This enables creativity and innovation, which are essential for problem solving in entrepreneurship.

This approach is both work- and people-centred with a continuous, liberal flow of information in either direction. Job satisfaction is raised in participative settings as employees can actively influence their work conditions (Hodgetts, 2002).

**Laissez-faire Leadership Style:** Leadership may be the wrong term in this case. Laissez-faire refers to very independent working, requiring a self-sufficient, confident and in the best case experienced project team that has worked well together in the past, which is rarely given in entrepreneurial settings. This style often occurs naturally from a lack of control by managers.

According to Hacker's action regulation theory, there are two options to achieve a complete work action, leading to job satisfaction. Either sequential integrity or hierarchical integrity (Mustapha & Schweden, 2021). Laissez faire allows for both systems with the independence and freedom given by the leaders. For employees with suitable personalities, cultures and tasks, this leadership style hence can permit significant job satisfaction.

**Transformational Leadership Style:** In transformational leadership, the objective is to "transform" team members by using their own strengths. The approach is highly people-concentrated and requires authenticity as well as individual consideration and is therefore less suitable for larger teams with one manager. Focus lies on the interactions between



leader and subordinate, as typical for interactionist approaches, and its performance-raising effects are especially useful in change or founding settings (Luthans & Doh, 2006).

Leaders have the self-conception of a coach and utilise enthusiasm and optimism, strengthened by individual consideration, to motivate employees (Bass & Riggio, 2005). Therefore, studies show a high correlation between this leadership style and satisfaction with leadership as well as extra efforts at work (Arnold, Randall, Patterson, Silvester, & Robertson, 2010).

**Characteristic Leadership Style:** This type of leader aims to inspire employees with his or her personality and positive vision. This often fits with founders convinced of their product. Applicable traits are high self-esteem, power inhibition and slight neuroticism (House & Howell, 1992). The manager has to be a skilled communicator to reach his or her followers at an emotional level, using basic human instincts, including power, social relations and performance (Conger & Kanungo, 1998). However, charismatic managers often trust only themselves without a deep relationship to their employees. The entire operation thus depends on performance and reaching the visionary goals, which is unpractical for entrepreneurial settings since challenges arise frequently. Subordinates often notice, especially in case of encountering obstacles, the missing psychological trust, leading to lower performance (Luthans & Doh, 2006).

**Contingency/Situational Leadership Style:** As the term describes, this leadership style aims at matching the personal characteristics of the leader to the respective situation. The leadership style may therefore vary as required over time to allow for a certain flexibility (Mueller & Turner, 2010). Alternatively, this leadership might be enacted by inexperienced leaders that frequently change their style. This also demands a high degree of flexibility from team members as they cannot rely on a constantly stable relationship with their manager. It can therefore lead to either increased or decreased job satisfaction, depending on the employee's character traits (Judge, Zhang, & Glerum, 2020) and is also not an optimal leadership style with positive results on a reliable basis.

**Leadership and Culture Interaction:** Regardless of their general leadership style, every project manager reacts differently to the existence of multiculturalism in their team. No overarching leadership style that is equally effective in all cultures can be established (Lutsch, 2019). Nonetheless, styles that require high flexibility from the employees as well as overly strict or loose styles are often less recommended for multicultural settings. They do not provide the required stability to get used to it or deviate too much from some team members' habits. To develop cultural awareness and sensitivity, followed by adjusting the leadership style

accordingly, companies should invest in cross-cultural trainings and intercultural management skills within their employee base (Deresky, 2014).

Leadership has to adapt to digital communication and cyber-physical systems, not only changing corporate and national cultures (Cakmakci, 2019). Furthermore, the leadership strongly varies with the type of industry (Mueller & Turner, 2010).

### ***Psychological Biases***

Cognitive biases happen wherever people act. They can be described as simplifying tool sets to solve particular complex problems. In groups their application can lead to misunderstandings and misjudgements (Haselton, Nettle, & Murray, 2015). The following paragraphs describe the major types and their impact on leadership effectiveness.

**In-group Bias:** In-group bias belongs to the category of behavioural biases and describes the phenomenon of favouring individuals belonging to one's own group, as mentioned with stereotyping. It is one of the most documented biases and is psychologically rooted in the wish for identity, belonging and group pride building the basis for discrimination (Lutmar & Reingewertz, 2021). In multicultural groups, in-group bias can lead to conflicts with or favouring particular team members, thus impeding communication, and trust (Okech, 2016).

In order to avoid the negative consequences, the in-group bias has to be brought down to a healthy level. This can be enforced by the leader by emphasising rational information and morals (Hetherington, Hendrickson, & Koenig, 2014). A second option is to form sub-groups, work parallelly and be re-assigned after a specific time frame. This activates interaction processes including de-categorisation (Gaertner, Dovidio, Rust, Nier, & Banker, 1999).

**Fundamental/Ultimate Attribution:** Error As a perception bias, the ultimate attribution error is human's tendency to overattribute events to an individual's characteristics rather than external circumstances. In multicultural entrepreneurial teams, the fundamental attribution error can occur in different ways: Between two individual project team members of same or different culture or between the manager and the team.

Based on the in-group bias, the attribution error often happens between in- and out-group members. There are differences depending on the situation. Asian cultures, for example, are less likely to apply the in-group attribution bias, while intense emotions impactfully change the application of the ultimate attribution error (Pettigrew, 2020). Other studies suggest that personality traits influence the. Individuals with a more cognitive processing style reduce the risk (Hicks, 1985).

**Risky Shift:** Risky shift negatively impacts the actions a

group is taking. It is a behavioural bias whose effects are more severe with greater group cohesion, similar to group think. It describes the phenomenon of individuals leaning towards more extreme opinions, called polarisation, and more risky decisions when in a group (Fuellbrunn, Luhan, & Sanfey, 2022). While group cohesion is an intended state for any team, it is obvious that the effects of risky shift, namely taking on higher risks in decision making, are not desirable even though risk is part of entrepreneurial activities.

There are gender-specific differences, with male dominated groups exhibiting a higher degree of risky shift than female dominated ones (Lima de Miranda, Detlefsen, & Schmidt, 2019). Further, risky shift can be reduced by minimising group think, for example through a moderator in discussions. On top of this, the leader should not state his preference on a matter in advance, but subordinates should be asked to start with their opinion. This makes it harder to change a statement at a later point due to the fear of losing face (Clayton, 2020). The phenomenon of losing face exists everywhere, but is executed more often in Asian cultures. It could be paraphrased as avoiding social embarrassment (Miron-Spektor, Paletz, & Lin, 2015). Especially with these cultures more consideration is necessary.

**Halo, Horn, Primacy, Recency:** Effect All of these describe an error of generalisation. Individuals who draw positive assumptions based on one very positive event are subject to the Halo effect. Its opposite is the Horn effect, describing the mechanism of applying several negative attributes (Pohl, 2022). Additionally, the primacy effect, where first impressions build the basis for the lasting image about a person or concept, and recency effect with most recent events respectively (Sullivan, 2018), play a big role. Thus, these biases form a major threat to interpersonal evaluation, more even in the starting phase of a team. Activating rational processes and analytical thinking can prevent such errors from wrongfully altering one team member's opinion about other individuals (Wen, Georgiou, Huang, & Wang, 2020).

## Findings

### *Leadership Style Recommendation*

Concluding, a suitable leadership style valuing differences between the team members evidently leads to higher performance (Turner & Mueller, 2005), so that this matter should be given plenty of consideration in intercultural teams. Depending on technical complexity, leader characteristics and cultural background, the most motivational, but most effortless leadership style should be chosen (Mueller & Turner, 2010). Having to put too much thought into details of daily leadership routines distracts from important topics.

Further, it is concluded that collaborative leadership styles are most useful in the long term (Iqbal, Anwar, &

Haider, 2015). For entrepreneurial ventures coined by risk taking, acceptance of failure and idealising founder figures, a certain degree of additional focus on this one leading person is recommended in the beginning of the growth phase (Burns, 2016). Nonetheless, it is inevitable for a startup's success to deeply root the entrepreneurial spirit into the company culture for guaranteed success even after the original founder steps out of the company at a later point.

To name examples, mixtures of the participative and the characteristic leadership style seem well suited in international entrepreneurship. However, the advice always given in these matters also counts in this realm: Every team and every employee are different, which makes a one-fits-all solution impossible (Val & Kemp, 2012).

### *Relationship between Leadership Style and Team Performance*

No matter which leadership style is chosen, utilising psychological empowerment as an additional modern tool will improve performance (Seibert, Wang, & Courtright, 2011). It is obvious that people with different combinations of the five character traits prefer different leadership styles based on the ease and authenticity they can implement them with. In an intercultural entrepreneurial setting, a rather strong openness to new experiences is favourable, while a suspicious behaviour endangers efficient project leadership (Kirkpatrick & Locke, 1991).

Psychological empowerment increases employee satisfaction, which in return increases team performance (Bass & Riggio, 2005). Further, with higher satisfaction and a feeling of confidence and autonomy in their job, employees are less likely to apply psychological biases in a negative manner (Haselton, Nettle, & Murray, 2015). These reasons combined demonstrate how important attention to the matter of the correct leadership style, added tools and attention for cognitive patterns is.

## Discussion

### *Practical Implications*

It is recommended for leaders of growing startups to shift their main attention from the core business towards leadership style, personal interactions and employee satisfaction. It is indeed a difficult change to make, but can be fostered step by step. Introducing concepts like open communication, slowly paying attention to cognitive patterns and then finding the personal leadership style is a process and will not happen from one day to the next. Training and early consideration of the topic are recommended.

While the strategies for addressing psychological biases are mentioned for each of them above, it is difficult for an entrepreneurial leader to take all these counter measures at the same time. Similarly, it cannot be expected by the

managers to be aware of all the behavioural nuances of various cultures. The practical implications hence should be filtered based on industry, set up of the group and experience as well as personality of the leader.

### **Limitations and Potential Future Research**

Although this research provides valuable insights, it is not without its limitations. Firstly, the findings are merely based on a literature review. While the data basis takes into consideration recent as well as established, older literature to get the best picture of scientific findings, the practical perspective is fully missing. Confirmation of the findings should be sought by applying other research methods, such as a survey. An opportunity for further investigation would hence be interviewing respective experts who are or have been in the described situations.

Secondly, a closer look at the specific cultural requirements should be taken. While scientific cultural models, like the one from Schein or Hofstede, were respected in the findings, a more detailed review of cultures or cultural regions would be helpful in their application. Leaders would benefit from straight-forward guidelines on how to handle which team set up. Therefore, a further literature review looking at more local aspects rather than this general overview can provide impactful insights.

### **Conclusion**

The aim of this paper was to establish which leadership style is most effective in international entrepreneurial ventures as they grow to larger teams, taking into consideration psychological knowledge and a multicultural background of international ventures. The results of the literature review suggest that employee satisfaction should be the major goal. This can most efficiently be achieved by applying leadership styles in the participative, slightly founder-focused context, while it remains clear that every team has their own preferences. Being aware of additional helpful tools like psychological empowerment and strategies to decrease impact of psychological biases can further ensure success of international entrepreneurial leadership.

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# Chinese Management and German-based Subsidiaries

Steffen Hillebrecht, Technical University of Applied Sciences Würzburg-Schweinfurt, Germany

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*Since 1989 China has demonstrated a breathtaking economic development which leads among other issues to a wave of Foreign Direct Investments (FDIs) in different pattern all around the world. Concerning Europe and especially Germany it covers some 225 both well known a hidden name. Most of the related firms are Small and Mide Size Enterprises (SMEs) where executives and staff members normally do not have a closer connection to Chinese culture. This article covers basic questions related to the influence of Chinese management thinking on Human Relation issues and tries to outline the consequences for staff members of German subsidiaries.*

## The relevance of the topic

During the last 30 years an impressing number of some 260 German based companies had been sold to Chinese investors. Beside a small number like KUKA AG (Augsburg), Kiekert AG (Heiligenhaus) and Linde Forklift Branch (now KION GmbH, Aschaffenburg), most of them are of a SME size of 2.500 FTEs and/or a total turnover of € 500 mill. and less. The total amount of FDIs in European countries comprises (Ernst & Young, 2022; additionally, Bertelsmann, 2018, pp. 5ff.; Yang et al., 2021, pp. 5ff.)

United Kingdom:	€ 79.6 bill.
Germany:	€ 30.1 bill.
Italy:	€ 16.0 bill.
France:	€ 15.7 bill
Netherlands:	€ 13.5 bill.
Finland:	€ 13.0 bill.

These numbers illustrate the fact that China turned into the most important or second important source of FDIs (Feng & Ge, 2022, p. 312f.). To be honest, FDIs may occur both in Mergers & Acquisitions and in greenfield investments. The second mode consists of the establishment of subsidiaries of Chinese corporations like telecommunication giant Huawei, FMG productioner Haier, automotive supplier Guangdong Lyric and Edunburgh, construction machinery SANY Group or commodities dealer ZCC-CT and others.

### ***Need for local staff and need for cultural alignment***

In order to deliver appropriate services to the customers in Europe and to fulfill the basic requirements of business administration (e.g.: book keeping, taxation and finance, HR administration), foreign investors employ local staff members and often local management members. If a firm is

subject to M & A, the new subsidiary consists of a specific amount of local staff and management members. These local staff members are regularly used to the culture and the management philosophy of their country or – in case of an international company, of the former owner and his management staff. The purchase or foundation of a firm in Germany does mean that both sides have to adjust themselves to the new situation. The consequences of the relevant situations will be outlined hereafter and will be completed by a short look at specific parameters of the Chinese management philosophy (or better: philosophies) in general. Some final recommendations may help both sides to adjust them more appropriately.

### ***The case of Mergers and Acquisitions***

If a FDI covers an already existing company, with staff and management board members, both sides have to consider some necessities. If local employees will leave, they will take away some of the intellectual capital and network from the company, which means a shrink of the economic worth. The new ownership has some interest in keeping these persons on board, at least for an unspecified transitional time. On the other side their possibilities to switch to another employment might be limited, so the current workforce may tend to stay, and it might be expedient to adjust their behaviour to the expectations of the new owner, especially the specific management style. An undefined uncertainty arises from the question, if the new owner will transfer technology and production plants to his home base or a third location. Examples might be found in Volvo Car Corp. from Sweden. The new owner Geely left the traditional manufacturing sites at Gothenburg, but established the electric care production labelled as “Polestar” in China.

### ***The case of greenfield investments***

Greenfield investments are characterized as investments from an holding company in different country, in order to support sales activities, better access to commodities or other reasons. In this case the parent company can decide to dispatch own staff and managerial board members and/or to employ local personnel. The local employees normally do know that the employer comes from a different culture and it is their duty to adjust to the specific corporate and managerial culture.

### ***Common aspects***

Despite the nature of the ownership in every case the HR management has to answer the same set of questions, like:

- The job security – will the employer be able to grant a longer, stable perspective?
- What are the relevant principles and cornerstones of the management philosophy?
- And how will they influence expectations concerning the behaviour of local staff members?

Concerning the majority of Chinese subsidiaries in Germany we already did note that they are more or less SMEs. One of their distinctive characteristics is a lack of a broader HR organization which might help the local staff members to learn about Chinese management culture and an appropriate adjustment. Therefore it is the aim of this paper to outline some basic aspects in order to encourage the future discussions and research

### ***Basics of Chinese culture***

Quite a lot of sources emphasize the relevance of Master Kong or - in a more common naming – Confucius, who lived 551 to 479 b.C. His philosophy covered topics like the natural order under the auspices of heaven, appropriate behaviour as a moral role model and the way to become a civilized, respected man (King and Zhang, 2014, p. 6f.; Riegel, 2020). For managers these keystones offer orientation, just like they are relevant for the head of a family or the head of a state – all are some kind of “father” for the entrusted community (i.e.: company family, biological family, social family, “state family” – the people).

Even if Confucius was the most important traditional impact on Chinese culture and Chinese management thinking, four more philosophies have to be named (Fan et al., 2019, pp. 742ff.; additionally, Hu, 2021).

- Buddhism
- Taoism
- Legalism
- Guan-theory (or “Yin-Yang-Thinking”)

The five traditional roots may be comprised to the CBTLG-formula.

These traditional roots create a specific understanding of leadership and management, which might be summarized in keywords like “show patience and turn to the long time lane”, “obey hierarchy”, know your place” and “adjust yourself to each challenge”, which is known as well as the “he-he-principle” (Huang, 2008, pp. 9ff.). These keywords will be helpful to gain a deeper understanding in the effects of modern roots of management thinking.

### ***Modern inspirations of Chinese Management Thinking***

Modern management thinking in China started with the ideas of Mao Tse-Tung and his prioritisation of state-owned and directed economy, a Chinese specification of Socialism or Communism. Other impact factors are according to Fan et

al. (2019, pp. 742ff.):

- Deng Xiping-Thinking (i.e.: employ the material interests of people for societal progress)
- Scientific knowledge and wisdom (i.e.: western scientists would say “capitalism” and its scientific deepening, i.e. Business Administration)
- Xi Jiping-Thinking, about the role of the state in the economy, the Communist Party in China, and China’s role in the world.

Combing these four roots one will receive the MDSX-formula.

Given the traditional roots, one will find a strong hierarchy and priority of authorities, so modern roots are a closer specification of the traditional philosophies. In other words, it is a mode of the mentioned he-he-principle, and the way Chinese enterprise owners and executives will try to combine their specific version of corporate vision, management duties and official guidelines. Any violation may lead to sanctions. The example of Jack Ma of AliBaba is a pretty good illustration – he diminished from public for some time and later withdrew from his official functions with the AliBaba holding (Economist, 2023).

### ***Concretization - Chinese management abroad***

Management behaviour is not only the result of a specific education and the surrounding system of values, but as well of personal dispositions and experiences, and finally of personal plannings. A Chinese management member and/or a Chinese shareholder will observe these roots and will accept the governing role of state and party authorities. It will be in his or her best interest, not to violate any of the given guidelines. On the other hand, success abroad is an objective to each expatriate, and the expat therefore will try to adjust him- or herself to the local conditions and customs. Here we will find the field to consensual cooperation.

### ***German corporate reality and Chinese management***

Wellknown studies like Hofstede et al. (2010), Lewis (2018) or Meyer (2016) point out, that German work and management behaviour differs in general in some ways from Chinese working and management behaviour. Germans like to be more direct and bound to time tables and agreements, whereas Chinese like to be more flexible in the interpretation of objectives and agreements. As well the importance of hierarchy seems to be more dominant in China.

Beside the fact that there is no “typical” German or Chinese person, and that it will make a difference if Chinese CEO has been educated in China or at a North American or European Business School, these studies demonstrate the necessity to develop a strong empathy for the different culture of the expats from China and the local staff members in Germany, if they want to succeed together.

For Germans this does mean to develop and strengthen “China competence” (Hu, et al., 2021; in addition, Büchenbacher & Wolf, 2023; Huawei, 2016, Mitter &

Johnson, 2021, pp. 41ff.). Additionally, German subsidiaries might profit from “cultural interpreters”, like the models of DürkoppAdler AG (Yang et al., 2019, pp. 19ff.) and KUKA AG (Jung, 2019, p. 73) proves. If no adjustment or alignment will be shown, employees and management staff will increase the danger of a loss of their employment because they might be regarded as unable to cooperate and to submit to the requirements. Given one example: critical points of view are given in Germany in a more or less direct manner, founded with facts and arguments. In China this kind of feedback will be judged as insubordination with the loss of the face of the supervisor (Ren & Chen, 2018, pp. 148ff.). In the end, a well-meaning interaction will switch to its direct opposite and a not intended result.

As well Chinese universities are urged to develop intercultural understanding, to get more insights in appropriate ways of working together with European employees. One example may illustrate the need: The representation of the staff is in Europe organized in staff councils (“Betriebsrat”), with specific rights and privileges awarded by trade and labour legislation. Even if in China the existence of staff councils is common as well, they do have a different function and legal justification (Dong et al., 2016, pp 40ff.; Han et al., 2021, p. 14f.; Reisacher, 2017). Therefore we do see the necessity to more insights of the specifics of corporate behaviour and management thinking in Germany – a missing knowledge about and understanding towards local customs and relations will be seen as “ignorance” (Leese & Ming, 2022, p. 55) and Chinese educational institutions and scientist are clearly engaged in this necessity (Lin & Zhao, 2016; Su, 2020, p. 111f.).

## Conclusions

Chinese FDIs of the last 25-30 years show that Chinese investors and Chinese authorities follow a long-term plan, which comprises the usage of western technology, western production plants and western sales markets. Therefore local employees have to adjust their understanding of Chinese Management culture and philosophy if they want to be staff members for a longer time, despiteless their level of responsibility. Especially management team members who are involved in direct contact with Chinese supervisors and shareholders are advised to get deeper insights in the specifics of Chinese Management behaviour because it is part of the duties to intermediate between Chinese ownership and local staff members. It is up to universities and other institutions of vocational and professional development to offer suitable formats of training.

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# The Influence of Political Conflicts on Foreign Direct Investments – An Impact Study on Taiwan

Rainer Wehner, University Applied Sciences Würzburg-Schweinfurt, Germany  
Emin Akcaoglu, Manisa Celal Bayar University, Turkey

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*Political conflicts, such as civil unrest, protests, or armed conflicts, create an atmosphere of uncertainty and increase the perceived risk for investors. Taiwan is currently at the doorstep of such a conflict, as Beijing has vowed to bring Taiwan back under Chinese control. For that reason, the author examined the published literature of the last years and analysed the Chinese – Taiwanese political and economic relationship. Furthermore, he researched the impact of political conflicts on FDI's in similar situations to draw assumptions for an eventual conflict. Based on the available data the major findings show that at the beginning of the conflict FDI's drop dramatically, but return after a certain period depending on the intensity of the conflict.*

Keywords: War, Conflict, Taipei, Xi Jinping, Political risk

## Introduction

China is continuing to strengthen its economic and geopolitical influence in many parts of the world. Besides international infrastructure projects the Chinese president Xi Jinping announced several times to solve the “Taiwan problem” (Huaxia, 2021). The “Taiwan problem” occurred in 1949 after the Chinese civil war, when Taiwan separated from mainland China. As Taiwan is only recognized by 13+1 countries as a sovereign state, it is difficult to claim international rights. While Xi Jinping has always been highlighting his preference for a “peaceful reunification” based on a “one country, two systems” model, he also pointed out that Beijing will never promise to renounce the use of force and will take all necessary actions (Morris, 2022). Having a look at the situation in Hongkong as well as the permanent violation of Taiwanese territory over the past years by the Chinese, a peaceful reunification towards a “One China” is politically unfeasible (Yang, 2022). This ongoing political conflict can have massive impact on Taiwan’s economy and especially on the inflow of FDI’s to the island. Even Taiwan is a small island it is an interesting country in many respects. With 65% Taiwan is dominating the world market for computer chips. A Chinese takeover will therefore give Beijing the control of one of the most important industries in the world. As for FDI's, Taiwan

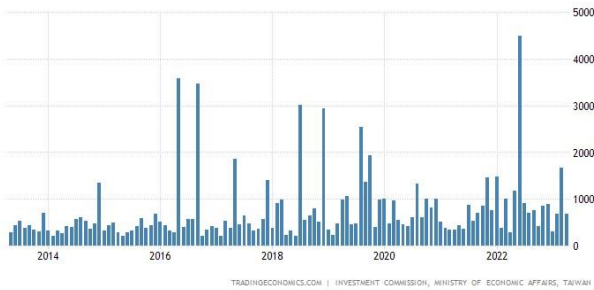
welcomes foreign investors and creates a stable environment. Despite the ongoing provocations through China the amount of FDI's flowing into the country even increased in 2022 (Trading Economics, 2022). Obviously, investors are not worried about the situation or international investments in a globalized world have their own regulations. Looking at the FDI's during conflicts in other countries, like the Russian war in the Ukraine, it shows that after a decrease in FDI's at the beginning of the conflict, the investors return. The extent to which this example can be applied to China and Taiwan is questionable. Especially because there are different scenarios of a possible conflict, that will probably lead to different outcomes. For that reason, the author tries to answer the research question: “How does the political conflict between a China and Taiwan effect the inflows of Foreign Direct Investments?”. The fact that there is very little research being done on that possible conflict creates a research gap, the author is trying to resolve. The research conducted in this paper is mainly based on qualitative data, except for some statistical key data describing FDI's and their fluctuation in case of a conflict. After the analysis of the situation of FDI inflows to Taiwan the author draws parallels to conflicts in other parts of the world. Even if similarities can be determined, there are too many possible scenarios to draw general conclusions. For this reason, there is room for further research on this topic.

## Foreign Direct Investments into Taiwan

Taiwan’s attitude towards FDI's is highly welcoming. The country has initiated multiple measures in order to attract investors including both foreign entities, but also Taiwanese companies that are located overseas. Science parks, governmental tax incentives as well as tariff exemptions and low-interest loans contribute to the matter. The measures taken by the Taiwanese government are so far developed, that starting from investments of 500 million NTD (approximately 17 Million USD), a Taiwanese manager will be assigned to oversee the investment project and guarantee a smooth process. The Ministry of Economic Affairs (MOEA) and the Department of Investment Services

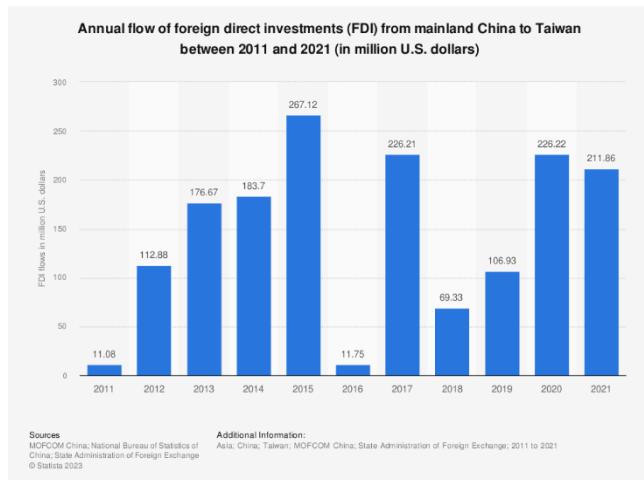
(DOIS) both help potential investors with various bureaucratic tasks, like retrieving application forms, providing a “relaxed working visa” and a simple permit process. Taiwanese authorities are specifically promoting investments in the “5+2 Innovative industries” which include semiconductors, smart machinery, biomedicine, Internet of Things (IoT), green energy, national defence, and advanced agriculture (Shroff, 2020). A negative list with business sectors that are closed for foreign investments does exist but is relatively small in relation to the whole economy. The list contains the production of specific goods and services that could have a negative effect on national security and health.

**Chart 1:** Foreign Direct Investments to Taiwan in the last 10 years (Trading Economics)



The smaller fluctuations in FDI's are generally explained with micro political and economic decisions, while the bigger ones are connected to global circumstances and crises. The recent increase of FDI's in 2022 can be explained with a rebound effect after multiple restrictions due to the COVID-19 pandemic were lifted (Unctad, 2022).

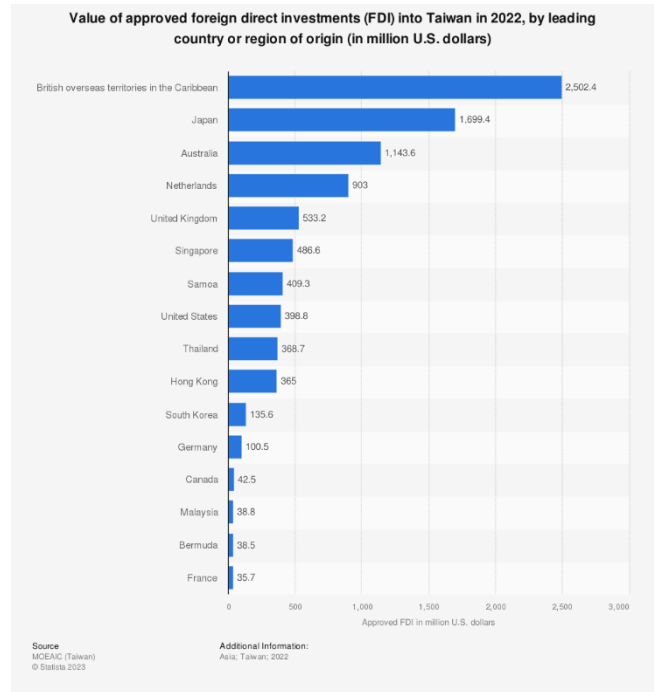
**Chart 2:** Foreign Direct Investments from China of the last 10 years (Statista, 2021)



Despite China is one of the most important economic trading partners of Taiwan, the amount of FDI's approved are not in relation with this economic interdependency, as they

are comparably low. The reason for that is a high number of regulations Taiwan puts on Chinese investments. Taiwan is extremely careful when it comes to Chinese FDI's because the Chinese use to deploy their investment to gain political influence on the companies in a systematic way (Stone, 2021). In the Taiwanese journal of Current Chinese Affairs the FDI's from China are described as “necessary but not desirable” (Lee, 2017).

**Chart 3:** Value of approved foreign direct investments (FDI) into Taiwan in 2022, by leading country or region of origin (Statista 2023)



The biggest amount of FDI's to Taiwan is coming from the British Overseas Territories (BOTs). The BOTs are former British colonies, which are known as tax havens. Many companies are registered there but do not mainly operate from or in those destinations.

## The impact of conflicts on Foreign Direct Investments in historic and recent examples

Since the main purpose of this paper is to provide a future projection of the political conflicts on the possible effects on FDI's to Taiwan, the author considers it valuable to reflect on past and presents conflicts. Even though a comparison can give some valuable insights, the same outcomes are highly unlikely as economic and political circumstances vary and are of high importance when trying

to determine effects on foreign direct investments in times of crises. Furthermore, conflicts differ in intensity, as not every conflict needs to include high casualties, the use of heavy weaponry and the destruction of infrastructure.

## Russia’s war in the Ukraine

On February 24, 2022, the Russian army invaded Ukraine and started a war that is still ongoing. Even if this war has massive effects on the global economy due to the overall dependency on Russia’s natural resources like gas, oil and minerals, the FDIs into the Ukraine will be focused (Mbah & Wasum, 2022).

The following chart displays FDIs into the Ukraine from July 2018 until March 2023.

**Chart4:** Foreign Direct Investments into the Ukraine from July 2021 to June 2022 (ceicdata, 2023)



The chart shows that during the start of the Russian attack the FDI’s into the Ukraine decreased massively, because foreign investors immediately retrieved their capital out of the Ukraine. However, it also displays that soon after, the FDI’s experienced a recovery.

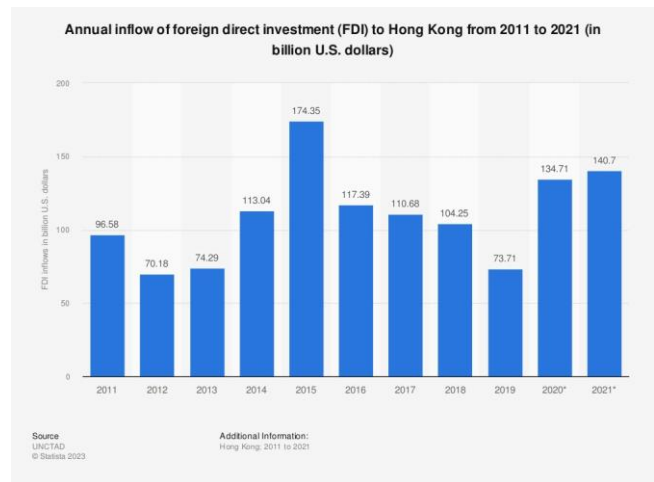
## The Hongkong protests in 2019

The situation in Hongkong is particularly interesting, as the author recognizes similarities to the situation in Taiwan today.

Hongkong has been a British colony until the year 1997 before it returned to China under specific conditions trying to preserve its freedom and sovereignty. The so-called “one country, two systems” agreement aimed to integrate Hongkong back into the Chinese environment after 50 years being more or less independent. Hongkong should be able to keep some of its laws and the political system that were leaning towards a more democratic approach, including electing their own government. However, in 2019, China tried to implement the “Fugitive Offenders and Mutual Legal

Assistance in Criminal Matters Legislation (Amendment) Bill 2019” also called simply “the bill”. It included changes to the legislation, which would have made it far easier to transfer criminal suspects from Hongkong to mainland China and prosecute them according to Chinese law. The announcement of this bill resulted in protests with sometimes more than a million protestors. The protests escalated on multiple occasions and were indicated as riots to allow the police to act more aggressive (Purbrick, 2019). The effects of this crises had a direct influence on the FDIs to Hongkong.

**Chart 5:** Value of Foreign Direct Investment inflows to Hong Kong from 2011 to 2021



The chart shows that, because of the crisis, the amount of FDIs decreased in 2019. Furthermore, the number of FDIs increased heavily in 2020 and 2021 to a degree that it even surpassed the amount invested in the years before 2019. It is important to remark, that the chart include investments from mainland China into Hongkong as well. Looking at the economic costs of the 2019 protests, Hongkong’s GDP suffered a decline of 1.19 %. Even this is considered low, it was one of the first times in over 50 years Hongkong’s economy failed to grow aside from the economic crises in 2018 and 1998 (Au, 2021).

The two examples show that conflicts always have short-term impact on the FDIs in the country. Depending on the devastation of or in the country, the effects can even last longer. In the case of a massive conflict between China and Taiwan the examples help to understand what can or will happen with the FDIs.

## Results

The examination of the topic made clear that the flow of FDIs is highly complex and hard to predict. Especially considering the complicated history China and Taiwan share. In a way, modern Taiwan is a product of FDIs, despite them

being unwanted in the form of colonial powers forcing themselves onto the island. Even occupied by different forces, the Taiwanese have formed their own culture and identity, which they stand up for, protest and fight for when necessary. Furthermore, Taiwan managed to become the leading power in currently one of the most important industries, the chip manufacturing industry. This makes the country valuable not only for China, but also for the U.S. and Europe who need the chips for their industries but also for military purposes. A military attack of China can presumably cause a shortage in that field. That is probably one reason why the U.S. President has guaranteed military support to Taiwan in case of a Chinese invasion. Another reason might be the U.S. investments in Taiwan over the years. America is as a country always among the biggest FDIs into the island. Untaxed money from U.S. companies coming from the Caribbean Islands not counted.

The attitude of the Taiwanese government towards FDIs is highly welcoming and professional. This is certainly one of the main reasons for Taiwan's success in attracting FDIs. Thus, it might add to the idea that investors will not remove their assets completely in the case of an attack.

Looking at similar conflicts, a temporary decrease in FDI's can be observed, mostly at the beginning of the conflict. This is a natural reaction of investors to secure their money. The extent to which the money returns depend on various factors and a long-term investment perspective. The example of Hongkong shows that FDIs returned very quickly. It can be argued that this was not a hostile takeover per se, however there are many similarities between the situation in Hongkong and in Taiwan. In the case of Hongkong it must be mentioned that the local police supported China or at least opposed the reaction of their own people. This might be different in the case of Taiwan.

Assuming that FDIs are depending on the intensity of the conflict, China has more than one option to take over Taiwan, including options that minimize the destruction of infrastructure and deaths. Although experience with similar conflicts suggests that a less aggressive takeover will lead to a more moderate response in FDI, this cannot be proven from the available data.

Finally, the reviewed literature showed no indication that FDIs increase during a conflict in the short term.

## Discussion

As the amount of existing data related to FDIs in situations of conflicts is very limited, general statements how the financial markets will react can hardly be made. Especially in the case of a political conflict between China and Taiwan, many eventualities can influence the FDIs inflows.

A look at Taiwan's FDI inflow statistic shows that most investors are from Western or Western-oriented countries. If those countries reject their investments in case of a conflict,

will China be able to substitute those investors with money from allies?

Another interesting thought is Taiwan's reaction if China takes over the chip industry. Will Taiwan destroy the semiconductor factories instead of handing them over to China? This will most likely have massive effects on the FDI situation, as the chip industry is one of the most attractive industries Taiwan has to offer. This could be guiding questions for future research.

Returning to the statistics of FDI inflows it demonstrates that most of the capital flowing into Taiwan comes from the Caribbean Islands. These islands are well known as tax havens, where large multinational companies direct their profits to avoid taxes. As Chinese companies are also directing their investments through those jurisdictions, the figures only show that Taiwan benefits massively from untaxed or low- taxed profits from companies around the world (Sutherland et al., 2010). It is also nearly impossible to collect valid data in that field because tax havens are not known for their transparency or do not reveal data at all. The incapability to collect data relating to FDIs as well as unpredictable reactions of the parties involved are the limitations of this paper.

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Chart 1: <https://tradingeconomics.com/taiwan/foreign->

direct-investment

Chart 2:

<https://www.statista.com/statistics/720399/china-outward-fdi-flows-to-taiwan/>

Chart3:

<https://www.statista.com/statistics/1292945/taiwan-approved-inward-foreign-direct-investment-by-industry/>

Chart 4:

<https://www.ceicdata.com/en/indicator/ukraine/foreign-direct-investment#:~:text=In%20the%20latest%20reports%20of,USD%20bn%20in%20Dec%202021.>

Chart 5:

<https://www.statista.com/statistics/1017046/hong-kong-foreign-direct-investment-inflows/>



# Proceedings of Plenary Session III





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# Readiness for Digital Sales: A Comparison of German B2B SMEs and LEs

Heiko Fischer, Baden-Wuerttemberg Cooperative State University Mosbach, Germany

Sven Seidenstricker, Baden-Wuerttemberg Cooperative State University Mosbach, Germany

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*The megatrend of digitalization profoundly changes the way sales is done. To compete in the dynamic era of digital sales, small and medium-sized enterprises (SMEs) and large enterprises (LEs) must ensure the readiness of their salespeople. For this reason, this article gives insights into the capability and need for digital sales as essential pillars of readiness for digital sales. The quantitative survey is focused on the German business-to-business (B2B) market. We show that there exist significant differences between SMEs and LEs and that LEs' readiness for digital sales lags behind SMEs'.*

## Introduction

In Germany, 99.4% of all companies are SMEs. They employ approximately 55% of Germany's workforce and have a 30% share of the total financial turnover of all enterprises (Destatis, 2023). The highly specialized SMEs are acknowledged as Germany's strongest driver of innovation and act as important partners for LE. Therefore they are an essential pillar of Germany's economic growth (BMWK, 2020).

Previous research indicates significant differences between SMEs and LEs. For instance, SMEs have fewer financial resources, and their CEOs are usually more involved in operational tasks than the CEOs of LE (Haug et al., 2011, p. 491). However, SMEs have the advantage of higher market responsiveness and a more flexible organization due to less bureaucracy (Spithoven et al., 2013, p. 541). Even though SMEs are the main driver of economic growth (Maroufkhani et al., 2020, pp. 484–485), their digital transformation is lagging behind LEs' digital transformation: For instance, compared to LEs SMEs are struggling much more with the implementation of digital technologies in their business (Müller et al., 2021), the transformation to digital marketing (Peter & Dalla Vecchia, 2021, p. 251), and superior IT competency (Buer et al., 2021, p. 621).

To examine whether these research findings are transferable to the readiness for digital sales of B2B enterprises, we formulated the following research question: *What are the differences between German SMEs and LEs regarding their readiness for digital sales in B2B markets?*

To answer this question, we conducted a quantitative

survey in Germany and compared the results of SMEs with those from LEs. In doing so, our article complements the scarce research on readiness for digital sales in the B2B markets. It indicates that LEs lag behind SMEs regarding their readiness for digital sales.

This article is structured as follows: First, we give an insight into the research on readiness for digital sales. Second, we explain our study design and data collection. Fourth, our research findings are presented. Fifth, we discuss our findings on the comparison of SMEs with LEs; sixth, this article closes with a brief conclusion and description of limitations.

## Theoretical Background

The digital transformation of sales has attained increasing research interest in the past decades, and companies are continuously investing in their digital sales solutions. However, digital sales goes deeper than simply automating sales. Due to changing customer behavior and customer power, as well as technological advancements, the entire customer-sales relationship is changing. Accordingly, enterprises are challenged to develop digital sales solutions and must re-align their sales function. This results in new responsibilities for sales and affects the required skills of salespeople (Ahearne et al., 2022; Fischer et al., 2021; Fischer, Seidenstricker, & Poepplbus, 2023).

Because of these described transformative changes, enterprises are trying to create salespeople that are ready to respond to the new market requirements and, thus, salespeople who are ready to practice digital sales (Mullins & Agnihotri, 2022, p. 800). Looking into the literature on readiness to change, we can highlight that readiness consists of two dimensions: cognitive and affective (Rafferty et al., 2013, pp. 113–116). Regarding cognitive readiness, employees must perceive the urgency of the need for a specific change and feel that they have the capacity to undertake this particular change (Armenakis et al., 1993, p. 691; Rafferty et al., 2013, pp. 113–116). Moreover, the literature differentiates between the employee's personal and organizational readiness (Gfrerer et al., 2021, pp. 26–27; Lokuge et al., 2019, p. 456).

While these theories are generic and not focused on

sales, Mullins and Agnihotri (2022) research salespeople's readiness. They describe two dimensions relevant to readiness for digital sales: the capability to practice digital sales and the recognition of the need for digital sales. The basis of their work is the well-established literature on employee and organizational readiness for change.

## Study Design and Data Collection

Digital sales is promising because it better serves customer needs and increases efficiency and effectiveness in sales (Fischer, Seidenstricker, & Poepelbuss, 2023). However, to be able to benefit from the benefits brought by the digital transformation in sales, enterprises must re-align their business processes as well as organizations and introduce a digital sales strategy (Guenzi & Habel, 2020; Zoltners et al., 2021). The digitalization of sales must not be seen as an isolated solution and impacts the whole organization (Fischer et al., 2022, p. 138). Thus, the first concern of our survey was investigating the existence of a digital sales strategy from two points of view.

Furthermore, readiness consists of two dimensions: the employee's recognition of the need for a specific change and the employee's capability for a particular change (Armenakis et al., 1993; Lokuge et al., 2019; Rafferty et al., 2013). The transfer of this knowledge to sales results in the capability for digital sales and the recognition of the need for digital sales (Mullins & Agnihotri, 2022). To assess the first dimension, capability, we included two questions, one concerned with the employee's capability and one with the organizational capability.

The second dimension, the recognition of need, was more complex. Based on a systematic literature review, we investigated three need dimensions (digital orientation, information orientation, and customer orientation) and included them in our survey (Fischer, Seidenstricker, & Poepelbuss, 2023).

First, to successfully practice digital sales, salespeople must have a high degree of digital orientation. That refers to a deep knowledge of the characteristics of digitalization and its influence on B2B sales. In today's sales environment, salespeople must know how to apply digital technologies in sales and cope with a mix of traditional and digital sales channels depending on customer demands (Bongers et al., 2021, p. 163; Fischer, Seidenstricker, & Poepelbuss, 2023, pp. 12–13; Järvinen & Taiminen, 2016, p. 173; Wengler et al., 2021, pp. 604–609).

Second, information orientation refers to acquiring data and making data-based sales decisions as well as tracking market trends and responding to them (Fischer, Liebing, & Seidenstricker, 2023; Fischer, Seidenstricker, & Poepelbuss, 2023, pp. 12–13; Park et al., 2010, p. 1136; Paschen et al., 2020, p. 411; Wengler et al., 2021, p. 609)

Third, working in the digital sales environment requires consequently being customer oriented. Therefore,

salespeople must deeply analyze the customer business and need to derive value-adding solutions. Moreover, they must be aware of the need for cooperation with other sales colleagues, the marketing department, and customer support (Alamäki & Korpela, 2021; Bongers et al., 2021; Fischer, Seidenstricker, & Poepelbuss, 2023, pp. 12–13). We included scales for each of these three dimensions in our questionnaire.

Table 1. Sample Characteristics

Description	Frequency	Percent
<b>Sex</b>		
Male	128	67.7
Female	58	30.7
No answer	3	1.6
<b>Age</b>		
≤24	24	12.7
25 to 34	67	35.4
35 to 44	56	29.6
≥45	42	22.2
<b>Discipline</b>		
Key account management	28	14.8
Outside sales	26	13.4
Inside sales	42	22.2
Marketing	14	7.4
Product management	22	11.6
Business development	20	10.6
Other	37	19.6
<b>Enterprise</b>		
SME	78	41.3
LE	111	58.7
<b>Industry sector</b>		
Manufacturing	132	69.8
Information & communication	30	15.9
Wholesale & retail trade; repair of motor vehicles & motorcycles	8	4.2
Energy supply	6	3.2
Other	13	6.9

The survey was conducted as a part of a research project concerned with employees' readiness for digital sales. We collected data from February to March 2023 from employees in sales, marketing, and related disciplines. All respondents were employed in Germany, and their enterprises operated in the B2B market. The questionnaire was provided in German and English. We ensured the respondent's anonymity, ensured that the questionnaire included no leading questions,

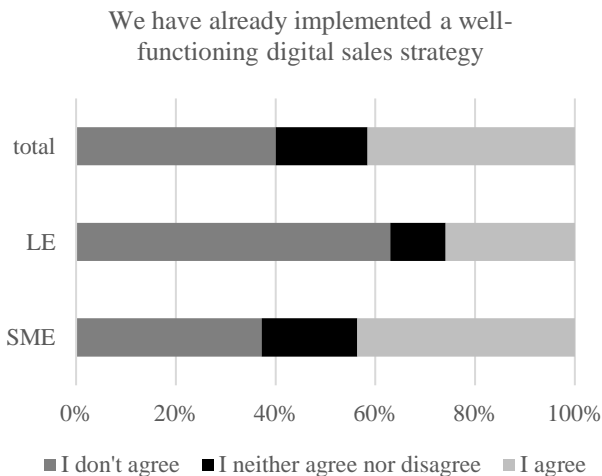
and used established scales to avoid biases reported by Podsakoff et al. (2003). To assess the company size, we used the well-established definition of the European Commission (European Commission, 2003). After deleting incomplete and invalid datasets, we were left with a final sample of 189 responses. The respondents' characteristics are depicted in Table 1.

## Findings

We analyzed the data from three points of view: The total view, which includes all 189 responses; the SME view (78), and the large enterprise view (111), whose number of employees or financial turnover exceeds the SMEs' thresholds. Within this section, we present some insights into the research project on readiness for digital sales.

First, Figure 1 shows the results of "We have already implemented a well-functioning digital sales strategy." Referring to the total view, approximately 40% of respondents do not agree, and slightly more than 40% do agree with this statement. As the figure depicts, there exist large differences between LEs and SMEs. While more than 40% of SMEs' respondents think that they have a well-functioning digital sales strategy, only 25% of LEs' respondents agree with this. However, SMEs have the highest share of respondents who are unsure about their digital sales strategy. Moreover, over 60% of LEs' respondents think that they do not have a well-functioning digital sales strategy.

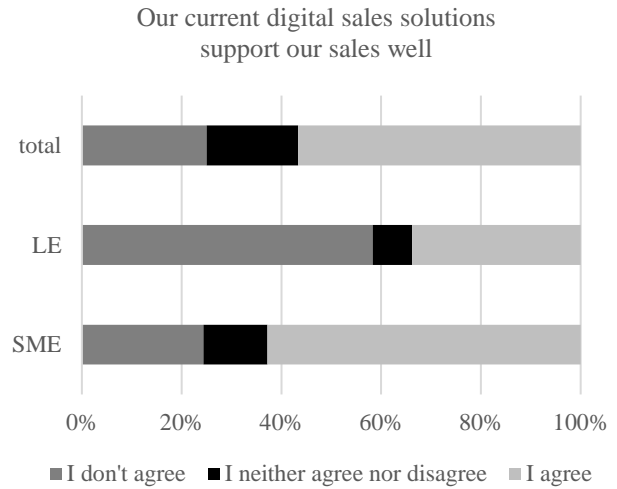
Figure 1. Sales strategy



Secondly, Figure 2 presents the results of "Our current digital sales solutions support our sales well." According to the total view, almost 60% of respondents think their company has good digital sales solutions. Like Figure 1, LEs lag behind SMEs: More than 60% of SME respondents believe they have good digital sales solutions, while only about 35% of LEs' think so. Again, the share of unsure

respondents is higher in the case of SMEs.

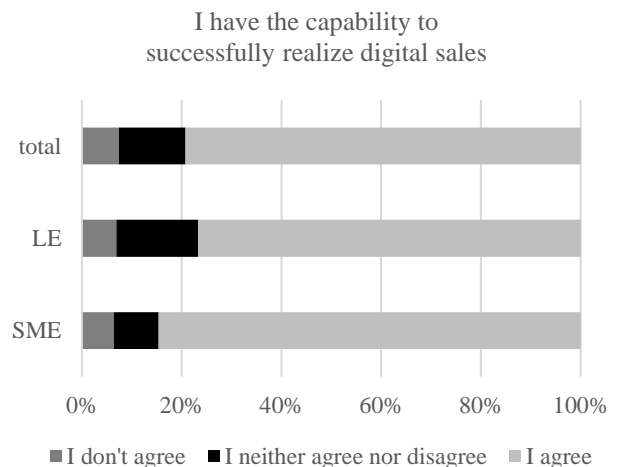
Figure 2. Sales solutions



Comparing Figure 1 and Figure 2, we can see that LEs lag behind SMEs in the case of their digital sales strategy and digital sales solutions. Surprisingly, the majority of LEs think that they neither have already implemented a well-functioning digital sales strategy nor that their digital sales solutions support their sales well.

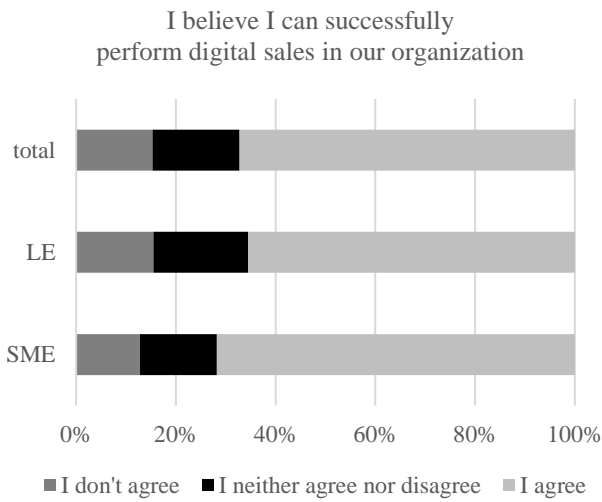
Next, we investigated the respondents' capability for digital sales from two viewpoints. The first viewpoint is whether respondents think that they have the capability to realize digital sales. As Figure 3 depicts, a large majority of respondents think they can realize digital sales. However, again LEs lag slightly behind SMEs.

Figure 3. Capability to realize digital sales



The second viewpoint shows whether the respondents think that they can perform digital sales in their organization (Figure 4). Again, the majority agrees with the statement, and LEs lag slightly behind SMEs.

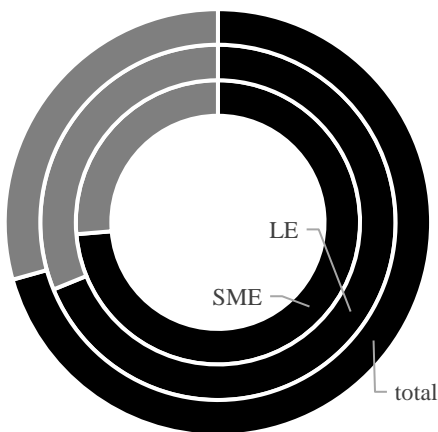
Figure 4. Capability to perform digital sales in an organization



Comparing Figure 3 and Figure 4, one can assume a slight mismatch between one's capability and capability to perform digital sales in the organization. Irrelevant, whether they stem from SMEs or LEs, there is higher skepticism for performing digital sales in the organization.

As already mentioned, we further analyzed the need dimension of readiness. The need consists of three dimensions: digital orientation, information orientation, and customer orientation. These dimensions are derived from a systematic literature review that analyzes the influences of digital transformation on B2B sales and its implications for the B2B sales function (Fischer, Seidenstricker, & Poepelbuss, 2023).

Figure 5. Digital orientation

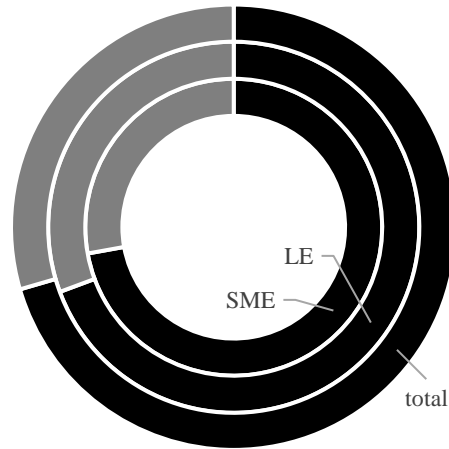


For this reason, we measured the digital orientation. Figure 5 depicts the results for the total sample, SMEs, and

LEs. The black color refers to the achieved score of these groups in percentage, while the grey color indicates the gap to 100%. The total sample has a score of 71%. Again, SMEs have the highest score (74%), and LEs lag behind them (69%).

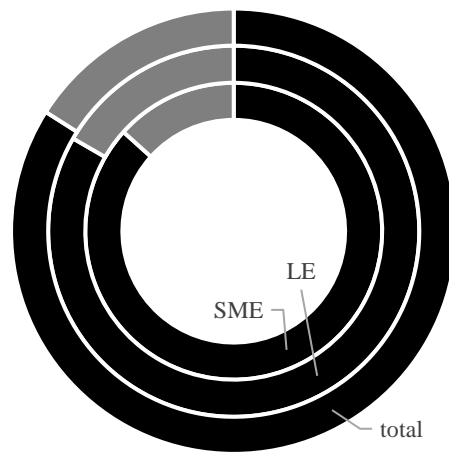
Second, the results of information orientation are presented in Figure 6. The total sample reaches 70%, and with a value of 72%, SMEs have a better score than LEs again (69%).

Figure 6. Information orientation



Third, we measured the enterprises' customer orientation and present the results in Figure 7. With a score of 87%, SMEs are again better than LEs (83%). The total sample has a score of 84%.

Figure 7. Customer orientation



## Discussion

Our findings show that there exist significant differences between well-functioning sales strategy and the developed digital sales solutions. This is in line with Proksch et al. (2021, pp. 18–21), whose research indicates that the digital strategy and digital culture of an enterprise have an impact on the digital services and digital processes of an enterprise. As our comparison of SME and LE show, a weaker assessment of the digital sales strategy might result in a weaker assessment of the digital sales solutions.

Furthermore, our research indicates slight differences between one's own capability to realize digital sales and the capability to realize digital sales in the organization. This is in line with previous research on digital readiness. For instance, Gfrerer et al. (2021) created a framework that differentiates between individual digital readiness and organizational readiness. They conclude that managers are an important facilitator of digital readiness. They are responsible for empowering employees and must support their employees to embrace digital change. Following this reasoning, we may conclude that employees perceive a lack of organizational support and organizational capability regarding digital sales.

In addition to this, our research identifies the high need for customer orientation, digital orientation, and information orientation in the age of digital sales. The findings show that all three dimensions seem to be very important in meeting the new market demands triggered by changing customers and technological advancements. Mullins and Agnihotri (2022) are solely focused on the aspect of digital selling in the FMCG industry and highlight the importance of social media. We complement the research of Mullins and Agnihotri (2022) by transferring the recognition of the need and the concept of readiness to the B2B sector. Moreover, the present research is in line with the literature insights of Fischer, Seidenstricker, and Poeppelbuss (2023) and supports it with quantitative data.

Lastly, our findings identify huge differences between SMEs and LEs regarding their readiness for digital sales. In all analyzed disciplines LEs lag behind SMEs. This is surprising since previous research highlights the financial power of LEs (Haug et al., 2011, p. 491) and the inferiority of SMEs compared to LEs (Buer et al., 2021; Peter & Dalla Vecchia, 2021). However, the monopoly power of LEs (Spithoven et al., 2013, p. 541) could be a potential disadvantage of LEs. The monopoly power may tempt LEs to take market trends less seriously, and thus they miss high responsiveness and are not aware of the relevance of digital sales. However, market responsiveness, flexibility, and employees that are responsible for multiple roles are an essential power of SMEs (Haug et al., 2011, p. 491).

## Conclusion and Limitations

Summing up, our findings indicate significant differences between SMEs and LEs. According to our research, we assume that SMEs are more ready for digital sales than LEs due to their higher market responsiveness, flexibility, and multi-skilled employees responsible for multiple roles in SMEs. Based on this assumption, we recommend LEs make their organizations more market-oriented to meet the dynamics of digital sales. Moreover, both types of enterprises, SMEs and LEs, must scrutinize their developed digital sales strategy and the actual implementation in the company due to the identified mismatches.

Moreover, our study complements the scarce literature on readiness for digital sales and transfers previous research findings to B2B markets. While the respondents of SMEs and LEs are aware of the need for customer orientation, they are less aware of the need for digital orientation and information orientation. However, previous research indicates that these two dimensions are critical to practice digital sales successfully. To make their employees aware of these circumstances, companies should develop change management processes to transfer the need for digital strategies and working principles and invest in training their salespeople.

Finally, we must acknowledge that our study has several limitations that can serve as a basis for future research. First, our study only includes respondents from B2B markets; thus, the results cannot be transferred, e.g., to B2C markets, without considering the differences between those two markets.

Second, the majority of our sample stems from the manufacturing sector and with a number of 111. Future research could investigate whether there exist differences between product-oriented manufacturing business models and solution business models that are, e.g., performed by communication and information companies.

Third, most respondents have rather operative tasks (122) and no managerial responsibility (140). For this reason, future research could contribute to Gfrerer et al. (2021) and investigate more profoundly the impact of tasks and responsibilities on respondents' perceived capability, digital sales solutions, digital sales strategy, and need recognition.

Fourth, our sample does solely include the view of selling organizations. Future research could consider the customers' viewpoint and investigate whether there is a mismatch between seller and customer.

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# Pre-implementation of the ERP System in a Small to Medium Production Company in Poland – A Case Study

Sławomir Kłos, University of Zielona Góra, Poland

ERP systems are crucial for small and medium production companies that operate as part of supply chains in such as the automotive or mechanical engineering industries. The paper describes a case study on the implementation of an ERP system in a small Polish manufacturer of steel structures. Based on the project, an analysis of the literature and author's experience in the field of IT projects, viz., a methodology for preparing SMEs for ERP implementation, was proposed. The methodology includes the specificity of SMEs, such as: lack of investment funding, the lack of specialists and IT competences.

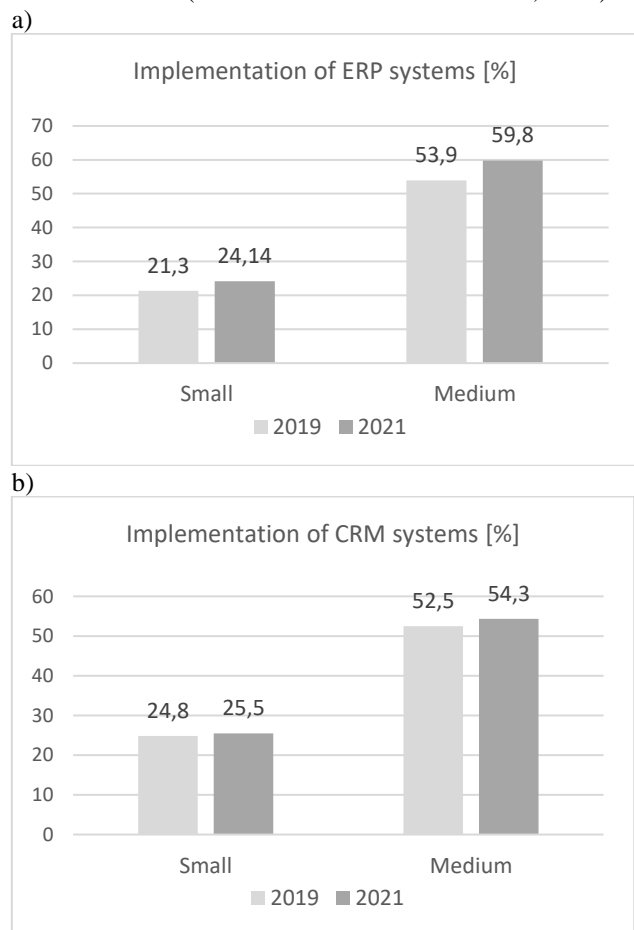
## Introduction

In Poland, there are about 2.26 million registered enterprises, of which 99.8% belong to the SME sector, some 10% of which run production activities. Therefore, the number of production companies in the SME sector in Poland is over 200,000 business entities. One of the most important challenges is the implementation of the assumptions of Industry 4.0, taking into account the computerisation and digitisation of production companies in the SME sector. The proportion of SMEs in Poland, in generating GDP, is close to 50%. In 2020, companies from the SME sector, in Poland, allocated 5,655 thousand PLN for R&D activities, of which approximately 64% was these enterprises' own funds. In 2021, 24.4% of small and 43.3% of medium-sized companies used Cloud computing, while 14.9% of small and 31.8 medium-sized companies used smart devices, connected to the Internet (IoT - internet of things) in their operations. Figure 1 presents changes in the use of CRM and ERP software for SME management in 2019 and 2021. As the charts show, over 50% of medium-sized and about 25% of small companies use ERP and CRM systems to run their business. The increase in the number of ERP system users, within two years, among medium-sized companies (5.9%) is much greater than among small companies (2.84%). The computerisation of SMEs operating in the production area is one of the fundamental assumptions of the Industry 4.0 concept. This is especially important for companies from the automotive industry, for mechanical engineering companies and for steel structure companies, due to the need to:

- the electronic exchange of documents,

- confirmation of order dates and sales forecasts,
- production planning and control,
- traceability,
- calculation of a product's manufacturing cost,
- analysis of receivables and liabilities, in order to maintain financial liquidity.

**Figure 1.** Implementation of a) ERP and b) CRM systems in the Polish SME (Polish Central Statistical Office, 2022)



ERP and CRM systems make it possible to automate business processes and support operational, tactical and strategic decisions. However, one of the key problems with SMEs is the heavy workload and the lack of staff with IT



knowledge. The computerisation of SMEs requires employees to perform additional tasks, such as creating construction (bill of material) and technological specifications (routing), registering material turnover documents, etc.

The success of the implementation of the ERP system in SMEs depends on many factors, such as (Ahmad & Cuenca, 2013):

- clear goals and objectives,
- good project scope,
- management support and commitment,
- selection of ERP,
- training,
- inter-departmental communication and co-operation,
- vendor support, etc.

From the research conducted by Koh et al. results that it is possible to avoid a high level of investment in training and consultancy for the implementation of ERP systems in SMEs, using a training model based on three key underlying reasons, namely the system's design, the previous experience of users with ERP systems and the support tools offered by the vendor (Koh, Gunasekaran, Cooper, 2009). Alaskari, Pinedo-Cuenca & Ahmad (Alaskari, Pinedo-Cuenca, Ahmad, 2021) proposed a framework (methodology) for implementing ERP systems in SME. The framework includes the following 9 stages:

1. Process analysis.
2. Preparing the scope of work.
3. Creating a project plan.
4. Build the system.
5. Preparing standard operating procedures.
6. Creating a data migration plan.
7. User acceptance tests.
8. User training.
9. Go – Live.

Salas (Salas, 2023) proposed a model for the implementation of the ERP system that complements the current methodologies and uses the best practices in project management and software engineering. The results of a quantitative study of Spanish SMEs, involved in the innovation of the business model (BM) that either have, or have not implemented enterprise resource planning, show that there is a direct and positive impact of BM experimentation on BM performance (Molina-Castillo, Rodríguez, López-Nicolas, Bouwman, 2022). Haddara et. al. examine the assumptions and limitations of adopting Cloud ERP system in SMEs (Haddara, Gøthesen, Langseth, 2021), (Demi, Haddara, 2018). The simulation model can be useful in developing and analysing different implementation strategies of ERP in SMEs (Ali & Cullinane, 2014). The importance of ERP systems is underscored with the continuous development of technology to support the implementation of Industry 4.0 concepts (Estefania, Samir, Robert, Patrice, & Alexandre, 2018), (Syreyschikova,

Pimenov, Mikolajczyk, & Moldovan, 2020).

The article presents a case study of the implementation of ERP system in a small Polish manufacturing company. An analysis of the assumptions and key problems that emerged during the implementation is presented. Based on the author's experience, related to the implementation of ERP systems in SMEs and the analysis of the literature, some conclusions regarding the limitations, associated with the implementation of ERP systems in SMEs could be generalised.

## **Company Characteristics and Objectives of the Implementation of ERP**

The AK ANATOL company, located in Żary in western Poland and until 2004, deals mainly with the construction of steel structures for the construction industry. The company specialises in the production of balcony structures for western European customers. Since 2015, the company has also been producing steel construction elements for offshore wind farms. The company carries out unit production of products based on the construction documentation entrusted. Orders are projects with precisely defined requirements regarding (delivery date of the product to the construction site. AK Anatol products are usually large-size steel structures, galvanized and powder coated. The company has EN 1090-1 and PN-EN ISO 3834-2 series certificates and has qualified staff responsible for the quality control of welded joints and conducts cyclical training of staff in the fields of welding and the modernisation of machine parks. The AK ANATOL company belongs to the class of small production companies employing about 40 individuals with 90% of the company's products being manufactured for export. The company also provides services in the fields of:

- powder painting,
- welding,
- plasma cutting,
- technical consulting and auditing,
- assembly of completed structures,
- servicing of the products offered,
- adaptation of structures to existing buildings.

Figure 2 shows example products made by AK Anatol. The main goals of the implementation of the ERP system have been defined as:

- determining the technical cost of manufacturing a product for the purpose of calculating sales offers,
- updating stock levels,
- planning the requirements of materials,
- balancing production capacity,
- registering technological operations and accounting of employees for the tasks to be undertaken.

The greatest demands for labour, related to the handling

of production orders, concerned entering data regarding the material specifications of the products sold. Due to the low repeatability of products, construction specifications have been simplified to one level since materials go directly into the product, by-passing sub-assemblies. This approach enabled the quick creation of construction specifications and the ability to copy similar products.

**Figure 2.** An exemplary of a product manufactured by the AK Anatol company **a)** a balcony platform, **b)** a section of an automotive industry production line



The technology has also been described more simply to include the following operations:

- steel cutting (sheets, profiles),
- deburring,
- bending,
- welding,
- grinding,
- sanding,
- powder painting,
- quality control.

Enquiries from customers usually come in the form of an e-mail with technical documentation attached; often the documentation sent at this stage is incomplete or very

fragmentary. The offer is prepared on the basis of the documentation entrusted, usually by the owner of the company or the head of production. The calculation is prepared using a spreadsheet. Incomplete, incorrect or delayed documentation is a major obstacle for the company.

During development of the concept for the implementation of the ERP system at AK Anatol, the most important functions of the system, in the area of handling production orders, were defined as:

- acceptance of the material delivery into the warehouse of raw materials with the symbol of the production batch,
- automatic release of material, on request, upon registration of the first technological operation (material release),
- analysis of the efficiency of employees, based on a comparison of the standard time taken in performing operations with the actual time taken; ultimately, this efficiency analysis will be the basis for calculating bonuses.

ERP systems work properly when users enter data and follow defined processes. Due to the small number of SME employees who enter data into the ERP system, it is important to automate and simplify processes. An example is the determination of the weight and area of a structure in an ERP system. Since production orders are carried out on the basis of entrusted documentation, it is impossible to determine these quantities in the CAD system. However, based on the parameterisation of material indexes, procedures for determining the surface area and weight of the structure were developed, which was crucial for determining the paint (powder) consumption standard and estimating the cost of an external service, related to galvanising products.

Most scientific publications that deal with projects analysing the implementation of ERP systems, emphasise that the key condition for implementing an ERP system within an enterprise is the involvement of top management. In the case of SMEs, this usually applies to the owner of the enterprise. In the case study described, the owner of the company was both the initiator and the main consultant in the implementation of the ERP system in the production area; noteworthy was the profile education of the owner, a PhD in production engineering.

Due to the limited number of personnel, the AK ANATOL company has planned to implement the automatic distribution of material from the warehouse for production upon registration of the first operation - the release of materials. Thanks to the implementation of the system, it was possible to:

- shorten the time taken, in creating sales offers,
- automatically establish product weight and area,
- control the consumption of material,
- control employee efficiency,
- control manufacturing costs,
- improve the efficiency of the flow of material,
- improve delivery processes and customer service.

The key problems that emerged during the implementation of the system include:

- insufficient involvement in the supervision of production employees, due to the lack of time in implementing the concept and the very high operational burden upon the company,
- lack of consistency in the entering of data and implementing processes in the ERP system,
- lack of employees' understanding regarding important processes related to the computerisation of the enterprise.

One of the most labour-intensive tasks in the implementation of ERP in SMEs, is defining material indexes and creating bill of materials (BOM). Creating BOM can also lead to errors and is crucial for the correct implementation of the ERP system in a manufacturing company (Matende & Ogao, 2013). Documentation of steel structures, commissioned to AK Anatol is provided electronically. A system concept was developed enabling the automatic generation of BOMs in the ERP system, based on the documentation entrusted. Implementation of such a module would save a lot of time and eliminate possible errors when entering data into the ERP system. Based on the geometrical data, it is possible to determine the net standard. Of course, there are a number of problems with calculating the standard, based on geometry, e.g., for sheet metal elements with blanks, however, based on selected methods of component geometry analysis, it is possible to properly determine the material standard. The next step after the constructor develops the BOM specification and determines the net material specification of the product components or subassembly, is to determine technological allowances and gross standards and the specification of technological operations, taking into account unit times, i.e., preparatory and finishing times, or set-up times.

In most SMEs the number of technological operations and production resources is relatively small at less than 50 operations. Thus, the construction of the technological specification of a product or sub-assembly is limited to assigning operations selected from the list and determining the times for completing an operation. However, in many enterprises, the key problem when defining technology is the lack of -or incorrectly defined- time standards. The lack of data on unit times of technological operations and changeover times is typical for companies that perform unique production. The lack of such data makes it impossible to plan production and calculate labour costs. The AK Anatol company proposed a method of estimating technological times and creating new technologies in the ERP system by copying and changing similar products. Data on technological processes can be obtained directly from production, based on the operation times, recorded by employees. The AK Anatol company proposed a two-stage registration of technological operations, namely, the registration of the start and end of each operation.

Implementing an ERP system in a manufacturing

company can be compared to learning a language; 90% of the work depends on the commitment of the company's employees. The main problem is the perception of the implementation of the ERP system by SME employees as an IT project and not as an organisational one. Therefore, it is crucial for the success of the implementation of the project, to build awareness among employees that the computerisation/ digitisation of the company is the next, natural stage of its development, without which the company cannot compete on the market.

## **Methodology for Preparing SMEs to Implement the ERP System, i.e., Pre-implementation Methodology.**

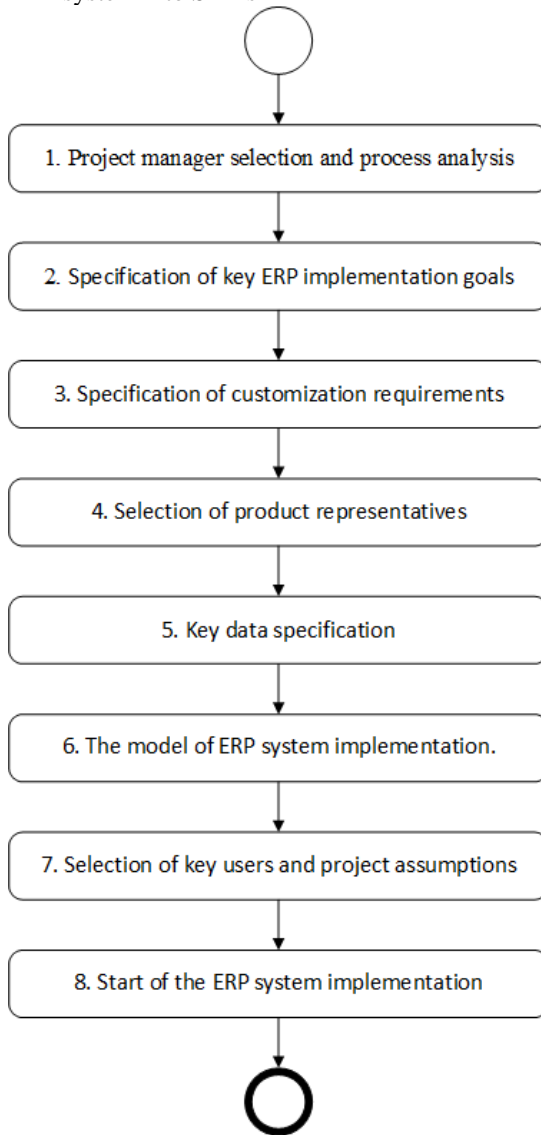
The implementation of information technology in SMEs in the production area, requires the following assumptions and limitations to be taken into account:

- lack of clearly defined business processes,
- lack of current data, such as unit times and preparation-completion times; a scheme for calculating the cost of manufacturing a product, offers from suppliers, material indices, etc.
- shortage of personnel with knowledge of information technology,
- ambiguity regarding employees' duties,
- lack of sufficient financial resources for infrastructure, training and motivating employees.

Due to the specificity of ERP implementation in SMEs, a methodology for preparing the implementation was proposed, which takes into account the specified limitations (Figure 2). In the first step of the proposed methodology, an ERP system implementation manager should be selected. This should be someone who is able to make decisions, who knows the specifics of the company and who, also, is well acquainted with production. In this step, an analysis of the key processes in the company should be carried out. The analysis should focus, primarily, on the main processes that will be implemented in the ERP system. Additional processes can be specified, but they should be implemented in the ERP in subsequent stages of implementation. The process of analysis will allow the most important goals in the implementation of the ERP system in the company to be formulated. Example goals are listed below:

- the accurate calculation of the cost of manufacturing the product,
- increased effectiveness in bidding,
- accounting of production employees for efficiency,
- planning the requirements of materials,
- scheduling deadlines for completing orders,
- reducing stock levels,
- monitoring the status of production orders, etc.

**Figure 2.** Methodology for the pre-implementation of the ERP system into SMEs



In the next step, the level of adjustment of the ERP system to the user's needs or 'customisation' should be determined. Since adjusting ERP functionality to individual MSP requirements is expensive and difficult to implement (prototype, untested solutions), any wide ranging 'customisation' should be avoided and can only be justified in cases where the main objectives of the implementation cannot be achieved. It should be remembered that any wide ranging customisation of an ERP system increases costs and makes implementation, thereof, difficult. In the next step of the proposed methodology, 2-3 typical products manufactured by SMEs should be selected. It is important that the selected products are representative in terms of design and technology for the production of a given company and take into account the possible specificity of the company,

such as, operations carried out in co-operation, special operations and quality control of the first piece, etc. In the next step, data should be prepared, vis-à-vis the construction and technological specifications of selected products, the costs of materials, operation times, exemplary of contractor and employee data, etc. and an identification of the ranges of missing or outdated data that will need to be supplemented.

On the basis of the data on the design and technology of selected products entered into the ERP, key processes should be simulated, such as:

- calculation of the cost of manufacturing the product,
- preparation of the offer and sales order,
- planning the production order,
- ordering materials and co-operation services,
- accepting the delivery of materials into the warehouse,
- generation production documentation,
- release of materials for production,
- registration of production operations,
- receipt of products into the warehouse,
- release and shipment of the product to the customer,
- issuing invoices.

The functionality here presented is typical for a manufacturing company making discrete productions. Depending on the type of production (MTS, MTO, ATO, ETO), some operations may be omitted or carried out in a different order. It is also important at this stage of the pre-implementation methodology to test the customised functions of the ERP system. The ERP system implementation model, thus developed, should be a roadmap for implementing it into the system. In the next stage, key users responsible for implementation of the system into specific functional areas of the company, such as construction and technology, sales, supply, warehouse management and production planning and control, etc., should be selected.

One very important issue that should be taken into account when implementing ERP systems in SMEs is the aspect of sustainable development, covering issues of energy consumption, the biodegradability of materials and products and the system of employee motivation and development, as well (Patalas-Maliszewska, Kłos, 2019).

## Conclusions

The article presents issues of the computerisation of small and medium-sized production companies featuring, as an example, a selected company dealing with the construction of steel structures based on entrusted documentation. Such a model is characteristic of Polish SMEs, which usually undertake orders as subcontractors of large concerns from European Union countries. The computerisation and digitisation of enterprises within integrated supply chains is a pre-requisite for the continued existence of many companies within the automotive,

mechanical engineering or steel construction industries. Therefore, it is very important to prepare good practices that will enable the rapid IT transformation of SMEs. The implementation of ERP systems in small and medium-sized enterprises should now take into account:

- the possibility of purchasing an ERP system as a service, that is, *'software as a service'* tailored to the size of the company,
- automation when implementing BOM, based on data from the CAD system or construction documentation,
- the digital automation of sales order registration and the sending of supply orders and invoices based on EDI solutions,
- automatic release of materials when registering technological operations,
- automatic settlement and bonuses for employees,
- working time records,
- automatic sending and evaluation of offers from suppliers for materials and services, etc.

Based on direct interviews with enterprise managers, it appears that, from an economic point of view, the total monthly cost of maintaining the ERP system in Polish enterprises of the SME sector should not exceed the average costs of one employee. For the effective support of processes by ERP in SMEs, it is very important that supervisors constantly monitor key production reports, with particular regard to the efficiency of resources and production employees, deviations from the production plan, changes in the value of the warehouse, planned and actual sales revenue, complaint costs, control protocols quality, etc.

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# Competitive Strategies, Nonmarket Strategies, and Firm Performance in Romania and Poland

John A. Parnell, University of North Alabama, USA  
Sebastian Vaduva, Emanuel University of Oradea, Romania  
Silvia Fotea, Emanuel University of Oradea, Romania

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*We surveyed managers in 249 Polish and 159 Romanian firms about their nonmarket strategies (NMS). Firm size did not influence market orientation, but it influenced political and social nonmarket strategies in both countries. Firm performance was driven primarily by global growth and differentiation, not cost leadership. Social NMS was a significant performance driver in both countries, but political NMS was not. Finally, relative firm size was significantly associated with firm performance in Romania but not Poland. Our findings suggest that firms in CEE can integrate market and nonmarket strategies to improve performance, but NMS creates more value in the social realm than in the political sphere.*

Central and Eastern European (CEE) nations are developing economically and geopolitically. Firms in the region must address many of the same strategic challenges as their counterparts in Western Europe and other parts of the world. Scholarship on social and political nonmarket activity is increasing, but empirical work in transitional economies is limited. This paper investigates the links among relative firm size, market and nonmarket strategies, and firm performance in two transitional economies, Poland and Romania.

## Research Significance and Purpose

Scholars have investigated the relationships between competitive (i.e., market) strategies and firm performance for several decades (Barney 1996; Parnell, 2018), but nonmarket strategies (NMS) can also enhance firm performance outside of the market context (Lux et al. 2011; Sun et al. 2021; Liedong 2022). A nonmarket orientation includes political and social interactions between organizations and external actors mediated by governments, public institutions, and other stakeholders (Baron 1995). Recent research underscores the importance of nonmarket activity as a consequential part of a firm's strategy and a potential driver of performance (Doh et al. 2012; Meyer and Peng 2016; Parnell 2018; Sun et al. 2021). A growing body of scholarship evaluates the links between NMS and firm

performance, but relatively little is known about these issues in transitional economies (Diamond and Price 2012).

Consumer perceptions of corporate social responsibility (CSR) activities vary widely (Hinčica et al. 2022; Szilagyi et al. 2022). Firms in coordinated market economies tend to be more involved in CSR activities and stakeholder engagement than their counterparts in dependent markets like Poland and Romania (Boesso et al. 2022). Horváth et al. (2017) replicated a CSR study of US and Western European companies in the CEE region. They selected the 50 largest companies from nine CEE countries and two Western European countries and concluded that CSR activity differs across CEE countries. The percentage of CEE companies with a standalone CSR strategy is low, but firms in Poland and Romania are beginning to emphasize CSR (a social nonmarket strategy) as part of their overall strategic approach (Gołębiowski and Lewandowska 2015; Boesso et al. 2022). We test the assertion that the emphasis on social and political NMS drives firm performance and how this relationship is influenced by firm size and competitive strategy. We formulated the following hypotheses:

*H1a: Relative firm size will be positively associated with an emphasis on broad cost leadership.*

*H1b: Relative firm size will be positively associated with an emphasis on global growth and differentiation.*

*H1c: Relative firm size will be positively associated with an emphasis on political nonmarket strategy.*

*H1d: Relative firm size will be positively associated with an emphasis on social nonmarket strategy.*

*H1e: A firm's relative size will be positively associated with firm performance.*

*H2a: A firm's emphasis on broad cost leadership will be positively associated with firm performance.*

*H2b: A firm's emphasis on global growth and differentiation will be positively associated with firm performance.*



H3a: A firm's emphasis on political nonmarket strategy will positively affect firm performance.  
H3b: A firm's emphasis on social nonmarket strategy will positively affect firm performance.

## Methods

We used the Prolific platform to survey managers and other professionals in 249 Polish and 159 Romanian firms in 2022 about their market and nonmarket strategies. We measured relative firm size by asking the respondents to compare the size of their firms to those of their competitors (i.e., much smaller, smaller, about the same size, larger, or much larger). We removed responses completed too quickly, included evidence of straightlining, or contained more than 10% missing data. We used partial least squares structural equation modelling with SmartPLS version 4 to test the hypotheses (Sarstedt et al. 2021), following established guidelines when evaluating the measurement and structural models (Hair et al. 2021).

The constructs were measured reflectively. Reliability and validity were assessed with the partial least squares (PLS) algorithm and supported by factor loadings and coefficient alpha scores. The Fornell-Larcker matrix and hererotrait-monotrait (HTMT) results suggest discriminant validity for all constructs. We also assessed variance inflation factor (VIF) scores to confirm the integrity of the data.

## Findings

We used SmartPLS bootstrapping to test the hypotheses. The results for both countries are presented in Figures 1 and 2. The circles for each dependent variable contain R<sup>2</sup> values. The lines include path coefficients and p-values.

Our first hypothesis was partially supported. Relative firm size was not a significant driver of broad cost leadership (H1a) or global growth and differentiation (H1b) for either Polish or Romanian firms but was positively associated with political nonmarket strategies (H1c) and social nonmarket (H1d) in both countries. Relative firm size was not directly associated with firm performance in Poland but was positively linked in the Romanian case (H1e), albeit with a low effect size.

Our second hypothesis was partially supported. Emphasis on broad cost leadership (H2a) was not a significant driver of firm performance in either Polish or Romanian firms. Still, an emphasis on global growth and differentiation (H2b) was positively associated with firm performance in both countries.

Our third hypothesis was also partially supported. Political nonmarket strategies (H3a) were not a significant driver of firm performance for either Polish or Romanian firms, but social NMS (H3b) was positively associated with

firm performance in both countries.

## Implications

A firm's relative size did not influence its market orientation, such as broad cost leadership or global growth and differentiation. However, a firm's size was positively associated with an emphasis on both political and social nonmarket strategies. The significant link between firm size and performance in Poland (but not Romania) is intriguing.

Figure 1. Tests of Hypotheses and Path Models: Poland.

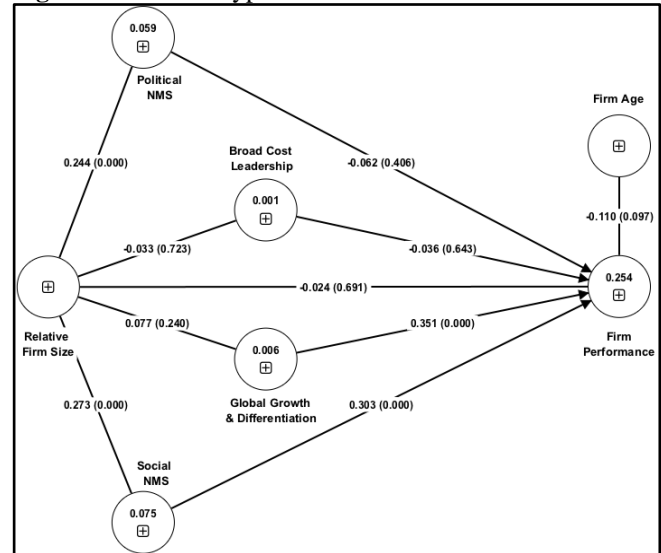
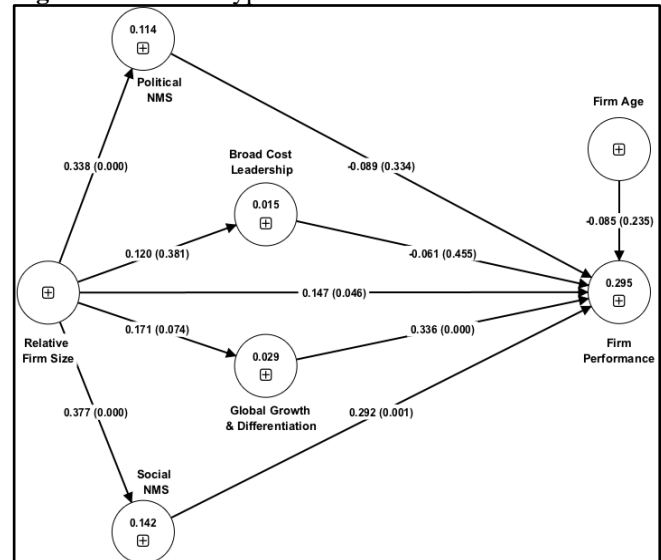


Figure 2. Tests of Hypotheses and Path Models: Romania.



The distinction between market strategy options is notable. Specifically, firm performance was not supported by an emphasis on a broad low-cost orientation. However, an

emphasis on global growth and differentiation was a significant driver of firm performance in both countries.

The distinction between political and social nonmarket strategies is also noteworthy. Specifically, social nonmarket strategies were a driver of performance in both countries, but political nonmarket strategy was not. This finding is encouraging, considering the history of private business in the CEE region. Following the fall of communism, many firms were overwhelmingly reliant on government contracts and favors. The data suggests that companies in Poland and Romania have begun to view CSR activities as essential for sustainable development goals, treating them as investments rather than costs (Stawicka 2017). Hence, CSR activities positive impact firm operations.

An essential benefit of CSR activities is that they tend to be voluntary and resonate with the values of younger workers. Social responsibility as a management idea is another practice akin to quality and environmental management. Żemigala (2017) investigated how standardized (e.g., ISO 14001, SA 8000, AA 1000 AS, and G4) and non-standardized tools are being used to assess social responsibility in Poland. Only ISO 14001, a mainly environmental management tool, was utilized while ignoring others which dwell on working conditions, sustainable development reporting, and stakeholder relations. The success of CSR initiatives in both business and society depends on their impact on social, economic, cultural, and institutional factors. This concept has drawn the attention of academics and practitioners. Hence, it needs to be analyzed, understood and adopted more broadly.

## Conclusions

Our analysis of 249 firms in Poland and 159 firms in Romania revealed similar links among relative firm size, market strategies, nonmarket strategies, and firm performance. Firm size did not influence market orientation, but it influenced both political and social nonmarketing strategies. An emphasis on global growth and differentiation, not cost leadership, impacted firm performance. Social NMS impacted performance in both countries, but political NMS did not. Relative firm size was significantly associated with firm performance in Romania but not Poland.

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# Mainstreaming Sustainability and Promoting Innovation in SMEs: A Time for New Chances!

Harald Bolsinger, University Applied Sciences Würzburg-Schweinfurt, Würzburg, Germany

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*The article describes the transformation of the business model of a specialist bank that was one of the first successful banks in Germany to fundamentally commit to sustainability, that were presented 2023 on the WIBF. The article provides background information about the "road of sustainability" as a model for medium-sized companies to align to the Agenda 2030 of the United Nations. [About a brief "How-to" directly from business practice @ UmweltBank AG, Nuremberg, Germany.]*

**Keywords:** SMEs, Sustainability Mainstreaming, Sustainable Finance, Sustainability Innovation, Change Management

## Introduction

“There is one and only one social responsibility of business — to use its resources and engage in activities designed to increase its profits.” as Milton Friedman stated in 13.9.1970. Much time has passed since this statement and everyone on the globe knows today, that this viewpoint is at least outdated! The multicrisis challenges of this world need joint answers of politics, the public and the economy. This is the only chance to cope with the threats facing mankind today. Therefore this statement has to change and in many mindsets had already changed into: There is one and only one responsibility of business — to use its resources and engage in activities to profitably serve people & planet! There are so many SMEs out there, that already do that, which gives courage to look into a good future! One example is the Umweltbank AG Nuremberg in Germany. In the case study presented at the Würzburg International Business Forum - THE 6th INTERNATIONAL BUSINESS CONFERENCE 2023 with the headline “International Business with New Challenges and Entrepreneurial Opportunities”, we showed why, how and what was done by a specialized sustainability bank to become a strong part of the solutions for the multiple challenges of the world and not to be part of the yesterday’s old economy.

## The Case of Umweltbank

The presented case is already published extensively in Bolsinger, H., Bašić, G. (2023):

Financing Sustainability Change in Germany: SDG Implementation in UmweltBank AG. In: Leal Filho, W., Dinis, M.A.P., Moggi, S., Price, E., Hope, A. (eds) SDGs in the European Region. Implementing the UN Sustainable Development Goals – Regional Perspectives. Springer, Cham. [https://doi.org/10.1007/978-3-030-91261-1\\_5-1](https://doi.org/10.1007/978-3-030-91261-1_5-1) So we add here only a few key facts from the WIBF presentation, that can be found on the web also under <https://www.wirtschaftsethik.biz/en/talks/mainstreaming-sustainability-and-promoting-innovation-in-smes-15062023/> The whole case is available freely on <https://www.wirtschaftsethik.biz/umweltbank>

When first showing the case to an international audience, we received great respect, because when in 2015 a globally recognized understanding of sustainability emerged among the member states of the United Nations in the form of the Sustainable Development Goals (SDGs), there was nobody really thinking especially about SMEs. How could SMEs contribute to global sustainable development on the basis of the Agenda 2030?

At THWS we developed a model with eight milestones specifically for medium-sized companies back in 2015. We invited SMEs to the “Road to Sustainability”. Especially small and medium-sized enterprises often lacked an affordable start to tackle this challenge on their own. Along the eight milestones of the “Road to Sustainability”, employees could systematically implement a sustainability strategy for the benefit of their company based on a discourse-ethical model. All this had prompted the United Nations (Department of Economic and Social Affairs) to invite international imitation of the good example from Germany. “Supporting the SDGs through integration into business policy” was selected as one of the 464 success stories worldwide for the implementation of the United Nations’ 2030 Agenda.

Writing your own SME-success story leads to the strengthening of innovation potential and a differentiated position on the market and needed to answer questions like the following: What does our value chain look like beyond the boundaries of the company? How can our company contribute to the achievement of specific SDGs in its core business and throughout the entire value chain? What corporate activities, even beyond the boundaries of the company, run counter to the UN sustainability goals and to

what extent?

## The Profit of a Sustainable Business Model

The 4-year development process of Umweltbank led to the definition of a new sustainability vision and mission, building on the bank's existing culture and corporate ethos. By amending the statutes, the SDGs became an integral part of the bank's identity. This led to the fact, that it became the first bank in Europe to include the Sustainable Development Goals in the preamble of its statutes. The shareholders passed the resolution with a majority of over 99% in the respective annual general meeting with the following text in German language: "UmweltBank promotes the sustainable development of society with the aim of preserving and creating a world worth living in for future generations. The bank bases its business activities on the United Nations'

Sustainable Development Goals. In particular, it contributes to the realization of sustainable cities and communities, affordable and clean energy, and climate protection. In doing so, it pays attention to sustainable production and consumption as well as gender equality. Honesty, transparency and a focus on people are the values that guide our actions. A stable economic foundation is the prerequisite for successful work."

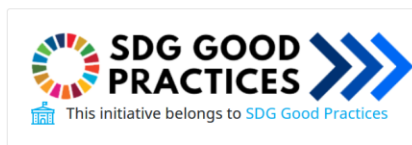
By that the bank laid the foundation for constantly increasing sustainability performance and at the same time creating structures of a learning organization with high innovation potential. In 2019 first indicators for every prioritized SDG were defined and thanks to a materiality analysis, conducted in 2021 with several stakeholders, SDG 4 was identified as an additional goal for UmweltBank. A 2022 snapshot of Umweltbank's contribution to the selected SDGs shows the figure below (Bold 2022) and still unfolds more from year to year.

**Figure 1.** Screenshot of UN-Examples Website: <https://sdgs.un.org/partnerships/supporting-sdgs-through-integration-business-policy>

The screenshot shows the United Nations Department of Economic and Social Affairs Sustainable Development website. The header includes the UN logo, the text 'United Nations Department of Economic and Social Affairs Sustainable Development', a search bar, and a user profile icon. A navigation menu contains: Home, SDG Knowledge, Intergovernmental Processes, HLPF, SIDS, SDG Actions, Engage, News, and About. The main content area has a blue background with the title 'Supporting the SDGs through integration into business policy' and the text 'UmweltBank (Private sector) #SDGAction33813'. A dark navigation bar at the bottom lists: DESCRIPTION, SDGS & TARGETS, DELIVERABLES & TIMELINE, RESOURCES MOBILIZED, PROGRESS REPORTS, and FEEDBACK.

### Intro

Since the UmweltBank was founded, environmental protection has been a major objective of its corporate strategy. However, sustainability as a broader concept was not firmly defined at the end of the 1990s and was (and still is) subject to constant change. With the SDGs, a common concept of sustainability - on which all 200 member states of the United Nations were able to agree - emerged for the first time in 2015. For our executive board, the time had come to make specific SDGs the core of our business policy and to align business



**Figure 2.** Snapshot of Umweltbank’s contribution to selected SDGs (Bold 2022)



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# Unlocking the Innovation Dilemma. A simple Formula to clear up Innovation Status

Gerhard Hube, University of Applied Sciences Würzburg-Schweinfurt, Germany

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*This contribution is based on the publication "Innovation formula and Innovation Test bed" published in December 2022 (cf. Hube, 2022). Dealing with innovation in practice often occurs a dilemma of understanding. This dilemma arises when the actors do not clearly distinguish the status quo of an innovation from its future potential, resulting in misunderstandings and wrong decisions. Therefore, it is of high importance for both science and business practice to develop a uniform understanding of innovation. This then has far-reaching consequences for the design of organisation and processes in the company (cf. Hauschildt, 2007, pp. 6-7). Building on a clear and simple formula of innovation, this work develops an instrument that is to be used both in practice and in teaching.*

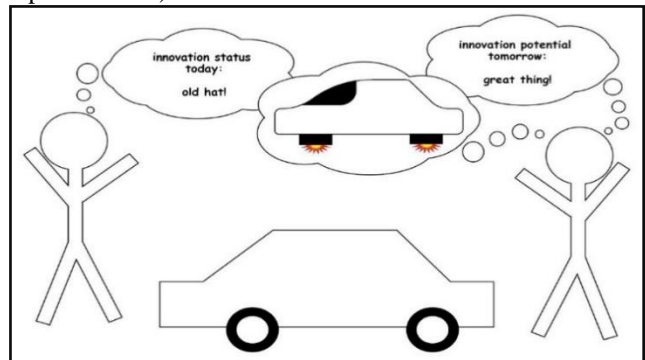
## Basic dilemma and formula proposal for innovation

### *The dilemma with the concept of innovation*

One of the reasons for the different understanding of innovation seems to be the synonymous use of the terms "invention" and innovation, especially in everyday language (cf. Albach, 1991, p. 46; Schaudel, 1993, p. 46; Strebelt, 2007, p. 20 f.). However, the invention is only the necessary preliminary stage of an innovation and describes the result of a planned or unplanned generation of ideas, i.e. it is time-related, whereas the innovation always represents the result of an innovation process or the innovation process itself (cf. Vahs/Brem, 2013, p. 21). However, the concept of innovation is not clearly anchored in time, but is subdivided between different temporal perspectives. In the literature, a distinction is made between a results-oriented or object-oriented view and a process-oriented view (cf. Gerpott, 2005, p. 37; Corsten et. L., 2016, p. 6). In practical application, the definitional approaches from the literature therefore only appear to make sense if a clear distinction is made in the discussion between the different perspectives, i.e. whether it is a question of describing the state of innovation or whether the future potential is to be analysed and evaluated. The concept of innovation thus seems to include both the present and the future at the same time. Figure 2 illustrates this

fundamental dilemma of understanding innovation. While one person focuses on the actual status and cannot see any novelty, the other person is already in a mental development and sees the great potentials and opportunities that could arise.

**Figure 3** Dilemma of understanding innovation (Own representation)



In the following chapters, a proposal will be developed to make the understanding of innovation understandable and applicable to the status quo in the present. It is based on a result-oriented view of innovation, since from a business perspective innovation is intended as the result of multiple efforts (cf. Gerpott, 2005, p. 37). An attempt is made to clarify and illustrate this understanding in the form of a formula.

### ***The innovation (status) formula $I=NxU$***

If we go back to Schumpeter's original approach as already presented in chapter 1, the two essential elements of the concept of innovation become clear. First, there is the element of the "new" combinations, i.e. the invention, the idea, the novelty as such. The second element is the utilisation, the market success of the innovation and thus, in the best case, a commercial success on the market. In the sense of such a reconsideration, innovation only exists if there is a novel purpose-means relationship (cf. Baker et. al., p. 160), an understanding that is also confirmed in the basic meaning and origin of the word: "introduction of something new; innovation; reform" (Duden online, 2022, n.d.). If we

reduce it to these two aspects, we are only dealing with the "new" and the implementation, i.e. the creation of a "benefit". However, it is important to note that innovation must always consist of both aspects, i.e. a new idea without a beneficial implementation is not an innovation and vice versa. If this insight is summarised in a short formula, it can be deduced that innovation is therefore a product of a new idea with a beneficial implementation:

**Figure 4.** Innovation (status) formula (Own representation)

$$I = N \times U$$

**Innovation (I) =**  
**New idea (N) × Useful implementation (U)**

If it is determined that the idea is not actually new, this value would be zero and thus the result would be zero, even if the implementation is extremely beneficial, and it would not be possible to speak of an innovation. Likewise, the result is zero if the idea is defined as new, but no beneficial implementation can yet be determined. It should be emphasised once again that the aim is to carry out the assessment at the present time in order to evaluate the actual state, similar to an MOT, and not the possible potential in the future.

At the upper level of this formula, no further differentiation is made, e.g. what does "new" mean or how is a benefit expressed more precisely? The focus is on clarifying the mandatory two-sidedness of an innovation in order to create a common understanding. Even at this very aggregated level, it should be possible to make an assessment of innovation and non-innovation as quickly and easily as possible.

Even if the application of the innovation (status) formula appears simple and purposeful, it must be taken a step further for a meaningful application in practice. At this level, it is possible to distinguish between innovation and non-innovation in an initial assessment, albeit subjectively, but no further qualitative statement can be made. However, this is usually the case in situations where several projects or ideas have to be analysed and evaluated for a decision. Therefore, building on this formula with the two components "new idea" and "beneficial implementation", a further analysis and evaluation procedure is to be developed.

**Excel tool for determining the innovation status**

This chapter presents the implementation of the previous considerations in a tool that is as easy to use as possible. For a first draft, a tool based on Excel was developed, which will be briefly presented in the next chapter. For this purpose, the requirements for the tool are explained before the implementation is presented.

**Requirements and prerequisites** The tool for assessing the status quo of a (supposed) innovation on the basis of the innovation formula is intended to help companies better assess the current status of their innovation activities. In particular, it should become clear after the assessment whether it is actually an innovation and how it should be evaluated. In addition to the content, the tool should also fulfil a number of other requirements, which are listed below:

- Simple software environment without access barriers if possible
- Complete content mapping of the basic considerations and criteria
- Brief explanatory notes on use
- Intuitive operation as simple as possible
- Possibility of comparative evaluation of several innovation activities
- Possibility for comparative assessment of different assessors
- First graphic evaluations for interpretation and decision support

To meet the first requirement, Excel was chosen as the software for a first version, as it is very widespread and frequently used. In the following chapters, the different elements of the tool are explained. The core of the instrument is the evaluation with the help of the criteria developed in the previous chapters. For the assessment of novelty, i.e. the "N" in the formula "I=N\*U", the two questions "new for whom?" and "how new?" are asked, as shown in the example in the following figure. If there is no recognisable novelty or it is merely an adaptation, the criterion is assessed as 0 and already leads to a 0 in the overall result, i.e. the result that it is not an innovation.

**Figure 5.** Assessment of novelty

Use as:	multi-project			
	Project number:	1	2	3
Please enter a project name.		3D print prototyp	online configurator	digital twin
<b>New for whom? (single response)</b>				
0: nothing new				
2: only for the company				
4: for the whole industry				
<b>How new? (single response)</b>				
0: only adaption/enhancement, that means known market and solution				
2: new solution/combination in a known market/application				
4: both, solution and market/application are new.				
		2	0	4
		2	0	2

In the next part of the assessment, the degree of maturity and the benefits of the innovation project are evaluated. If it is only an idea or concept so far or has already been in series production for years, i.e. in the case of completed robust processes, this is assessed with a 0. The same applies if there is no discernible benefit. This ensures that, in the sense of the innovation formula "I=N\*U", we only speak of innovations if both novelty and a beneficial implementation are present.

**Figure 6.** Assessment of maturity and benefits

		Use as:		
		multi-project		
		1	2	3
		3D print prototyp	online configurator	digital twin
Please enter a project name.				
<b>Level of maturity? (single response)</b>				
0: so far just an idea/concept				
1: prototypical implementation				
2: market entry phase/testing phase in company/pilot				
3: in series respectively in use, but no completed robust processes yet				
0: for years in series respectively in use (completed robust processes)				
		1	0	2
<b>Benefit? (multiple answers possible)</b>				
Yes/No: Is there a recognizable benefit? (internal or external benefit)		Yes	No	Yes
1. valuable increase in know-how/learning effect for the company		1		1
1. benefit for employees in the company (e.g. ergonomics, health, satisfaction, ...)		1		1
1: benefit for society (e.g. fair trade, education, charitable, ...)		1		1
1. benefit for environment (e.g. saving resources, renewable resources, environmental protection, ...)		1		1
2. economical benefit (first turnover or subsidies, respectively cost efficiency benefits)		0		0
<b>Total Benefit</b>		<b>4</b>	<b>0</b>	<b>4</b>

In order to arrive at an overall result in the logic of the innovation formula after the assessment of the individual aspects, the products are now formed from the various elements. This produces a result for the novelty, a result from the degree of maturity and benefit as well as the overall result for the assessment. The multiplication between the sub-aspects ensures that the basic idea of the innovation formula is represented in the result. This means that only if there is an existing novelty and an ascertainable benefit is the result greater than 0 and thus also an innovation. If not, it is only an idea so far or the project shows no benefit or is actually already in series production.

## Conclusion and outlook

The innovation (status) formula approach presented here has already been used in teaching, both in Bachelor's degree courses and in courses of a Master's degree programme. The teaching of the basic ideas and characteristics of innovation, as well as the use of the innovation test bench as a practical application could be used well and effectively in teaching. In addition to teaching, the approach was also evaluated through expert interviews and has already been applied in several projects with commercial enterprises. Based on the good experiences with this approach, a further formula is to be developed subsequently, which, following on from the analysis of the innovation status, develops an approach that enables the assessment of the potential of (future) innovations. Similar to the innovation (status) formula, this should be as simple and easy to remember as possible and

make clear that special expenditures and activities are necessary before a potential innovation success and that certain risks can occur.

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# Proceedings of Plenary Session IV



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# Cross Cultural Comparative Study of Sustainability Awareness in European Education System: A Case Study on Italy, Germany, and Romania

Elia Francesca Pacelli, University Applied Sciences Würzburg-Schweinfurt, Germany

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*This paper presents a comparative analysis of three European cultures, their educational systems and impact on sustainable development. This article turns out to be among the first to analyze this phenomenon. The innovative aspect of this work lies in the comparison not only of different cultures but also of students' opinion of their educational system and the impact it has on the sphere of sustainability. Based on this, a questionnaire, containing the same questions, was administered according to country of residence to compare students' opinions on: Culture, Education, and Sustainability. The main aspects of the research are based on previous studies and new analyses that allow us to understand how the three spheres, mentioned above, are connected. The purpose of the article is to understand the similarities and differences among the three countries and how different cultures impact the sphere of education for sustainable consciousness.*

## Introduction

The construction of sustainable development (SD) is one of the major issues societies worldwide are currently facing. How to achieve both social and economic growth and environmental sustainability is the main issue at stake in the global sustainability debate. At international level, policies have highlighted the important role education plays for SD (e.g., UN-DESA 1992; UNESCO 2006, 2014). These point to the importance of cultural diversity and emphasize that education for sustainable development (ESD) needs to be framed in different ways to adapt to the cultural context (UNESCO 2006, 2014).

For some time now, there has been an emphasis on ESD as central to promoting SD globally (e.g., Hopkins 2012; UNESCO 2006, 2014). Respect for cultural diversity is considered an important value in international ESD policy, and ESD is supposed to take different shapes to adapt to the cultural context. In line with studies that have compared different nations in relation to environmentalism (Olsson 2018; Fang et al. 2018; Yu et al. 2019), this article aims to answer a series of questions about the connection between the cultural, educational, and sustainable spheres of three

nations: Romania, Italy, and Germany. Through a comparative analysis of the data, it is possible to understand the various aspects that influence sustainability consciousness in the three countries.

In fact, this research aims to investigate and compare sustainability consciousness (SC) among universities in Germany, Italy, and Romania.

The development and validation of the survey instrument measuring SC was reported by Gericke et al. (2019). The present study is the second to use the concept in a cross-cultural survey after the study conducted on students in Taiwan and Sweden (Teresa Berglund et al., 2019). A questionnaire was used to investigate students' awareness of sustainability (SC) based on students' sensitivity to the topic of sustainability and the inclusion of this topic within the university system. The SC construct probes knowledge, attitudes, and behaviors in relation to the environmental, social, and economic dimensions of SD. Three comparable samples of students living in three different European settings were selected to answer a questionnaire. The data were analyzed used by comparing the graphs outlined by the three questionnaires administered. By investigating SC among students from Romania, Italy, Germany, it is proposed to contribute to the discussion of cultural differences in the educational context by highlighting the issue of social responsibility on sustainability.

## Background

### *Culture*

Defining culture is as crucial as it is difficult, due to the intrinsic elusiveness of the concept. The first definition relevant to the purposes of this paper is the one provided by UNESCO, which, in its turn, is borrowed from Tylor (1871), who defined culture as that complex whole which includes knowledge, beliefs, arts, morals, laws, customs, and any other capabilities and habits acquired by [a human] as a member of society.

Culture is approached from an anthropological perspective, which includes the body of knowledge shared by a society. This prevailing institutional view has generated

a dualism between heritage, an unchanging set of human acquisitions, and culture in a more general and dynamic sense, an evolving and changing concept that embraces the anthropological view while being closer to the socioeconomic sense of the term.

The institutional conception is widespread: Raymond Williams (1986) identified three different meanings of the term: culture as spiritual development, as a set of values, and as work and intellectual activity. Williams' definition adds two additional layers to the UNESCO definition: an "upward," somewhat Platonic layer, defining culture as a state or process of human refinement (Williams, 1986), and a second "downward" layer, toward the socioeconomic meaning of the term.

Cultural value orientations represent the basic and fundamental beliefs of a culture; these basic beliefs concern human relationships with each other and their world. Culture is the complex system of meanings that a group holds in common, and this set of ideas can be very different from another group's culture. Culture pervades every aspect of a society and influences the thinking and acting of every member of a group. However, because culture is so pervasive and fundamental to a group, there are subtleties in culture that group members may know and understand but are unable to articulate with others outside the group. This, in a sense, is the fundamental problem of understanding a culture other than one's own:

McCarty suggested that a starting point for understanding a culture and differences in cultures may be cultural value orientations. Kluckhohn (1951) defined value orientations as "a generalized and organized conception, influencing behavior, or nature, of man's place in it, of man's relation to man, and of the desirable and undesirable as they may relate to man-environment and interhuman relations." Cultural value orientations, therefore, represent the most basic and fundamental beliefs of a society. These beliefs form the central understandings that members of the culture hold and as suggested by Kluckhohn, relate to the human relationship with each other and the world around them.

The cultural value orientations that exist in a culture reflect the general inclinations of a culture as a whole. The beliefs of individuals within a given culture about particular dimensions of value may vary and deviate from the general position of a given culture. The extent to which there is homogeneity or heterogeneity of individual beliefs within a culture is itself a dimension on which cultures may vary. Triandis (1989) argues that there are "free" cultures that tolerate differences between people and "strict" cultures that are relatively intolerant of differences.

### ***Education***

The concept of education involves all the outputs that come to us from the outside world, from family care to school contacts, from casual encounters to media input. It involves the physical and spiritual growth of each of us. The

child who is born carries within him or her infinite possibilities, some of which are common to all people, while others are peculiar and specific to each individual. Education is the development of all aspects of human personality, physical, intellectual, affective and character.

In the provision of education for the successful development of global citizenship, the development of global citizenship can be divided into four concepts: 1) Curriculum and instructional management, 2) Participation of students, parents, and communities, 3) Enhancing the culture and learning atmosphere, and 4) the development of teachers and administrators' potential (Pratumsuwan, 2019).

Education is a universal right, that is, it is among those rights that must be protected by the simple fact of belonging to humankind. Every child and every adult, from every country, in every corner of the world should be able to receive education and care. But it is not just a quantitative issue. The United Nations Organization is making the case for this: among the 17 Sustainable Development Goals - Sustainable Development Goals, SDGs - that form the foundation of the UN 2030 Agenda, one is entirely dedicated to Education: Goal 4. The UN Programme of Action, signed in 2015 by the governments of 193 member countries and divided into 169 Targets or Goals, is a community march, composed of goals common to all humankind, to be achieved all together by 2030.

Sustainable Development Goals (SDG) (UN, 2015), whereas to achieve the objectives and values of SDG, multi-stakeholders in education have to promote and strengthen all activities in education to accelerate the sustainable development. To build sustainable world through education, the policymakers, institutional leaders, learners, parents, educators, youth and communities are the important elements of the global target groups which can do strengthening ESD to contribute to achieve the SDG (UNESCO, 2020).

### ***Sustainable development***

Sustainable development is broadly defined as: 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs'.

The pursuit of economic expansion has led to issues like social inequality and environmental deterioration. Social inclusion, environmental sustainability, and economic prosperity are the three fundamental pillars of sustainable development, which calls for a more balanced approach to growth.

Economic progress does not necessarily translate into happiness or a sense of well-being, according to quality-of-life surveys like the OECD's How's Life 2020 report. The demand on our biosystem and social equity grows along with the world population. Adoption of more responsible consumption and production habits is necessary for sustainable growth. Win-win measures for mitigation, health

improvement, and cost savings offer a range of benefits for diverse stakeholders as the concerns of climate change grow more significant.

In 2015, the United Nations and its 193 member countries adopted the ambitious Sustainable Development Goals (SDGs), a 15-year plan that addresses 17 global and interconnected issues, including reducing poverty and hunger, ending discrimination, and preventing the long-term consequences of climate change. They are seen as "the blueprint for achieving a better and more sustainable future for all."

Combining social, economic, and environmental factors to address the major problems of our time means that the solutions pursued are more likely to be of long-term benefit and will not come at the expense of the environment or social justice and human rights.

This represents a significant change from previous approaches that distinguished between economic, environmental, and social goals. The SDGs recognize that economic growth, social inclusion, and environmental protection are closely interrelated and that, to achieve these goals, they must be addressed together to create lasting and positive change. Each country will contribute, depending on its unique challenges and available resources.

### ***Why is there a need to form a new leadership class that is sensitive and educated to the issue of sustainability?***

Sustainable leadership is when business leaders (often CEOs) manage companies with the environment, society, and long-term sustainable development goals in mind. It is often referred to as PPP, or the triple bottom line: people, planet, profit. Sustainable leaders consider stakeholders (everyone connected to a company from employees, to consumers, to future generations) not just shareholders (investors who are financially invested in the company). Companies need leaders who can balance both the pressure of short-term goals and priorities and long-term objectives and incorporate a new set of ideals focused on improving social and environmental issues in the world, according to this study. It is about leading in a way that benefits societies and the environment while maintaining financial performance. But big profit and financial return are NOT the only thing that matters. (Meghan Werft, 2015).

Through sustainable leadership it is much more likely that the changes needed to create a better world with equality for all will occur. Corporations and the environment benefit when CEOs and companies prioritize sustainable leadership because environment, society, and governance (ESG) add to profits. How companies' benefit is a bit more complicated. Measuring success for companies is often calculated in financial returns. But when financial returns are measured along with ESG levels, research shows that companies performed much better financially when they had higher ESG.

## **How do different cultural spheres impact and develop the theme of sustainability in educational settings?**

Sustainable development is achieved once people around the world live together in dignity and develop their personality while considering resource scarcity and the inherent value of natural heritage - today and in the future.

This requires future-oriented thinking and action. Individuals worldwide need skills to understand the impact of their own actions and to learn how to deal with changes and risks. They need knowledge, skills, attitudes, and values that enable responsible behavior (UNESCO, 2020-2021).

ESD enables people to make decisions for the future and assess how their actions affect future generations or life in other regions of the world. It considers the social, economic, and environmental dimensions of sustainable development.

### ***Germany***

The way energy is produced, consumer behavior, and education and awareness efforts on sustainability and corporate social responsibility (CSR) issues are the three main sectors in German society that need to change.

Change is required across a wide range of stakeholders, including business, government, decision-makers, society, and educators, according to Germany's foundation for sustainable development. People who identify as "teachers" and "researchers" may deliberately consider how their area of specialization relates, in a more general sense, to the quality of life of others who are impacted by their work.

### ***Italy***

The MIUR (Ministry of Education and Merit) outlines that in recent years schools have seen their educational responsibility broaden to new transversal areas, school autonomy has laid the foundations for a different way of relating to the territory and the institutional and professional realities that operate there.

A promoter of culture and relationships, schools can also provide students, families, and the community with the necessary tools to communicate and implement a virtuous process that truly leads toward a more fraternal humanity.

In order to carry out adequate interventions, it is of great importance that the school world establishes relationships and synergies with the reference subjects present in the territory; it is essential to activate broad collaborations, to involve institutions, local authorities and all subjects of social life in the paths of common growth.

### ***Romania***

According to UNESCO, education for sustainable development is a key instrument to achieve the SDGs (UNESCO 2017). Sustainable development is a paradigm based on ethics and education for sustainable development

and has as its goal the development of competencies that enable individuals to reflect on their own actions, taking into account their current and future social, cultural, economic, and environmental impacts. In order to improve the education system in Romania and make it more flexible, more coherent and better tailored to the needs of society, in 2009, the National Qualifications Framework for Higher Education (NQFHE) was established, while in 2011 the National Register of Qualifications in Higher Education (NRQHE) became operational in the form of a portal-style IT application in Romanian and English (Romanian Government, 2018).

## Research Methodology

This study uses a quantitative approach to investigate whether differences exist in the SC of German, Italian, and Romanian college students. Students in the 17-27 age group participated in a survey based on five questions measuring students' knowledge, attitudes, and behaviors regarding sustainability. Student samples were selected to be comparable. Data were collected in 2023 and statistically analyzed. The questionnaire, sampling process, data collection, and statistical data analysis are described in detail in the following sections.

### Survey instrument

The questionnaire used is aimed at investigating the effects of the implementation of sustainability in the school system. The questionnaire includes three questions aimed at knowing: age, university, and subject of study. Next, five more questions are outlined to know how close students are to the subject of sustainability and how much this awareness of SC is due to the school system and the cultural sphere.

The version provided to the three samples of students was elaborated in English. Each item of the questionnaire is highly specific, and the possible answers have been outlined in ranges or in "yes, no, maybe" answers.

### Sampling and data collection

The aim of this study was to see if there are differences in the SC of German, Italian and Romanian youth. If there are differences, to further investigate their characteristics. If not, an attempt was made to delineate the similarities of the three cultural spheres. The analysis included three main groups of students (ages 17-27) from Italian, Romanian and German universities. A total of 40 students responded to the questionnaire. The entire sample included students from European public universities.

The study focuses on cross-cultural differences and their awareness of sustainability, and the samples were considered to define whether there are differences in European universities. However, the results of this study are not and are not intended to be representative of the three countries.

## Results

This section begins with some descriptive statistics, which are then used to interpret and discuss the results of the analysis submitted here. Next, the results of the analysis corresponding to the five questions submitted to the students are presented. The questions administered are generic, as they are intended to outline an objective analysis of the case.

The five tables show the five questions and the corresponding responses (in percentages) of the forty students who participated.

From these responses it is possible to delineate similarities and differences among the students.

**Table 1.** How close are you to the topic of sustainability?

Answers	Germany	Italy	Romania
0-20%	0%	11,4%	0%
30-50%	72,7%	31,8%	42,9%
60-80%	27,3%	45,5%	57,1%
90-100%	0%	11,4%	0%

**Table 2.** Your cultural sphere, does it influence your sustainable choices?

Answers	Germany	Italy	Romania
Yes	54,5%	54,5%	85,7%
No	0%	11,4%	0%
Maybe	45,5%	34,1%	14,3%

**Table 3.** In your nation, does the educational system deal with the topic of sustainability?

Answers	Germany	Italy	Romania
Yes	27,3%	20,5%	14,3%
No	27,3%	25%	28,6%
Sometimes	45,5%	54,5%	57,1%

**Table 4.** Would you treat the topic of sustainability more in schools?

Answers	Germany	Italy	Romania
Yes	85,7%	90,9%	100%
No	14,3%	4,5%	0%
I don't know	0%	4,5%	0%

**Table 5.** Can education, culture and sustainable development be linked?

Answers	Germany	Italy	Romania
Strongly disagree	9,1%	2,3%	0%
Disagree	0%	0%	0%
Agree	18,2%	45,5%	42,9%
Strongly agree	72,7%	52,3%	57,1%

## Discussion

The main objective of this study was to investigate the SCs of students at German, Italian and Romanian universities, thus contributing to the discussion on the form and character of SD and ESD in different cultural contexts. Internationally, the importance of cultural diversity is emphasized, and awareness of SD is encouraged, which can take different forms to fit the cultural context. This study investigated awareness among students in the three countries that differ in history and cultural and educational context.

The research results showed similarities among the three countries as well as differences. In fact, as can be seen in Table 1, the awareness of sustainability in the three countries is in the middle range. Therefore, German, Romanian, and Italian students feel close to SC in the same way.

Subsequently, similarities are also found in Table 2 among students who conceive as true the hypothesis that their cultural sphere influences their approach to sustainable development.

Questions 3 and 4, reported earlier, focus on the impact that the education system has on SC and whether students would like to see this topic expanded in schools. Responses were positive in all three countries except for low rates of disagreement in Italy and Germany. Finally, Table 5 shows the birth theme of the above article, namely the correlation between education, cultural and sustainability. It can be seen from the table that the majority of students agree or strongly agree on the connection of these three pillars. This supports this thesis.

This is also true, according to the study's major results, for the sustainability field. Boeve-de Pauw and Van Petegem (2011a) concluded that, in the environmental dimension, people with higher conservation values demonstrate more pro-environmental behaviors, regardless of their cultural background, while the significance of use values in predicting pro-environmental behaviors varies across cultures. Based on history and cultural and educational character, we expected to find differences in SC between German, Italian and Romanian students. The results showed that there were no significant differences among the three samples of students, nor real similarities. The results indicate greater knowledge and awareness among Romanian students and following Italian students. However, this was not associated with stronger behaviors. In contrast, German students showed a greater consensus regarding the connection between the cultural, educational, and sustainable spheres. The differences between the three samples were minimal in terms of percentages. The results support previous research suggesting that the relationships between environmental attitudes or values and behaviors are behaviors are culture-specific (Aoyagi-Usui et al. 2003; Boeve-de Pauw and Van Petegem 2011a).

Future studies on cultural differences can benefit from the use of instruments that can record different pro-

environmental behaviors (such as environmental activism, consumption patterns, non-activist political behaviors, etc.), according to Boeve-de Pauw and Van Petegem (2011a). This study can offer valuable insights from this angle because this instrument asked participants to disclose their own behaviors related to these factors.

## Conclusion

UNESCO guidelines indicate that education for sustainable development should be framed according to the cultural context in which it is implemented. However, little is said in international policies about the ways in which this should or could be implemented in education. For example, holistic approaches to Sd can be interpreted and managed in different ways. Environmental, social, and economic perspectives can be approached from a multidisciplinary or interdisciplinary perspective, which can lead to different but mostly higher learning outcomes. Another example is the value-oriented nature of education for sustainable development, as emphasized in several policies (UNESCO 2006, p. 5; UNESCO 2009, p. 26; UNESCO 2014, p. 14).

The research findings outline similarities among the three groups of students. However, further research is needed to define and explore ways to encourage sustainability actions among students in different cultural contexts.

From this study, research limitations were outlined, given by national government action that should implement more specific actions. This cross-cultural comparative study contributes knowledge to the discussion of the cultural specificity of SD and ESD. Comparative studies of this kind are important in shedding light on the meanings and interpretations of SD and, as a result, are a piece of the puzzle regarding the needs, challenges, opportunities, and pathways of ESD in different parts of the world (Berglund 2019).

In conclusion, culturally sustainable development is the only idea that adequately captures all the meanings of culture and all of its deep connections with the social, economic, and environmental facets of human life.

Further research should be done on the multiple possible connections between culture, education, and sustainable development, as well as the connectivity of the performance characteristics of the cultural sector. Instead of merely enabling sustainable development via culture, the emphasis should be on enabling the sustainable growth of culture itself. Such comparative studies are crucial for shedding light on the definitions and applications of sustainable development and, as a result, for contributing to our understanding of the demands and applications of SC.

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# Open Innovation Paradigm as Sustainability Booster Along Companies' Supply Chain

Salsano Sabrina, University Applied Sciences Würzburg-Schweinfurt, Germany

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*Worldwide current scenario requires companies to transform and evolve into the sustainable version of themselves. The success of this transition depends on ongoing innovation and continuous development. This study aims to explore how the open innovation strategy aligned to a better supply chain management could be fostered as an ideal solution. Therefore, through a systematic literature review this work plans to identify research trends and gaps in the field, conceptualize current paradigmatic views and therein provide clear propositions to guide future research. Findings suggest that open innovation is widely accepted as a link to sustainable innovation but understanding the key drivers of enhancing supply chain innovation remains underdeveloped. The originality of the paper is rooted in the comprehensive search and systematic review of studies in the discourse, which have not been unified to date.*

## Introduction

Given the contemporary volatile, uncertain, complex and ambiguous business environment, scholars and practitioners view innovation as a critical capability that makes or breaks the future of firms. The “winners” are those organizations that relentlessly look for innovation opportunities (Drucker, 2014; Edgett, 2014). Increasingly, organizations realize that innovation cannot come only from the research and development (R&D) department but should come from all possible internal and external sources. Firms can rely on different strategies to engage innovation (Goedhuysa and Veugelers, 2012). First, as most process innovation often involves small changes in the production method and operational routine of firms, firms can follow an internal innovation strategy. It can take shape using collaboration between their departments, incorporating, and applying useful techniques from skilled employees, developing their own technology, and creating their machine tools to produce better services at low cost (Tseng and Tseng, 2019). Second, firms can also adopt an externally oriented innovation strategy. When following this strategy, firms usually look for partners with relevant knowledge and set transactions (Nag and Mohapatra, 2012). Those partners could provide firms with external knowledge that would require more time and money to develop internally (De

Clercq and Dimov, 2008). Externally, innovation can also be derived in the existing supply chains. The importance of supply chain collaboration in pursuing innovation is generally recognized in the supply chain management literature (Cao and Zhang, 2011; Soosay et al., 2008; Soosay and Hyland, 2015). However, it is unclear what actions and efforts under collaboration with other supply chain entities drive innovation. Despite the existence of various forms of open innovation (OI) approaches, little is known about how companies innovate in external collaborations, benefit from their innovations (Stefan & Bengtsson, 2017), and with whom and for what reasons they cooperate with outside partners (Huizingh, 2011). In particular, this applies in the context of sustainability innovations (Hossain, 2010; Mustaquim & Nyström, 2014) referring to the need to re-think and re-design products, processes, and services to meet the requirements of Sustainable Development, which are being demanded by different groups, such as customers, NGOs, and governments (Ketata, Sofka & Grimpe, 2015; Tsai & Liao, 2017). Thus, organizations are being compelled to explore innovative measures to achieve integration of related aspects of sustainability (i.e., inclusion, environmental resilience, and organizational performance) (Geissdoerfer et al., 2017; Polese et al., 2018). Importantly, organizations may take different approaches to integrate sustainability-focused innovation. One relevant approach is to view it as an opportunity to include the sustainability perspective, and thereby re-engineer the organization to develop profitable business strategies (Alberti and Varon Garrido, 2017; Hahn et al., 2018). Thus, one may conclude that OI practices within organizations, do have the potential to positively impact both sustainability and innovation because of the complementarities of knowledge and resources (Keupp and Gassmann, 2009). Past literature on OI has highlighted the need to extend an understanding of the area beyond individual organizations to a higher-level organizational aggregation (Rauter, 2019). The sustainability focus as an inclusive, innovative, and integrative measure, creates shared value for the organizations, its stakeholders, as well as society (Caputo et al., 2019b). Open innovation for sustainability (OIS) can help enhance innovation efforts by creating external pressure and facilitating knowledge exchange for environmental, social, and economic performance (Lopes et al., 2017). Further, OIS can assist

organizations to look beyond their existing resource pool and business environment, and thereby include their partners and stakeholders for more inclusivity (Di Fatta et al., 2018; Wang et al., 2020). There are limited studies that have explored OI with a focus on knowledge in the ecosystem dynamics (Spender et al., 2017). In this study the area of Open Innovation for Sustainability in relation to the supply chain management is widened. The aim is to provide evidence of the cruciality of OIS integration as a core business strategy if combined with business and knowledge exchange from both internal and external stakeholders (Aloini et al., 2017; Santoro et al., 2018; Di Fatta et al., 2018).

## Literature review

The theoretical framework analysis is focused on the connection among the open innovation strategy, the sustainability topic, and the key role of supply chain management for companies' successful outcome.

### *The Open Innovation Phenomenon*

Over the years, innovation has brought about increasing interest among scholars and it has been studied by different disciplines and from several perspectives (Paula et al; 2018; Fagerberg, 2009; Martin, 2012). With increasing competitive and globalized conditions driven by innovation (Paula et al; 2018), businesses can no longer consider innovation the result of isolated contributions, but rather of a co-creative process with knowledge circulating within the economic and social environment (Sivam et al; 2019). Organizations need to make innovation available to all active parties in the process. To do so, the collaborative side of innovation in the form of the open innovation phenomenon is used and an emerging field of research has gained popularity in innovation management as a result (Paula et al; 2018, Popa et al; 2017). Although the concept of open innovation is deep-rooted (Paula et al; 2018), this field of research has attracted increased attention in academic fields (Bogers et al; 2017) since the term open innovation was created. Chesbrough (Chesbrough, 2003) defined open innovation as “a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology.” This definition opposes traditional “closed” innovation, where firms can rely on their internal research and development efforts (Chesbrough, 2003). Since Chesbrough's first definition of open innovation, the concept has been further described by several authors who have introduced new notions (Chesbrough, 2006; Chesbrough, 2014). A relevant issue in the open innovation literature is the context of its application and the importance it has been having in the economic environments where it is developed. Thus, the connection between open innovation processes and the economic environment where they take place plays a key

role in the empirical application of the OI paradigm (Shum et al; 2020; Cooke, 2020). Embedded innovation practices require the consumer involvement, and the perception of long-term ties between agents creating value and critical development of complementarities among them, seeding the sustainable economies of the future. Consequently, the framework cannot be considered a substitute but a complement to the conventional models.

### *Sustainable Innovation Criteria*

Innovation is essential for corporate and supply chain sustainability development and implementation (Schaltegger and Wagner, 2011; Klewitz and Hansen, 2014). Sustainable innovation can be defined as new or modified processes, techniques, practices, systems, and products to reduce social and environmental harm (Kemp, Arundel, and Smith, 2001; Beise and Rennings, 2005). This definition considers product and production process changes (De Marchi, 2012). Recycling, waste management, green efficiency, green design and concerns essential to reduce the environmental and social impact of organizational products should also be considered in organizational sustainability innovations. Deeper insight is therefore required for better understanding of these concepts. Sustainable and green innovation antecedents and characteristics have been studied over the years with several findings. Stakeholder engagement, internal and external stakeholders, are important for promoting sustainable innovation in organizations (Ayuso et al. 2011). Sustainability problems have become crucial in recent years due to the global concern about the impact that businesses can have on resources, the environment, and society (Yun and Liu, 2019). Sustainability brings inherent degrees of uncertainty, complexity, and big challenges compiled by the United Nations in the Sustainable Development Goals (SDGs) (Borgers et al; 2020). As mentioned before, open innovation entails that the company is more and more influenced by external stakeholders and their behavior (Payan-Sanchez et al; 2018). Therefore, stakeholders transfer their ideas and knowledge inside the innovation process of the company, which generates a need for coevolution between technological innovations and social innovations (Choi,2020).

### *The Supply Chain Evolution*

Since the advent of globalization, the majority of small and large firms have acknowledged the necessity of intercontinental integration to compete in the global market. Only broad cooperation and expansion outside of national borders and onto other continents might achieve the objectives of establishing a competitive advantage and lowering corporate costs. Supply chain research has emerged as a modern commerce solution to leverage this shift to the networked economy (Tseng & Hung, 2014). The supply chain term, initially defined by Oliver and Webber (1982), refers to the systematic collaboration between people,

processes, and information of alike organizations to create tangible (i.e., product) or intangible (i.e., service) values and deliver them to the customers. In the digital age, more complexity could be afforded when analyzing supply chains which changed its management perspective to accommodate flexibility, agility, and adaptability. To achieve the determined competitive strategies, the core business functions of supply chains including transportation and logistics, manufacturing and service, and procurement were to be re-evaluated and re-designed (Mentzer et al., 2001). After 17 years of Chesbrough's seminal work (Chesbrough, 2003), there has been growth in publications considering the chain as a system composed of knowledge sources from the perspective of openness. There is evidence of change from company level to interorganizational levels focusing on supply chain in one paper in 2010 and five in 2018. The importance of dealing with supply chain management in a brand-new perspective has also been influenced by nowadays sustainable revolution. Evolving over the years, sustainability has been discussed in various contexts and was presented in several ways to draw the attention to the environmental issues and the necessity to take serious actions. Most studies in Sustainable Supply Chain (SSC) literature were developed based on Brundtland commission definition for sustainability as meeting the needs of today without compromising the ability to meet the needs of the future generations (WCED 1987). While there are serious concerns about the meaning of this definition and vagueness about what present and future needs are, and what should be sustained (Voinov, 2017), the Brundtland report was pivotal to introduce the ideas of sustainable development to the political process. In most sectors, environmental effects linked to supply chains are thought to be becoming more crucial for sustainable growth. Businesses must decide whether to adapt in response to environmental concerns under internal and external pressures, and if so, what adjustments should be made to their supply chains. SSC is the incorporation of socio-environmental sustainability goals into the systematic arrangement of key inter-business functions along a chain. It was seen as a potential solution to improve the sustainability performance in the long-term (Carter & Rogers, 2008). Several terms such as green supply chain (Srivastava, 2007), low-carbon supply chain (Shaw, Shankar, Yadav, & Thakur, 2012), social supply chain (Hutchins & Sutherland, 2008) and ethical supply chain (Seuring & Müller, 2008) can be found in the SSC literature.

## The Research Methodology

A systematic literature review summarizes existing evidence, identifying gaps and directions for future research (Petticrew and Roberts, 2006), hence identifying current boundaries in the discourse. It differs from a narrative review because of its methodical approach, implying a detailed

description of the steps taken to select, scan and analyze the literature, aiming at reducing biases and increasing transparency (Fink, 2013; Tranfield et al., 2003). Descriptive rather than statistical analyses of results have been presented. The data presented refers to the findings resulting from computerized-database analysis.

### *Review topic and research questions*

The urge to find a way to make companies more sustainable in the shortest term has become the priority of this decade. Some scholars, as underlined previously, have recognized the relevancy of open innovation linked to a better supply chain management as a possible solution to simplify the sustainable transition. Nevertheless, it's necessary to focus on the topic deepening in how to concretize this transformation and to address the OI and SSC as enterprises' routine. Following such precedence, this systematic literature review offers a revealing stand-alone evaluation of purposefully considered literature related to this thematic. Specifically, the aim of this study is to address the following research questions:

*Q1 How can open innovation and supply chain management concretely help companies during the sustainable transition?*

*Q2 Is the significance of this theme recognized by experts?*

### **3.2 The search process and selection criteria**

Tranfield et al.'s (2003) three-stage procedure - planning, execution, and reporting guided this research. Research objectives and key data-base sources were identified during the planning stage. The list of articles was generated by computerized-database keywords searches on EBSCO Host®. It was chosen as the primary database as it simultaneously searches articles on databases such as Emerald®, the Sage®, Blackwell® and Science Direct®, thus demonstrating its scope and potential for a systematic review and meta-analysis study. This allowed for a broader search covering a wide range of disciplines with indexed content from more than 20,000 journals in the fields of business, technology, information science and education.

At the beginning of the process, the keywords chosen were "open innovation" AND "sustainability" to gain a broader overview of the main topic. Likewise, to allow for appropriate review and analysis, articles were considered only if full text was available from the database. Subsequently, the supply chain management topic has been included in the research. The final search string is summarized below:

Keywords: {open innovation AND sustainability AND supply chain} OR {open innovation AND sustainable supply chain}.

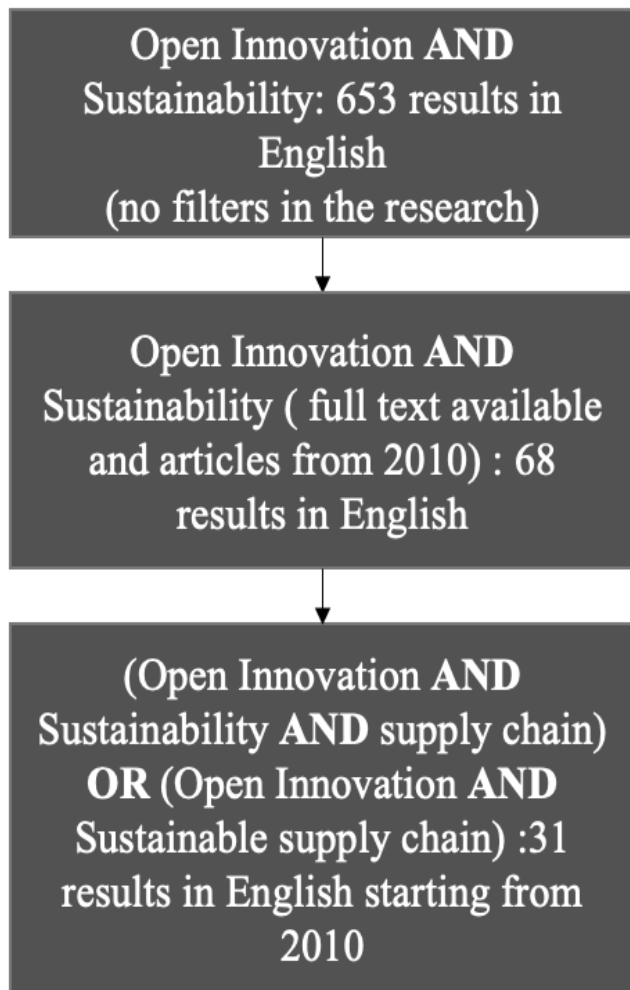
Exclusion criteria: only English publications allowed

and date limitation starting from the 2010.

## Findings and discussion

In this section descriptive figures and tables are presented to show the results of the search process and their categorization. Subsequently, the key questions are addressed and interpreted according to the analysis' space of action.

**Figure 1.** Keywords findings



### *Process and results' synthesizer*

Through the usage of EBSCOhost complete database, it was possible to report the following results. The main steps of this process are perfectly underlined by this own-produced scheme (Fig.2). As introduced in the selection criteria, this work was pushed by the urge to contextualize the argumentations presented in the previous pages, so the

supply chain management has been involved in the analysis. In fact, the real puzzle is to understand how the modern literature has linked the three topics together up to now. The selected criterion regards the combination of OI, sustainability and supply chain OR mixing the OI with the SSC. This typology of keywords conjunction gets to an immediate response: 31 English articles from 2010 arose on the database. The decision of not limitation of the results to the ones linked to a full text, has been driven by the awareness that this approach is not that common and that every paper talking about our keywords together deserve to be read and considered.

**Table 1.** Keywords inside the abstract

OI, SI, SC	OI&SC	SI&SC	OI&SI
16	6	6	3

### *The articles' examination*

From now on, the explanations will be referring to the 31 articles resulting from the most specific procedure. A strict work of checking has been accomplished to prove and show how many papers are connected to the aim of this research. The first move has been the reading of the various abstracts, this process allowed to investigate the real number of texts talking about open innovation and its effects on sustainable innovation thanks to the groundbreaking help of a better supply chain management. The results are showed briefly (Tab.1): 16 articles out of 30 are concretely talking about the topic, while 6 are about the relationship between open innovation and supply chain, 6 about the sustainable supply chain paradigm all alone and ultimately 3 texts are dedicated to the general topic of open innovation for sustainability. This proceeding could be compared to a skimming protocol, in fact it makes it possible to focus the attention on the precious data excluding papers that can be deceiving but in the end are useless for the purpose.

At this point of the paper, the time to substantiate the thesis has come. The most relevant findings, that are linearly connected to the argument that must be proven, are here reported (Tab.2). After deepening inside these papers, a summarization of their message has been proposed, the results evidence the utility, but also the necessity, of a new approach to companies' sustainability issues. Those sentences sum up perfectly the answers to the research questions. Indeed, OI and SCM are considered essential components to drive a sustainable change, this has been stated according to all the 16 specific texts. In the Tab. 2 have been inserted the most interesting articles in terms of

### 4.3 Most popular perspectives of the authors

Table 2. The papers' purpose

ARTICLE	FINAL RESULTS
Open innovation as a practice to enhance sustainable supply chain management in SMEs. (Viale et al; 2022).	It highlights <b>open innovation</b> as a practice within a <b>sustainable supply chain</b> that offers opportunities for mutual gain and learning without creating imbalance between customer and supplier and by developing <b>sustainable purchasing</b> .
The Impact of Electronic Procurement Adoption on Green Procurement towards Sustainable Supply Chain Performance-Evidence from Malaysian ISO Organizations. (Singh and Chan; 2022).	The study recommends that demand for environmentally friendly products and services be fueled by OI based purchases, resulting in a greener <b>supply chain</b> .
A consumer-centric open innovation framework for food and packaging manufacturing (Tsimiklis et al; 2015).	It presents a new ICT based framework that embraces <b>open innovation</b> to place customers in the product development loop but at the same time assesses and eventually coordinates the entire manufacturing and <b>supply chain</b> in a sustainable way.
Open for green innovation: from the perspective of green process and green consumer innovation (Yang and Roh,2017).	This alternative approaches to <b>open and green innovation</b> will contribute to corporate <b>sustainability</b> in the future.
Open innovation in the manufacturing Industry: A review and research agenda (Obradovic et al;2021)	Collaborating throughout the <b>supply chain</b> and sustainability study, represent important future research streams for OI.
Eco-Innovation, Sustainability and Business Model Innovation by Open Innovation Dynamics (Pichlak and Szromek; 2021).	The adoption of an <b>open innovation</b> strategy strengthens <b>sustainable</b> business leaders' propensity to generate <b>eco-innovation</b> . Moreover, developing such changes is dominated by the adoption of strategic and operational forward <b>supply chain</b> collaboration.

explanations and findings but none of them has diverged from the common message.

## Conclusive discussion

### Conclusions

This systematic literature review paper has provided an overview of the current trends of sustainability paradigms in open innovation and the linked supply chain management. The analysis showed that large numbers of articles on OIS have positive expectations on the future evolution of this phenomenon. However, when it comes to narrowing down the topic with specific and updated research, the results are not that convincing. This paper has identified most popular articles that want to study and forecast the feasibility of OIS together with SSC. The findings are inspiring but limited in terms of number of papers worth to work on, geolocation of

the companies used as case studies and at the level of accuracy. Whereas the well-known concept of open innovation has frequently been used in recent empirical studies, the aim was to enlarge the concept within the context of sustainability innovations and expanding the list of potential stakeholders as collaboration partners. If on one side the significance of open innovation for sustainability is widely recognized, contrariwise, despite its vital importance in contemporary business and the need for more research, understanding the key drivers of enhancing supply chain innovation remains underdeveloped (Cottrill and Rice, 2013; Fawcett et al., 2014; Singhry, 2015; Soosay et al., 2008). Sustainability-related studies have strongly entered in the innovation discipline in the last several years with almost 80% of the articles being published from 2015 to 2019, thus becoming one of the most relevant elements in today's research on open innovation. This increase has been mostly

influenced by the boost experienced with the appearance of the journal Sustainability (Switzerland), that mainly focuses on publishing sustainability and environmental related papers about open innovation (Payan-Sanchez et al; 2021). This study is an attempt to overcome the traditional implication of OI and SI relationship conceptualizing an open innovation approach in a supply chain setting.

### **Limitations and future research advice**

Although this study does have several contributions, there exist some limitations and concerns. These limitations do provide useful and additional opportunities for more studies into the subject. The study is a snapshot in time, and much broader empirical and longitudinal investigation to determine if the open innovation importance as a facilitator for a sustainable supply chain development may change over time is required. Moreover, a broader analysis inside the literature review is demanded to scholars and experts equipped with professional databases and softwares. The findings presented in this paper have opened up significant opportunities for future research. First, as this study did not dive into the comparison and differentiation among companies' fields in terms of OI for SSC application, future studies can involve a bigger data set from any two types of industries and performing a comparative analysis of results of these two industries. Second, it would be interesting to additionally analyze how company factors influence the internal acceptance and implementation of open innovation for sustainability along their supply chain. Third, a need to understand the differences between the organizational practices of SMEs and multinational companies is highlighted, and further delineation of what is effective for incremental and radical sustainable open innovation (SOI) inside companies' value chain. I invite studies to explore the extent and under what conditions these findings may be transferable. This paper sets an initial stage for further and future research investigation and practical application of open and sustainable innovation of supply chains.

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# Borderlines of Banking Crisis for Canada, China, Germany, India, Japan, Russia, United States of America, United Kingdom and Turkey

Halit Targan Ünal, Dogus University, Turkey  
Hakan Kaya, Okan University, Turkey

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*Banking crises are sudden and significant events. However, when they happen, their consequences make a big impact. The goal of this paper is to understand the dynamics of financial stability using correlation tests within nine countries. It specifically focuses on banking, debt, financial burden, inflation-related issues and systemic crises happened between 1990 to 2016 in Canada, China, Germany, India, Japan, Russia, USA, UK and Turkey. The results attained show that banking crises are substantially associated with systemic crises.*

## Introduction

The banking sector is the basic framework of the financial sector. The banking system and sectors have a very fragile and sensitive structure; incorrect economic policies, wrong development and the lack of reforms are driving the crisis towards disaster.

A crisis is the emergence of an unpredictable and unexpected situation. In the economy, it can be called that it reveals results that will seriously shake the country's economy from a macro point of view and firms from a micro point of view. Due to all the negativities in the economy sector, it causes a decrease in welfare by closing all successive sectors.

The banking crises that have emerged in the world in recent years have not only been limited to developing countries and countries in the process of transition to a market economy, but have also been observed in industrialized countries. Banking crises limit the activities of households and companies, accelerate the decrease in investments and consumption, and prevent the healthy functioning of the financial sector's credit and payments system.

Banking crises cause economic stagnation in financial and other non-financial sectors, excessive fluctuations in the exchange rate and interest rates, and ensure that obligations are not fulfilled on time. Since this situation accelerates the inability to collect the receivables due in the banking sector, it causes great losses.

As a result, decisions play an active role in ensuring the

welfare of individuals and the efficiency of the financial markets economy.

In this research which includes analysis observations of debt and crises in 9 countries from 1990 to 2016. In the first part, briefly touched upon the consequences of banking sectors and banking crises. In the second part; used factors, the Correlation Tests used in the third section, in the fourth section; Research Methodology, Dataset, Methods, and Hypotheses, in the fifth section; conclusion is included.

## Literature

Laeven and Valencia (2020) examined the policy responses and their financial and output costs to resolve banking crises based on crisis dates, using 151 systemic banking crisis events worldwide between 1970 and 2017. Complemented to find that it tends to follow banking crisis dates with sovereign debt and currency crisis dates. It was concluded that crises in high-income countries tend to last longer than crises in low- and middle-income countries and provide new evidence that they are associated with higher output losses, lower financial costs and more widespread use of bank guarantees and expansionary macro policies.

Cihanli (2020) studied for a thesis includes an analysis of the transformation of the fiscal and monetary structure of TRNC's economy after the 1999 banking crisis. It focuses on the political economy of the crisis and its impact on the country's sovereignty. The thesis explores the reasons behind the crisis, such as the liberalization of the banking sector, the conflict between Turkey and TRNC, and the country's lack of economic diversification. It also discusses the measures taken by the government to address the crisis, including the establishment of a new Central Bank.

Demirgüç-Kunt and Detragiache (1997) analyzed the factors associated with systemic banking crises in both developed and developing countries during the period 1980-1994. Through analyzing a large sample of countries, the paper identifies several determinants of banking crises, including macroeconomic factors such as slow GDP growth, high inflation, and currency overvaluation, as well as bank-specific factors such as high leverage and low capitalization

ratios. However, they also find that financial liberalization and globalization tend to increase the vulnerability of banking systems to crises.

Iacovone, Ferro, Pereira-López, and Zavacka (2019) studied explores the relationship between banking crises and manufacturing exports in different sectors. It includes data from 160 developed and developing countries covering the years 1970–2012. The study determines evidence that banking crises have a significant negative impact on export growth, which takes place through a financial channel. The analysis also appears that the impact of banking crises on exports varies across sectors that differ in their needs for external financing. The study confirms the importance of financing problems by demonstrating how both financial turmoil and falling demand have affected exporters in the past.

Demirgüç-Kunt, Pedraza, and Ruiz-Ortega (2021) examined have found that the crisis has had adverse effects on bank performance, especially on smaller, undercapitalized, and less diversified banks. The pandemic has generated instability and high volatility in global capital markets, which has affected the financial sector significantly. Moreover, government support measures have helped large banks perform better than expected during the crisis. The introduction of financial sector policy announcements has helped stabilize bank stocks worldwide, but the detrimental impact of the pandemic on banks is expected to be much more long-lasting than that on other sectors. The COVID-19 crisis has highlighted the importance of effective regulation and risk management to mitigate the impact of economic shocks on the banking sector.

Tambunan (2019) studied the impact of economic crises on (MSMEs) in Southeast Asia, with a focus on Indonesia. The investigation detects that MSMEs are highly vulnerable to economic crises due to their limited resources and lack of access to finance. The study also represents that the COVID-19 pandemic has had a severe impact on MSMEs in the region, leading to significant job losses and business closures. However, the exploration identifies crisis mitigation measures that have been effective in supporting MSMEs during economic shocks, such as financial assistance, tax relief, and regulatory reforms. It concludes that policy responses should prioritize support for MSMEs to ensure their resilience during times of economic crisis.

Beutel, List, and von Schweinitz (2019) examined the effectiveness of machine learning in predicting banking crises. Using a sample of developed economies covering the last 45 years, it compares the non-sample forecasting performance of different early warning models for systemic banking crises. The examination finds that machine learning models can outperform traditional statistical models in identifying the likelihood of a banking crisis. According to study also shows that the performance of machine learning models improves when they are combined with expert knowledge and when data quality is high.

Kim, Batten, and Ryu (2020) analyzed the relationship between bank diversification, financial stability, and the likelihood of a financial crisis in 34 OECD countries between 2002 and 2012. The study discovers that moderate levels of bank diversification can increase financial stability, while excessive diversification can have an adverse effect. In this study also occurs that bank diversification has a significant impact on the likelihood of a financial crisis, with more diversified banks being less likely to experience a crisis.

Acharya, Eisert, Eufinger, and Hirsch (2018) examined the impact of the European sovereign debt crisis on the real economy, specifically through the lens of syndicated loans. The study finds that the lending contraction resulting from the crisis depressed investment, employment, and sales growth of firms affiliated with affected banks. This study represents that the impact was more significant for firms in countries that were more severely impacted by the crisis.

Altavilla, Pagano, and Simonelli (2017) studied the impact of bank exposures on the transmission of sovereign stress in both domestic and foreign lending. In accordance with the study, it turns out that bank risks significantly increase the impact of country stress on bank loans to domestic firms and loans issued by foreign subsidiaries of banks. The study appears that this effect is more significant for banks that are less capitalized and those that hold a higher percentage of their assets in sovereign debt.

Popov and Udell (2012) studied on investigates the sensitivity of credit supply to bank financial conditions, particularly in the context of cross-border banking, in 16 emerging European countries before and during the financial crisis. The research finds that bank financial conditions, such as capitalization and liquidity, significantly affect the supply of credit, with a decline in bank financial conditions leading to a contraction in lending. This research also represents that this effect is more significant for foreign-owned banks, which played a significant role in cross-border lending before the crisis.

## Used Factors

### *Domestic Debt in Default*

Default is the failure to meet repayments on debt. It is on ability to secure future loans. Central government's debt is called to Domestic debt.

### *Sovereign External Debt Default*

External debt is the portion of a country's government's debt that was borrowed from any kind of financial institutions. It can be denominated in foreign or domestic currency. The immediate impact of sovereign default is the failure by a country's government to pay back its debt in full when due.

## Systemic Crisis

Systemic crisis is serious enough to have a significant adverse impact on the real economy. It is a domino effect in when problems in banks are a financial system with dire global economic consequences.

## Currency Crisis

A currency crisis can be defined as banking crisis or default crisis situation in exists whether Government's central bank has sufficient foreign exchange reserves. Resulting from the application of flexible exchange rate regime financial crisis and is often associated with a real economic crisis.

## Inflation Crisis

Inflation is a quantitative measure of the rate at which the average price level of a basket of more expensive a set of goods and services in an economy increases over a period of time. It is mostly related to political and economic crises typically have multiple causes.

## Banking Crisis

A banking crisis is often occurred with financial crisis. It refers to serious solvency, investors sell off assets, liquidity problems or withdraw money from savings accounts at the same outside shock because there are all hit by the failure in a group of banks spreads to other banks in the system.

## Correlation Tests

### Spearman

Spearman correlation test is a measure of the monotonicity of the relationship between two datasets. The

formula is  $\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$  where  $\rho$  is the coefficient and  $n$  is the number of points in the data set. For each point  $(x_i, y_i)$ , it is represented by the square of the difference in the ranks of the two coordinates is represented by  $d_i^2$ , and the sum of each of these squares is represented by the expression  $\sum d_i^2$ .

One varies between -1 and +1 imply an exact monotonic relationship with 0 implying no correlation.

### Pearson

The test calculates a Pearson correlation coefficient and the  $p$ -value for testing non-correlation of two quantitative variables. Let  $x$  and  $y$  two quantitative variables, where  $n$  samples were observed. The formula is defined as:

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^n (y_i - \bar{y})^2}}$$

## Research Methodology

### Model and Hypotheses of the Research

The purpose of this study is to investigate the effect on Domestic and Sovereign External Debts, Currency, Inflation and Banking Crises factors are most associated with Systemic Crises between 1990-2016 in 9 countries using the Python programming language with pandas, seaborn and matplotlib libraries.

In the study, the quantitative research-based Test of association (using correlation test) was preferred. How were the 9 countries effected by the debt defaults and the crises from 1990 to 2016? and Which factors are mostly associated with Banking Crises in 9 countries? sought an answer to the questions.

The calculation started by checking how much impact each factor had on countries. The model of the research is shown in Figure 1.

Figure 1. Model of the Research

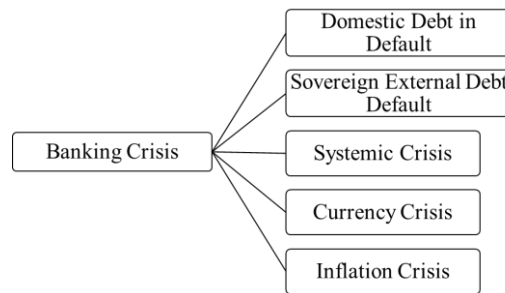


Table 1. Variables

#### Independent Variables

Domestic Debt in Default  
Sovereign External Debt Default  
Systemic Crisis  
Currency Crisis  
Inflation Crisis

#### Dependent Variable

Banking Crisis

## Data Scope Sets

The dataset is an enlargement of Reinhart et al. al's Global Financial Stability available online at <https://www.hbs.edu/behavioral-finance-and-financial-stability/data/Pages/global.aspx>

The dataset will be help to those who seek to understand the dynamics of financial stability within the 9 countries environment and central role in hypothesis testing following the questions:

I) How were the 9 countries effected by the debt defaults and the crises from 1990 to 2016?

II) Which factors are most associated with Banking Crises in 9 Countries?

Table 2. Details of Variables

Data columns	Descriptions
case	243 Entries
year	243 Entries
systemic_crisis	"0" means that no systemic crisis passed in the period and "1" means that a systemic crisis passed in the period.
exch_usd	The exchange rate of the country relating to the USD.
domestic_debt_in_default	"0" means that no sovereign domestic debt oversight passed in the period and "1" means that a sovereign domestic debt oversight passed in the period.
sovereign_external_debt_default	"0" means that no sovereign external debt oversight passed in the period and "1" means that a sovereign external debt oversight passed in the period.
gdp_weighted_default	The total debt in failure relating to the GDP.
inflation_annual_cpi	The yearly CPI Inflation rate.

independence	"0" means that no independence and "1" means that independence.
currency_crisis	"0" means that no currency breaking point passed in the period and "1" means that a currency breaking point passed in the period.
inflation_crisis	"0" means that no inflation breaking point passed in the period and "1" means that an inflation breaking point passed in the period.
banking_crisis	"no_crisis" means that no banking crisis passed in the period and "crisis" means that a banking crisis passed in the period.

Total 243 entries and total data 14 columns. The exact entries value could not be calculated due to some values in the count column being n/a.

Table 3. Range Index of Values

Column	Shows on
count	How many entries
mean	Average value
std	Standard deviation value
min	Minimum value in this series
25%	Average value of 25% of total records
50%	Average value of 50% of total records
75%	Average value of 75% of total records
max	Maximum value in this series

Table 4. Summarize all main statistical measures columns

	Count	Mean	Std	Min
case	243.0	39,666667	21,755022	9
year	243.0	2003	7,804957	1990
systemic_crisis	237.0	0,07173	0,258586	0
domestic_debt_in_default	234.0	0,008547	0,092251	0
sovereign_external_debt_default	243.0	0,041152	0,199052	0
gdp_weighted_default	243.0	0,349794	1,691944	0
inflation_annual_cpi	240.0	14,178709	62,682677	-1,4
independence	243.0	1	0	1
currency_crises	243.0	0,185185	0,399724	0
inflation_crises	241.0	0,095436	0,294427	0
	25%	50%	75%	Max
case	23	34	64	66
year	1996	2003	2010	2016
systemic_crisis	0	0	0	1
domestic_debt_in_default	0	0	0	1
sovereign_external_debt_default	0	0	0	1
gdp_weighted_default	0	0	0	8,5
inflation_annual_cpi	1,54575	2,914335	8,20925	874,622

independence	1	1	1	1
currency_crises	0	0	0	2
inflation_crises	0	0	0	1

### Hypothesis Testing

I) How were the 9 countries effected by the debt defaults and various crises between 1990 to 2016?

As result of Interpretation;

1) Domestic Debt in Default: Russia was in the Domestic Debt in Default between the years 1990 and 2016.

2) Sovereign External Debt Default: All the countries except Russia unsuffered Sovereign External Debt Default between the years 1990 and 2016.

3) Systemic Crisis: Between 1990 and 2016, all countries except Canada, India, UK and USA were effected by Systemic Crisis. Most effected countries being China, Germany, Russia, Japan and Turkey.

4) Currency Crisis: All countries were effected by Currency Crisis in that period and the most effected countries were Germany, India, Russia and Turkey.

5) Inflation Crisis: Only 3 countries; China, Russia and Turkey were the most effected in the Inflation Crisis between the years 1990 and 2016.

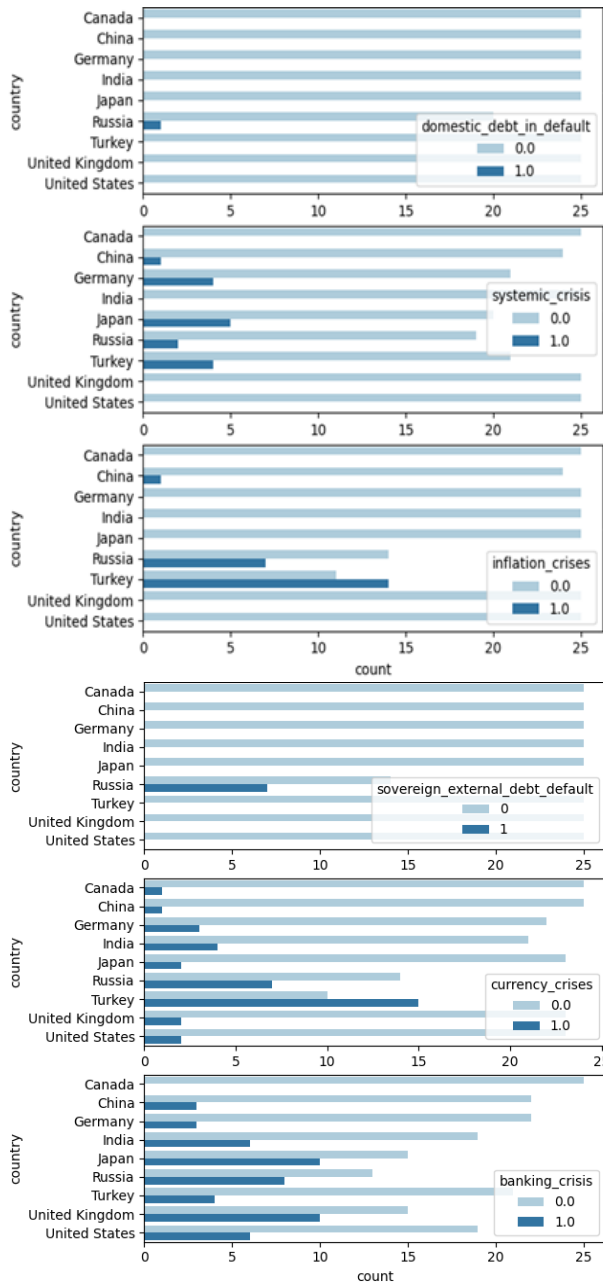
6) Banking Crisis: Between the periods 1990 to 2016, all the countries except Canada unsuffered Banking Crisis and the most effected countries were; China, Germany, India, Japan, Russia, USA, UK and Turkey.

Another observation is Russia has been effected by every situations. Turkey has the highest rate of currency and inflation crises in that period.

II) Which factors are mostly associated with Banking Crises in 9 countries?

Pearson correlation (parametric) and Spearman correlation (non-parametric) were used for test of association. The correlation graph is divided diagonally into 2 in the middle.

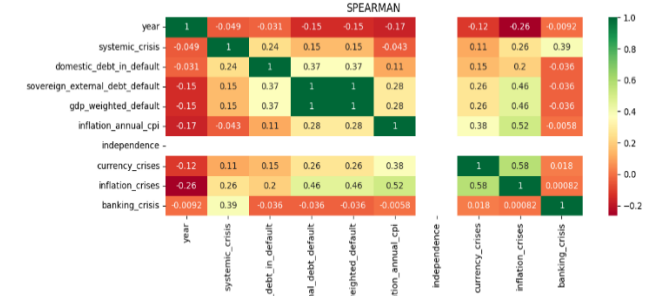
Figure 2. Effects of Crisis on Factors



**Spearman**

In this graph, green colors represent positive correlation and red colors represent negative correlation.

**Figure 3.** Spearman Correlation Matrix



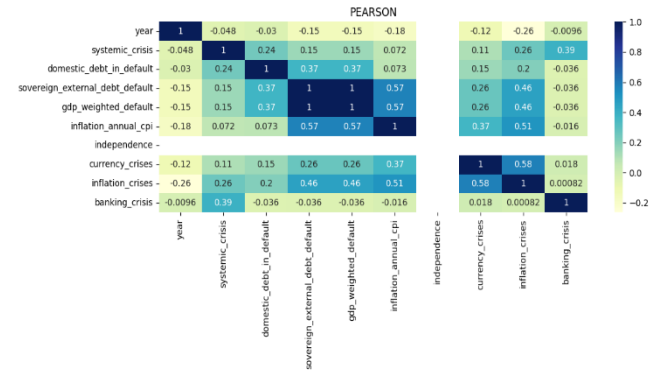
Pairs of variables with very strong correlations (values from 0.8 to 1 or -0.8 to -1.0):  
 “sovereign\_external\_debt\_default” with “gdp\_weighted\_default” – (1.0)

Moderate correlations (values from 0.4 to 0.6 or -0.4 to -0.6):  
 “currency\_crisis” with “inflation\_crisis” – (0.58)  
 “inflation\_annual\_cpi” with “inflation\_crisis” – (0.52)  
 “sovereign\_external\_debt\_default” with “inflation\_crisis” – (0.46)  
 “gdp\_weighted\_default” with “inflation\_crisis” – (0.46)

**Pearson**

In this graph, blue colors represent positive correlation and yellow colors represent negative correlation.

**Figure 4.** Pearson Correlation Matrix



Pairs of variables with very strong correlations (values from 0.8 to 1 or -0.8 to -1.0):  
 “sovereign\_external\_debt\_default” with “gdp\_weighted\_default” – (1.0)

Moderate correlations (values from 0.4 to 0.6 or -0.4 to -0.6):  
 “sovereign\_external\_debt\_default” with “inflation\_annual\_cpi” – (0.57)  
 “gdp\_weighted\_default” with “inflation\_annual\_cpi” – (0.57)

“currency\_crises” with “inflation\_crises” – (0.58)  
 “inflation\_annual\_cpi” with “inflation\_crises” – (0.51)  
 “sovereign\_external\_debt\_default” with “inflation\_crises” – (0.46)  
 “gdp\_weighted\_default” with “inflation\_crises” – (0.46)

Result interpretation from the correlation matrix;

- 1) The correlation between sovereign\_external\_debt\_default and gdp\_weighted\_default is high.
- 2) Currency Crisis has a very Low-strength correlation with sovereign\_external\_debt\_default, gdp\_weighted\_default and inflation\_annual\_cpi.
- 3) Inflation Crisis has a very Medium strong correlation with currency\_crises and inflation\_annual\_cpi.

## Conclusion

In the research, Russia, Turkey, India which has the power to influence the global system and China’s modern silk road which is called the One Belt One Road are among the world's 20 largest economies were included instead of the 7 richest countries in the world excluding Italy and France.

Banking crises are sudden and significant events, but when they go on their consequences are make a big impact. The goal of this paper is to understand the dynamics of financial stability using correlation tests within the 9 countries conditions. It specifically focuses on the Banking, Debt, Financial, Inflation and Systemic Crises that passed from 1990 to 2016 in including: Canada, China, Germany, India, Japan, Russia, USA, UK and Turkey.

For “inflation\_annual\_cpi” in both Pearson correlation matrix (0.57) and Spearman correlation matrix (0.28) “sovereign\_external\_debt\_default” and “gdp\_weighted\_default” was analyzed. Banking Crisis is mostly associated with Systemic Crisis. Moderate correlations are six in Pearson and four in Spearman. While “inflation\_crises” was prominent in Spearman, it was observed that both “inflation\_crises” and “inflation\_annual\_cpi” were prominent in Pearson. “sovereign\_external\_debt\_default” and “gdp\_weighted\_default” have very strong correlations in the pearson and Spearman correlation matrices, while the average correlations are six. In generally, we can say that except from Indepence all the features show a positive correlation with banking crisis.

Banking crises is an important problem that affects the functioning of the credit channel based on internal and external shocks from time to time. While the indicators in the economy in the early 1990s did not indicate that the crisis was approaching, it was faced with a financial crisis caused by the structural disorders of the crisis in 1994. Decreasing liquidity, increasing interest rates and inflation, lowering bank reserves and regulation weaknesses are led to banking crisis in Turkey.

Financial crisis in the Russian Federation when is in mid-1998, the impact of external factors, such as laid down in the economy in order to eliminate the drawbacks together with the IMF and the rate of inflation by controlling the exchange rate and sustainable development "Inflation Reduction Program" as a result of investments in an environment of accelerated production and the liquidity crunch that emerged in the financial markets in November 2000 has been turned upside down and suddenly all the positive expectations.

Among the economic crises that have started to be seen in the world recently, it is not only limited to developing countries; there are also crises in industrialized countries with strong economies. During the economic crisis, decreases in consumption along with investment prevent the system from functioning properly in case of disruptions in payments experienced in the financial sector. Along with the weakening of trust in banks, there are decreases in the fund flow of banks with weak capital, and as a result, a decrease in funds leads to a contraction in loans, and these decreases lead to a decrease in investments.

In order to reduce the vulnerabilities in the banking sector, it is necessary arrangements should be made and existing techniques should be updated in the prediction and detection of risks. In the same way, it is also important to monitor the credit expansion and conduct risk analyses on this issue. When risks are identified, In addition to the questions of risk categories, our critical assets, our activities that may be disrupted in the face of any event, the most spending areas or items, the complex activities or processes, the difficulties in reaching the determined targets, weak areas, resource constraints and legal requirements can be questioned.

The preparation and follow-up of the performance program is of great importance. It is important to reduce the probability and impact of risks. Whether the policies adopted are in line with the structural framework of the economy as a well-structured regulator contributes to the stability and efficiency of the major financial markets. Among the measures to be taken are the strengthening of the banking sector, closing public deficits, implementing the necessary institutional regulations and the creation of an independent central bank.

The things that need to be done to get rid of the problems experienced in banking crises can be briefly listed as follows:

- Globalization and the developments in information technology, an uncontrolled and uncontrolled growth in the financial sector have been one of the most decisive factors in the emergence of the crisis.
- Controlling sudden inflows and outflows in capital movements,
- Taking the necessary measures to ensure that the entire regulation and public support process for the banking sector is transparent in the market.

When the causes of banking crises in developing

countries are examined in general; due to an economic environment with a high risk ratio and an unstable economic structure, capital inflows, sudden capital outflows and high interest rates for developing countries can lead the financial system of countries to bankruptcy. In addition, the banking sector which is faced with public and frequent political interventions have become powerless within the system and negatively affected other actors of the system. And in this brief, banks with a strong financial structure and capital adequacy will be less affected in the crisis. For this purpose, it is of great importance to activate risk management, especially in the banking sector which have high sensitivity to exchange and interest rate risk in liquidity (Çinko & Rengin, 2009).

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# Cultural Differences and Entrepreneurial Needs

Isaac Wanasika, University Northern Colorado, Monfort School of Business, USA  
Diederich Bakker, Hanze University of Applied Sciences  
Rainer Wehner, University Applied Sciences Würzburg-Schweinfurt, Germany  
Gouher Ahmed, Skyline University College, UAE  
Mukhammadfoik Bakhadirov, ADA University Azerbaijan  
Hugh Julian Liu, Hanze University of Applied Sciences, Netherlands  
Liu Rong, Hubei University of Economics, Wuhan  
Yukie Tsuzuki, Seijo University, Japan  
Mikus Dubickis, Riga Technical University, Latvia  
Stephen Treacy, University College Cork, Ireland  
Sami Al Kharusi, Sultan Qaboos University, Oman  
Maria Gabriela Silva, ISCTE Instituto Universitario de Lisboa, Portugal  
Andreea-Maria-Gabriela Militaru, University Politehnica of Bucharest, Romania  
Greeshma Kondalu, Sri Venkateswara University, India  
Helena Markova, Silesian University Opava, Czechia  
Rocco Acocella, University of Malta, Malta

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*The purpose of this study was to investigate entrepreneurial intentions and cultural differences. The sample represents 1,110 business students from ten cultural clusters. The students completed a questionnaire that focussed on various dimensions of entrepreneurial intentions. Results indicated various statistically significant differences between the cultures. Country specific strategies related to enhancing entrepreneurship are discussed at the end of the paper.*

## Introduction

Entrepreneurs are regarded as inherently creative and innovative (Schumpeter; 1934). Consistent results show that a preference for innovation clearly differentiates entrepreneurs from managers (Carland & Carland, 1991; Stewart et al., 1999; Timmons, 1990). Managers tend to be more adaptive (Buttner & Gyskiewitz, 1993), and to be rewarded for their competence and efficiency (Schein, 1985) rather than for innovation and creative destruction (Schumpeter, 1934). More than eight decades later, Schumpeter's most of Schumpeter's insights are still relevant today. Recent studies have shown that unlike managers, the entrepreneurial mindset is characterized by a high propensity for risk, limited resources, and significant uncertainty that plays into their decision. On the other hand, innovation provides the means for entrepreneurial growth (Estrin et al., 2019)

Entrepreneurial career choices are impacted by entrepreneurial drive (Florin et al., 2007) and cultural values (Dahles, 2005). Culture has direct and indirect effects on different dimensions of entrepreneurship. Culture appears to play an important role in the business process, as cultural diversity can influence the predominant characteristics of entrepreneurship and thus moderate the effects of economic conditions on entrepreneurship (Jaén et al., 2017). Cultural values determine the degree to which a society views entrepreneurship as an attractive or unattractive professional outlet (Liñán et al., 2013). Thus, the level of entrepreneurship varies widely from country to country on the basis of culture (Hunt and Levie, 2003).

Studies on national culture have found interrelationships between national culture and entrepreneurship (Hofstede, 1980; 2000; House et al., 2004). The description of culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another" (Hofstede, 2001, p. 5), implies that cultural norms are manifested in individuals' values, norms, cognitions, motivations, beliefs and behaviors. Scholars have identified culture as a moderating factor in career choice to be an entrepreneur and start a new business (Moriano et al., 2012; Thornton et al., 2011), theory of planned behavior constructs (Hagger et al., 2007), and entrepreneurial intentions (García et al., 2018). Multiple studies have shown that country's culture has impact on students' entrepreneurial intentions (Liñán et al., 2013; Pruett et al. 2009;

Sánchez, 2010; Varamäki et al., 2013).

## Background

### *Entrepreneurial orientation*

Psychological and personality characteristics have been shown to be predictors of innovativeness. While some believe it is possible for all individuals to be innovative, creating new ideas is just easier for some. In a business setting, a preference for innovation refers to a willingness and inclination towards experimentation and creativity when developing and introducing new products and services (Lumpkin & Dess, 2001). Innovation is also enected proactivity. Proactive individuals scan the environment for opportunities, show initiative, and persevere until they bring about change (Bateman & Crant, 1993).

Studies indicate that innovative persons are persistent (Hurt et al., 1977; Sandberg et al., 2013), self-confident, open to experience, original, independent and have tolerance for ambiguity (Barron & Harrington, 1981; George & Zhou, 2001; Patterson, 1999; West and Wallace, 1991). Innovators are also willing to change (Hurt et al., 1977), eager to try new ideas (Rogers & Shoemaker, 1971), and have a tendency to advance problem solving (Scott & Bruce, 1994). Additionally, they have the ability to inspire others and build networks (Akrich et al., 2002). Regarding personality, studies have found a positive correlation between openness, extraversion, and creativity (Bender et al., 2013; Hughes et al., 2013).

Entrepreneurial orientation includes innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness. It has been shown to influence firm performance, profitability, growth and product innovation in entrepreneurial firms (Avlontis & Salavou, 2007; Johan & Dean, 2003; Moreno & Casillas, 2008; Tang et al., 2008). Harris and Gibson (2008) found that personal control, innovation, self-esteem and achievement with respect to business involvement were correlated with intentions to become an entrepreneur (Harris and Gibson, 2008). Additionally, several studies indicate that past experience with family business is linked to stronger entrepreneurial attitudes (Harris & Gibson, 2008; Roberts & Robinson, 2010; Zampetakis et al., 2009).

Florin, Karri and Rossiter (2007) have studied student attitudes which promote entrepreneurship and found that innovation, nonconformity, proactive disposition, self-efficacy and achievement motivation are crucial in this regard. Other researchers studying students used a variety of measures for entrepreneurial attitudes that included a mixture of attitude and trait measures, often including items referencing risk-taking and innovativeness (Domke-Damonte et al., 2008; Langkamp-Bolton & Lane, 2011; Levenburg & Schwarz, 2008; Macko & Tyszka, 2009; Zampetakis et al., 2009) as well as proactivity (Langkamp-

Bolton & Lane, 2011; Zampetakis et al., 2009). In addition to creativity and proactivity Zampetakis et al. (2009) found that the emotional intelligence is connected to entrepreneurial wishes.

## Theory of Planned Behavior

The Theory of Planned Behavior (TPB) (Ajzen, 1991) is one of the models in the study of entrepreneurial intent in different countries (Autio et al., 2001; González-Serrano et al., 2016; Krueger et al., 2000; Liñán and Fayolle, 2015; Moriano et al., 2012). Ajzen (1991) postulates that behaviour is a function of beliefs that influence a certain behaviour. These beliefs are considered important premises that determine 1) personal attitude, 2) intention and 3) perceived behaviour control. Personal attitude is the favourable or unfavourable assessment that a person makes on the behaviour in question. The second predictor of perceived behaviour is a social factor referred to as subjective norms. Subjective norms refer to the perceived social pressure to perform or not perform a certain action from people in the immediate environment who exert that influence and pressure. The third antecedent of intention is the degree of perceived behaviour control (PBC) over behaviour, which is the perceived ease or difficulty of the subject in performing an action based on past experiences, as well as difficulties and obstacles perceived by the subject.

The more favourable the subjective norms and attitudes towards behaviour, the greater the perceived degree of control of the individual, leading to a stronger intention to perform a certain behaviour (Ajzen, 1991). However, one of the current unresolved issues is the role of subjective norms. Some research findings support a direct influence of subjective norms on the intentions to undertake a behaviour, while others do not (Figueiredo and Liñán, 2017; Fayolle and Gailly, 2004; Krueger et al., 2000). Certain authors have found a direct influence of subjective norms through personal attitude and perceived control of behaviour (Meek et al., 2010; Moriano et al., 2012).

Previous studies have used TPB to predict certain variables that are related to entrepreneurship. These variables include entrepreneurial intentions, entrepreneurial behavior and entrepreneurial skills and attitudes. Entrepreneurial skills and attitudes are necessary antecedents in the process of effective entrepreneurship. Skills and attitudes are developed through learning, experience and environmental factors. Intention plays a central role in TPB by connecting norms, attitudes and behavioral control with enacted behaviors. Entrepreneurial intention is the “self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future” (Thompson, 2009, p. 676). Entrepreneurial intention is the first step towards taking entrepreneurial action such as contemplating a startup. The second variable of interest is entrepreneurial behavior. Based on the TPB,

intentions are correlated with behavior and also linked to behavioral control. Entrepreneurial behavior refers to entrepreneurial actions such as recognizing and exploiting opportunities by reconfiguring existing and new resources in ways that create an advantage” (Zahra, 2005, p. 25).

## Culture

Previous studies have found associations between culture and entrepreneurship. Specific cultural dimensions are likely to strengthen or weaken the relationship between individual factors and entrepreneurial intent (Schlaegel and Engle, 2013). Looking at each of the relevant dimensions, we can identify theoretical and empirical support for this assertion. Commonly used cultural dimensions at research of entrepreneurship are four dimensions from Hofstede, which are power distance (PDI), individualism (IDV), masculinity (MAS) and uncertainty avoidance (UAI). Even Hofstede has defined six dimensions, these four have been noticed to play crucial role regarding entrepreneurship.

Power distance (PDI) dimension expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally. Societies exhibiting a large degree of PDI accept a hierarchical order, control and obedience to those with power (Hofstede, 1980). Everybody has a place that needs no further justification. There are contradictory studies of power distance, some studies indicate that high PDI promotes entrepreneurial activity (Busenitz and Lau, 1996) whereas some that low PDI is connected to entrepreneurs (Mueller et al., 2002). Connection to risk-taking propensity in entrepreneurship is moderated by PDI according to Antoncic et al. (2018).

Individualism dimension (IDV) refers to societies that prefer a social framework in which individuals are expected to take care of themselves and their immediate families. On the other hand, collectivist societies take care of the larger extended family in exchange for loyalty. According to Hofstede (1980), IDV culture that emphasize “I” rather than “we” are more likely to demonstrate entrepreneurship. This is supported Lee and Peterson (2000) who found that countries with high levels of individualism develop a greater entrepreneurial spirit. Interestingly, Pinillos Costa and Reyes Recio (2007) also note that the entrepreneurial activity rate of a nation is positively associated with individualism when the country’s income level is high; however, when the level of income is low, collectivist culture predicts a high ratio of business creation. Additionally, Mueller et al. (2002) study indicates that entrepreneurs tend to have high IDV. High IDV is also related to venture-capital investments (Gantenbein, et al., 2019).

Uncertainty avoidance (UA) dimension expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. High uncertainty avoidance implies that the society exhibits strong beliefs and norms of

behavior and is uncomfortable with new ideas and the unknown. Studies have found a negative relationship between UA and different attributes of entrepreneurship such as innovation (Shane, 1993), risk-taking (Kreiser et al., 2010) and early-stage entrepreneurship (Arrak et al., 2020). Accordingly, Mueller et al. (2002) find out that low UA was related to entrepreneurs.

Masculinity (MAS) represents a preference for achievement, heroism, assertiveness, and material rewards for success. MAS has also been associated with traditional male values such as compensation, recognition and career advancement (Hofstede et al., 2005). These traits are somewhat perceived to be necessary in entrepreneurship. Numerous studies found support for this perception (Heilman, 2001). However, recent studies have pointed to sociocultural biases (Pecis, 2016) and gender blindness in research may conceal the gendered nature of innovation processes (Dheer et al., 2019).

Thomas and Mueller (2000) conclude that cultural values such as individualism and uncertainty avoidance are significantly related to traits such as internal locus of control, risk taking, and innovativeness, which are associated with entrepreneurship. Some authors (Del Junco and Brás-dos-Santos, 2009) have emphasised that a country’s cultural and social values impact personal values of entrepreneurs. However, Hofstede et al. (2004) add a psychological perspective, stating that when individuals are dissatisfied, they tend to become self-employed even when the country’s culture of entrepreneurship is not favourable.

Triandis (2004) postulates that collectivists conceive behaviour to be a result of external factors, such as norms and roles, while individualists relate it to leadership, high educational attainment and mobility on the social scale. According to Soares et al. (2007), this theory is useful for formulating hypotheses in comparative studies at an intercultural level. Based on previous studies between cultural dimensions and entrepreneurial activity, we are able to develop specific propositions. High individualism and high masculinity appear to be highly correlated to entrepreneurship. Power distance promotes certain aspects of entrepreneurial activity such as risk-taking. Low uncertainty avoidance is likely to be associated with entrepreneurship. Altogether, related to entrepreneurship are high masculinity, low uncertainty avoidance and high individualism.

## Entrepreneurship and culture

Gonzales-Serrano et al. (2018) compared entrepreneurial attitudes of eastern and western parts of Europe comparing Lithuanian and Spanish students. Lithuanian students had higher predictor variables for entrepreneurship having higher entrepreneurial intentions and perceived behavior control as well as personal attitude compared to Spanish students.

Earlier studies indicate that Danish and Finnish people

have very positive attitudes towards entrepreneurship (Amway Global Entrepreneurship Report, 2013), and the attribute is common among adults under 30 years. Generally, most Europeans tend to have more positive attitude towards entrepreneurship than US nationals, but interestingly the entrepreneurial rate is higher in the US. Additionally, contrary to positive attitudes, the Finnish and Danish are among the least likely to become entrepreneurs. A possible speculation for this phenomenon is that only 37% of US nationals indicate fear of failure as an obstacle to becoming entrepreneurs, while in Europe the fear of failure factor is 73% (Amway Global Entrepreneurship Report, 2013).

In the US, small businesses and startups play an instrumental role in economic and cultural environments, and account for two-thirds of net employment (Dilger, 2018). A significant part of the US cultural heritage that has been linked to entrepreneurship includes the protestant work ethic, freedom and independence (Morris et al., 1994). Lee and Peterson (2000) found that weak uncertainty avoidance, low power-distance, masculinity, individualism, achievement orientation and universalism were conducive to entrepreneurship. Based on a US sample, Mueller and Thomas (2000) found evidence of high individualism and high uncertainty avoidance as being supportive to entrepreneurship. Finally, while comparing the US culture to nine other countries, McGrawth et al. (1992) concluded that regardless of culture, individualism, high power-distance, low uncertainty avoidance and masculinity were common attributes among entrepreneurs.

**Table 1:** Areas Represented

Area	N	%
USA	100	9,0
West Europe	53	4,8
South Europe	149	13,4
Baltic	112	10,1
Caucasus	51	4,6
Nordic	51	4,6
India	74	6,7
East Asia	320	28,8
Southeast Asia	24	2,2
East Europe	138	12,4
Middle East	38	3,4
Total	1110	100,0

## Method

### *Questionnaire of entrepreneurial needs*

The respondents were asked to estimate; how much they would need certain qualities to become as entrepreneur. There were 13 items which they were rating at Likert-scale: Courage, Taking Risks, Motivation, Self-esteem, Optimism, Resilience, Persistence, Decisiveness, Innovativeness, Mentor to Help Me, Team to Build up the Business, More Knowledge about Entrepreneurship, Good Business Idea. Factor analyses (Varimax) indicated that 9 first qualities belong to inner needs and last four outer needs.

## Results

### *Entrepreneurial intentions*

At Table 2 can be seen that there are statistically significant differences between the areas. The Table 3 represents post-hoc differences and it shows that the areas like: Middle East, Caucasus, East Europe, India, Baltic and SouthEast Asia are mostly having entrepreneurial intentions. The lowest intentions were having East Asia, Nordic, South Europe and USA.

**Table 2.** Anova about the question “How likely it is that you will become an entrepreneur at next 5 years?”

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	230,416	10	23,042	20,6	<,001
Within Groups	1216,972	1093	1,113		
Total	1447,388	1103			

### *Qualities needed*

From Table 4 can be seen that there were statistically significant differences about the cultural areas and both inner and outer qualities needed for starting the entrepreneurship.

The Tables 5 and 6 present the post-hoc tests to see the qualities more specifically. Inner qualities were most needed in the South Europe, East Asia and Southeast Asia. Lowest needs were in Nordic, Caucasus and India. Help from outside was mostly needed Southeast and East Asia, Baltic and Caucasus. Least help was needed by West Europe, Nordic, Middle East and South Europe.

**Table 3.** Post-hoc (Duncan) of areas and entrepreneurial intentions

Area	N	Subset for alpha = 0.05		
		1	2	3
East Asia	320	2,66		
Nordic	51	2,98	2,98	
South Europe	149	3,04	3,04	
USA	100		3,19	
West Europe	52		3,25	
Southeast Asia	24			3,63
Baltic	110			3,67
India	72			3,74
East Europe	138			3,74
Caucasus	50			3,86
Middle East	38			3,92
Sig.		,056	,198	,177

**Table 4.** Anova of qualities and areas

		Sum of Squares	df	Mean Square	F	Sig.
Inner Qualities	Between Groups	45,033	10	4,503	3,679	<,001
	Within Groups	1322,061	1080	1,224		
	Total	1367,094	1090			
Help From Outside	Between Groups	45,978	10	4,598	4,034	<,001
	Within Groups	1244,504	1092	1,140		
	Total	1290,482	1102			

**Table 5.** Post-hoc test (Duncan) of inner qualities and areas

Area	N	Subset for alpha = 0.05			
		1	2	3	4
Nordic	49	5,3016			
Caucasus	49	5,3447	5,3447		
India	74	5,5000	5,5000	5,5000	
Middle East	38	5,5263	5,5263	5,5263	5,5263
East Europe	137	5,5499	5,5499	5,5499	5,5499
West Europe	50	5,5844	5,5844	5,5844	5,5844
Baltic	110	5,7131	5,7131	5,7131	5,7131
USA	98	5,7426	5,7426	5,7426	5,7426
Southeast Asia	23		5,7971	5,7971	5,7971
East Asia	317			5,8924	5,8924
South Europe	146				5,9825
Sig.		,060	,053	,097	,051

**Table 6.** Post-hoc test (Duncan) of help outside and areas

Area	N	Subset for alpha = 0.05			
		1	2	3	4
West Europe	53	5,2547			
Nordic	49	5,2704			
Middle East	38	5,4211	5,4211		
South Europe	148	5,4882	5,4882	5,4882	
East Europe	138	5,5091	5,5091	5,5091	
USA	100	5,5200	5,5200	5,5200	
India	74	5,5304	5,5304	5,5304	
Caucasus	50	5,6100	5,6100	5,6100	5,6100
Baltic	110		5,7341	5,7341	5,7341
East Asia	319			5,8770	5,8770
Southeast Asia	24				5,9792
Sig.		,117	,164	,081	,078

## Conclusions

Students from South Europe needed inner qualities the most but did not need outside help as much as others. So, it seems they would need to cultivate their own entrepreneurial qualities. It is possible that South European respondents think that entrepreneurship is a mentally very demanding job, and thus they think that they would need so much mental qualities like persistence, optimism and resilience.

Nordic people (Finnish) thought that they would not need so much inner or outer qualities. Finnish society gives the all the information what is needed about entrepreneurship, and they feel having also necessary inner qualities for entrepreneurship. Basing on the low needs it was surprising that Finnish people were among the lowest with entrepreneurial intentions.

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# Panel Meeting



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# Panel Meeting on Potential Effects of Nation Brands on Attracting FDI: Is a strong nation brand a way to attract FDI?

Emin Akcaoglu, Würzburg International Business Forum & Manisa Celal Bayar University, Turkey

Diederich Bakker, GASMERC & Hanze University of Applied Sciences, Netherlands

Alfredo Jimenez, KEDGE Business School, France

Musa Pinar, University of Valparaiso, Indiana, USA

Kurt Treumann, IHK Würzburg-Schweinfurt Mainfranken, Germany

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## **Emin Akcaoglu:**

It's very nice to see you. Of course, we'll have our final part of our conference today, with the panel meeting. We have got four panellists and me, but I'll be rather acting as the moderator. So, I'm the person who will be asking the questions. But of course, you can also ask questions to the panellists. As we know very well, the panel topic is 'potential impact of nation brands on attracting FDI'. Can a strong nation brand attract FDI? Yesterday we talked about it with some colleagues at the dinner table. And they asked me if we'll discuss something interesting at the panel meeting. I said yes, the topic is going to be very interesting. And I made a comparison between the case of Turkey and the case of Germany. And I said that Germany has got a better nation brand. Therefore, it may be possible for Germany to attract more foreign direct investment. What I think is that it may seem very sensible to say so. But at the same time, we all know that there are some other issues that would be perhaps more important than a nation brand. First of all, we should question how Germany has built that brand. In addition, we should also ask another question - if we forget the branding part completely for a moment - what makes some countries more attractive for FDI or not? So, to discuss this interesting topic, I would like to first invite each of our panel members to the floor. So, Diederich is at the top of the panellists list and in fact he is also the one who is going to leave soon. Therefore, the floor is yours Diederich. Could you please tell us what you think about the importance of nation brands in terms of attracting FDI? Thank you.

## **Diederich Bakker:**

Good morning, everyone. Just double checking whether you can see my screen. Great. And yeah, it's an interesting topic, I must admit. And coming from a marketer's point of view, I was delighted to see, you know, the word branding in this panel discussion. So, my field actually is brand

management and not FDI. But combining the two, I found it an intriguing approach. So, I looked at a little bit in my material that might enhance the discussion today. So just please allow me just to show you a few slides that I found interesting to share.

First of all, as a branding scholar, I always tell my students that everything can be branded. And you know, we always think of many products but also services, obviously. But then it goes to ideas. You can brand an idea like Earth Hour, for instance, when in March people turned off the lights to save energy and create awareness about this. So, an idea not even something tangible can be branded.

And nations, of course. What comes to your mind when you think about Australia? And my students usually say Kangaroos and Ayers Rock and you name it, maybe a Sydney Opera house. There is some interesting work from scholars on nation branding. And when we look at the definition of what a brand is, you know the American Marketing Association has a very technical brand, and it's to identify goods or services. But we just learned that countries or nations can be branded.

Overall, I think branding is a very individual concept. So, it happens in the minds of consumers or people or our thoughts. So, when I say to you what comes to mind when you think about Australia, you will think about, you know, common points of interest such as kangaroos or the Sunshine or the Sydney Opera House. But some of you have experiences, you have been there and some of you would never like to go because it's too far. So, it's a very individual concept when you really think about it. Now the topic is nation branding and I think an interesting nation where companies invest and where we, from a Western perspective, think of is the United States.

And there is some really interesting work on nation branding. And when you think about the brand America, this is what Leavitt came up with. And you can see it's a very complex construction. This is a so-called brand molecule. And I don't know if you can really read everything, but it's

made up of many cultural symbols like fast food, Coca-Cola, McDonald's, but also, you know, the Hollywood scene like Rambo movies. You can look at the Pentagon if you'll just take a scroll around this brand molecule. Many things come to mind, and you know, some of you will identify things. Some of you will not have thought about this. When I ask my students to what comes to their mind one day when they hear the word America. You know, we try to match what is been listed here in this brand molecule. And this is a dynamic process. And you can do this for every product brand, but you can do this, obviously, as you can see also for countries. So, when we think about FDI and when we think about America, you know, you might have individual thoughts about this, but nothing really hinders us to invest in America, it's a big market, it's very common.

Many Western companies have subsidiaries there, lots of foreign direct investment. Like I said, I'm not an FDI expert. But when you think about another country, and I will just show you this slide here now that I just put together just for illustration: China. Probably nothing is more toxic than investing in China right now because in the popular press, we hear so much about, you know, decoupling, de-risking. Yet I just chose the example of BASF, the German chemistry giant. They have just recently this year done or invested their biggest investment in China. And I think it's worth 11 billion. And it's not only the company's biggest investment in China, direct investment, it's the biggest investment a company has ever made in China, in history. So, amongst the, let's say, discussion of foreign direct investment and country branding, a country that has probably the least attractiveness and has probably the weakest brand from a Western perspective in foreign direct investment is China yet.

And as you can see, I just copied in a recent article from the New York Times, the US is trying to, you know, convince us to no longer invest in China, and German companies in particular are doing that more and more. And why? Because they need to, I think. Because they see investment opportunities, but also market opportunities and also a way to compensate the lack of return on investment in Germany and also, you know, shrinking markets, etc.

So, it's a very complex discussion. And I think the brand, and this is coming from a branding scholar like me, the brand plays a very small role in this, in this decision making. At least that's my hypothesis. And to start out this discussion and I'm curious what by what the other panelists are thinking about this. So branding is okay and foreign direct investment, I don't see that much of a correlation.

Thank you.

### **Emin Akcaoglu:**

Thank you very much. It has been a great introduction to the discussion. It seems that we agree with you in the field of foreign direct investment study, the field for the last couple of decades. And my impression is also in line like

yours. Yes, an issue could be important, but when companies are investing in certain countries, not because of the branding aspects of that nation, but rather some other things. But, of course, we have got some other experts in our panel. They have expertise in various areas. Now, I'll just invite another expert with the expertise in political inspections and some other areas is done. Therefore, the floor is yours.

### **Alfredo Jimenez:**

Good morning everyone, thank you for those of you who are coming today to this panel. I feel like I'm perhaps the opposite of our colleague. I'm not the brand or marketing professor in my area of expertise, it's definitely not that. I've done all my career basically studying factors that attract FDI. And I've studied many, many countries' cases. I was talking yesterday with someone, and I was saying I study a lot of topics, but always with an underlying logic that all these topics affect companies by creating uncertainty or troubles and how firms react to them.

So, to be honest, I haven't studied any country image affects directly FDI. Intuitively, I would say it can play a moderate role in reducing all these factors that are mentioned now to create trouble for companies. But it is sort of more into brand say not that much, not to me. It's an empirical question that seems very more often studied.

Companies when they invest abroad, of course, are risk averse. Going abroad is always problematic. Going abroad means entering an environment that you don't know, and there are so many factors that can go wrong beyond even the pure business activities. I've studied political race, corruption, terrorism. Yesterday I was talking about populism, distance in many ways: Cultural distance, religious distance, language distance within a country diversity context. There are many things I can relate to showing that attracted or unattracted FDI. But I would say that when a country has a good country image abroad, those factors might play a lesser role.

Yesterday I was talking with the other keynote speaker about precisely being in a world in which populism is increasing. Perhaps a good country image can reduce that threat. Of course, it's not going to completely eliminate those threats if the country is suffering from, let's say, a high terrorism risk. Just because you use the opposite brand of a country that's not going to eliminate the imminent threat that is going on right now. But I think you can be a moderating roll into dimension of this practice. While I was reflecting, I was I was told not to prepare slides, so I didn't thank you for quickly. So that's really slight. But I didn't prepare because I was told it's going to be more informal. But when I was reflecting about the question, what came to my mind is a TED-Talk that I use in my classes. It's called "Don't Ask Me Where I'm from, Ask Me Where I'm a local" and I use it in the class of business or cross-cultural management, showing how for some people, maybe not for everyone. But for some

people, their nationality, they don't really feel they are just that it's a lady who is a writer and she said that when she's on tour she's always introduced first with her nationality and it's problematic. She has four nationalities. She grew up somewhere, then stays then married somewhere in Italy. So, she has four nationalities. And whenever this is introduced on tour, they always start with: Selassie, that's her name, comes from what she said. But when I hear that, I don't think I'm that. And I link it to that talk because she's in the beginning of the video, she's explaining this difference between identity and locality versus nationality. Someone can have a nationality, but they grew up somewhere, the formative experience is somewhere, etc. But then there is a point and here is the link to the question. Then, after explaining the difference between identity, locality and nationality, then there is a point which says: then why is it that every introduction of two starts with the reference to nation and therefore makes it break like this uncomfortable silences that even students who are not paying too much attention, suddenly they wake up and stop and think what's going on because her tone and the force she makes there catches the attention and then she continues.

Here is one of the countries even with this tone and these slower words, call the attention of the audience. And then she says, when we hear someone from Canada, US, Germany, Japan, more power. Sri Lanka, Bangladesh is less power. She continued with a few more examples and say something like: It could be that we ask where someone is from because without realizing we play like a power game, assigning qualities or characteristics to the person based on where she is from, and it's true.

There are many studies even showing that professional recruiters don't evaluate the same CV equally, despite when they see the same CV just with a different nationality, they don't go into the CV exactly the same. And what I ask my students to do is to think how firms can overestimate or underestimate their relationships with all stakeholders. But I ask them to think how that can happen with every stakeholder. How firms can overestimate of suppliers, the quality of their product just because they come from somewhere. Or underestimate just because they come from somewhere. And beyond that, the power of governments, the power of NGOs, the power of customers, how likely it is that they are going to pay or not pay. So, I don't think country events matter because we subconsciously assign qualities to countries when we hear them. I'm not saying again, the impact is necessarily very large. I'm not saying it will eliminate all those threats from the environment I mentioned before, but I think humans, we unconsciously assign qualities, and I don't mean either countries with a good brand image. I don't think it's unethical or wrong that they build on their good image to attract investment. It's totally fine.

The lesson here is for those countries with the not so good image that they should try to improve their image. Because I think the relationship with all the stakeholders are

affected by what we perceive from the country. It's a very interesting problem. If you teach the cross-cultural management, take a look because the character, the legs, maybe even the tone, the words, she's quite a character. Anything else I wanted to say? No, for the moment that's it.

### **Emin Akcaoglu:**

Thank you very much. Yes, interesting points. And those will be very useful at the discussion stage, though, in the program. Mr. Treumann is the third panellist, by taking his permission, I would like to invite another academic. Do you know why? Because Mr. Treumann is the practitioner. And therefore, his insights from the practical perspective would be very interesting.

And now, professor Musa Pinar will speak. He is an academic with a special interest in the field of branding for the last seven years. Therefore, I would also particularly ask him to explain us how a good nation brand could be built? Then I would kindly ask you to explain how the good German nation brand has been built. The floor is yours.

### **Musa Pinar:**

Good morning, everyone. My name is Musa Pinar. Thank you for including me in this panel. I thought I would be lost, but now I feel prepared. My name is Musa Pinar, and I have been working in the branding area for the last seven years. I am also a marketing professor at Valparaiso University in Indiana, USA. Branding has become a powerful concept and strategic tool for companies. Numerous articles emphasize the importance of branding for all firms and organizations, including countries. I believe that everything is a brand; it's just a matter of whether it is a good brand or a lousy one. Does your brand have the power to attract? Let's start by discussing the power of a brand.

I was going to say this last, but I'll mention it now. There is an expression about marketing and branding: "Marketing is like asking someone for a date, and branding is getting the date." This means that many people can ask for a date, but only a strong brand can get the date. Similarly, many companies can compete for customers' business, but only the strong ones can win them over. Now, let's talk about the potential role of a strong nation brand in attracting foreign direct investment (FDI). Similarly, many countries actively seek companies to invest in their territories as FDI's. This is essentially marketing the country. However, a country with a strong brand has the power to attract and secure investments, indicating the potential impact of a strong nation brand on FDI attraction.

There are several important aspects to understand when it comes to creating a strong brand. First and foremost, it's crucial to recognize that brands are not created in factories or stores; rather, they are formed in the minds of consumers. Brands are shaped through impactful experiences with the

brand, which in turn creates specific associations in consumers' minds. These brand associations can be seen as interconnected "nodes" within the consumer's mind. They play a role in aiding consumers in recalling and recognizing the brand, contributing to brand awareness, which holds importance in the purchase decision-making process.

Several studies have been conducted on nation branding, including one that focused on China as a brand. This study examined dimensions such as brand awareness, perceived quality, brand associations, and brand loyalty within the context of the Chinese Nation brand. Brand awareness is a particularly significant and powerful factor in creating any brand, often referred to as "mind share." When a customer thinks of a particular product category, a brand with strong mindshare that occupies the top position in that category has a higher likelihood of being chosen for purchase. In summary, understanding the creation of strong brand associations and brand awareness is crucial in building a successful brand. These factors impact consumer perceptions and purchasing decisions, ultimately contributing to the brand's overall strength and its ability to stand out in its product category.

Similarly, a country with strong brand awareness, or mindshare, will be the first to come to mind in the global market. This is often industry-specific, where certain countries are well-known for specific industries and have top-of-mind associations with positive brand attributes. For instance, Japan is often associated with electronics, Germany with automotive and machinery, and Italy with fashion. These associations contribute to the brand image of these countries. In this regard, creating brand awareness or mindshare and establishing brand associations is the initial step in nation branding. For countries seeking to attract foreign direct investment (FDI), it is crucial to generate brand awareness and be top-of-mind with desirable brand associations that appeal to potential investors. However, it would be a mistake to solely rely on advertising and external promotion, as this is only part of external branding. It is equally important to communicate what the country promises to deliver as a top FDI destination.

However, the creation of a nation brand goes beyond mere advertising. It requires delivering on the brand promise and creating an experiential connection. Until businesses and investors have firsthand experiences that validate the brand promise, a true nation brand cannot be established. Therefore, it is essential to understand the process of building a nation brand. A country can claim to offer various advantages, but it can only become a strong nation brand when businesses and investors go there and experience the fulfillment of the brand promise. It is through these experiences that the foundation of a nation brand is built, creating a positive reputation, and attracting further investment.

There is no doubt that a nation with a strong brand image and reputation possesses a significant advantage. The nation

brand serves as a master brand for the country's various sub-brands. As a result, the nation with a strong brand positively influences the sub-brands within the country, enabling them to become strong brands in global markets and attract foreign direct investment (FDI) to the country. Germany provides an excellent example of a nation brand that benefits its major industries, such as automotive technology. Brands like Mercedes Benz, BMW, and Audi leverage the strong brand image and associations associated with German automobiles and machinery. The positive reputation and perception of Germany as a nation brand contribute to the success and competitiveness of these sub-brands in global markets.

It is crucial to understand that these associations are indeed linked to the nations themselves. The nation brand serves as a foundation, shaping perceptions and associations with the sub-brands. Similarly, regional associations can also play a significant role. For instance, the European Union (EU) serves as a master or umbrella brand for its member nations. In summary, a strong nation brand acts as a master brand, benefiting the sub-brands within the country. The associations related to the nation brand positively contribute to the success and market competitiveness of the sub-brands, fostering their growth and attracting FDI. Likewise, regional associations, such as the EU, can have a similar effect on member nations and their sub-brands.

When considering branding, there are three crucial concepts that require a thorough understanding: differentiation, relevance, and attainability of credibility, which is trust. A country must offer something distinct from competing nations, and it should also be relevant to the specific needs of direct investors. Moreover, it is essential that the country can actually deliver on its promises. These three concepts can be visually represented using a Venn diagram. The diagram suggests that a strong brand is created when these three concepts overlap or intersect. Without this overlap, establishing a strong brand, including a nation brand, becomes challenging.

For instance, a brand can be different and relevant, but if it lacks credibility, it becomes an empty promise. On the other hand, a brand can be relevant and credible, but not different, which relegates it to the status of a commodity. Another possibility is when a brand is different and credible, but lacks relevance, leading to its classification as a niche brand. Therefore, for a nation to become a strong brand that attracts foreign direct investment (FDI), it must possess the qualities of being different, relevant, and credible to FD investors. In summary, differentiation, relevance, and attainability of credibility are vital components of branding. By ensuring the intersection of these concepts, a strong brand, including a nation brand, can be established. This is particularly important for countries aiming to attract FDI, as they must demonstrate a unique value proposition that is relevant to investors and instills trust in their capabilities.

In addition to these concepts, there are two other important concepts for nation branding and attracting FDI:

Point of Parity (POP) and Point of Difference (POD). POP indicates that when a nation aims to attract foreign investment (FDI), it must first be considered by investors based on their decision criteria. This suggests that nations need to have similar attractions or brand associations as major competing nations to be considered. For example, if Turkey introduces a new electric car, it must compete for consideration in the US or Germany. If it fails to enter the consideration set of potential car buyers, it has zero chance of being selected. Thus, the Turkish electric car must strive to be considered by potential buyers. While POP allows the brand (in this case, a nation) to enter the buyer's consideration set, it is not sufficient for selection. This is where POD comes into play. To be selected for FDI, the nation must offer something different, unique, and relevant to the buyer's needs. In the context of attracting FDI, a nation must provide what investors are seeking, positioning itself in the consideration set with POP. However, to be selected, the nation must offer a distinct and unique value proposition (POD) that sets it apart from others. It's important to note that both POP and POD are influenced by brand associations related to the nation, including factors such as political risk, legal issues, geopolitical factors, and others. All brand associations associated with the nation must be identified and understood in the development of POP and POD, as they are essential for creating a strong nation brand.

The nation's brand associations or factors can be effectively analyzed with a brand ecosystem framework. The nation's brand ecosystem encompasses all interconnected factors and associations. Like an ecological system, any change in one factor can trigger a domino effect, leading to changes throughout the entire ecosystem. For instance, in Southern France, when mosquitoes were eliminated in a tourism region, it caused unexpected problems because mosquitoes play a role in maintaining balance within the ecological system. Therefore, it is essential to view a nation as a complex ecosystem comprising various interconnected factors, where a change in one factor can influence others and ultimately impact the entire system.

As an example, a Japanese company considering an investment in the US once evaluated the Chicago area but ultimately decided against it. The reason behind this decision was the perceived weakness of the local education system, which indicated a lack of qualified talent from an ecosystem perspective. This highlights the importance for nations aspiring to create a strong brand to adopt a holistic approach using a brand ecosystem framework. This approach encourages nations to examine all relevant factors and their interrelationships when formulating their brand promise, ensuring its deliverability. As mentioned earlier, this necessitates a comprehensive examination of all associations. In short, adopting a brand ecosystem framework allows nations to evaluate their brand associations and factors holistically. By considering the interconnectedness of these factors, nations can make

informed decisions regarding their brand promise, ensuring a coherent and deliverable positioning.

The brand associations included in the brand ecosystem framework can be utilized to develop scale measures for analyzing nation branding. These measures can encompass factors such as political and legal considerations, economic development, technological advancements, cultural factors, as well as dimensions of brand equity like brand awareness, perceived quality, brand associations, brand loyalty, and perceived trust. While all these factors are important for creating a strong nation brand, empirical research is necessary to understand the impact of each factor on nation branding. Additionally, since the essence of branding lies in consistently keeping the promise, nations must comprehend the relevant influence of branding factors in consistently delivering the brand promise. For instance, while brand awareness is crucial for gaining consideration, perceived quality plays a vital role in delivering the brand promise. This suggests that nations known for high-quality products have an advantage in the global market. Germany, for example, is renowned for its high-quality automotive and machinery industries, consistently delivering on the brand promise in these sectors. Italy excels in fashion, while France is celebrated for its wine. These examples highlight the significance of quality for creating nation branding, which contributes to the creation of a nation brand image and reputation in the global market.

Furthermore, considering that nation branding serves as an umbrella or master brand for national brands, nations should strive to build a robust nation brand and protect their brands, as this plays a crucial role in attracting FDI. For instance, when Volkswagen encountered problems several years ago, Germany was concerned not only about Volkswagen itself but also about the image and reputation of Germany's automotive and machinery industry. This is because it has a significant impact on Germany's nation brand. This suggests that the brand associations within the brand ecosystem framework can be used to develop measures for analyzing nation branding. Empirical research is necessary to understand the impact of each factor on nation branding, while consistently delivering the brand promise is of utmost importance. Quality plays a pivotal role in nation branding, and nations should prioritize building a strong nation brand and safeguarding their brands to attract FDI effectively.

Finally, to create a strong brand, it is crucial that brand associations possess three important characteristics: they must be favorable (desirable and deliverable), strong (relevant and consistent), and unique. Favorable associations imply that they are both desirable and can be delivered upon. Strong associations are relevant to the brand and remain consistent over time. Lastly, associations should be unique, setting the brand apart from competitors. These characteristics highlight the challenges nations face in establishing a strong brand to compete in the global market

and attract foreign direct investment (FDI). A study was conducted to examine China's reputation in the USA, utilizing brand equity dimensions such as brand awareness, perceived quality, brand reputation, and brand loyalty. The findings regarding China's Country Brand Equity (CBE) dimensions revealed that Country Brand Perceived had the highest measure related to CBE, followed by Country Brand Loyalty, Country Brand Reputation, and Country Brand Awareness. This empirical study emphasizes the importance of perceived quality of a country, as it is essential in delivering the brand promise. If a nation fails to deliver on its brand promise, it will have no opportunity, like any brand, to become a strong brand that attracts customers, including FDI.

The recent nation brand index for 2022, encompassing 60 nations, indicates the ranking of global nation brands. Germany, Japan, Canada, Italy, France, and the UK emerged as the top-ranked nation brands, while Palestine, Kosovo, Russia, South Africa, and Tanzania were positioned at the bottom of the ranking. These branding rankings imply that top-ranked nations have a competitive advantage in attracting investors compared to lower-ranked countries.

In conclusion, branding concepts and nation branding initiatives indicate that nations with a strong brand and brand image have a better chance of attracting desired FDI. Therefore, nations should develop strategies to become strong brands to effectively compete for FDI. Thank you.

### **Emin Akcaoglu:**

Thank you very much indeed. Okay, so now I would be so pleased to invite you to join because I'm sure you've got many things to say from the prospective investors as well as from the perspective of the country which is trying to attract investors.

### **Kurt Treumann:**

Thank you. Thank you for giving me this audience. And actually, I'm not an expert in marketing and branding and all that. I'm just the user of our branding, the branding of Germany and the branding as well of the Federal State of Bavaria. Especially this is quite interesting because the branding of Bavaria stands sometimes for the branding of Germany as well if you are abroad. So, all this heritage of Bavaria, the lifestyle is connected. It's very positive. Think about the touristic sides of Germany, the Castle of Neuschwanstein, Oktoberfest, the leather trousers ("Lederhosen") for example, which stand for strong power and the history of Bavaria.

Germany has a strong brand of ideas, for example, which can come into play in the connection with our sport activities and very open country, democracy for example. Also, very important to attract foreign investors here in Germany is that we give a sure framework where they can

invest. This is a present or this was the past because I wanted to divide my speech a little bit because I'm also thinking about the future.

So first of all, present and past. Our economy was and is quite strong. We are always connected with, for example, BMW, such big brands. I was two weeks ago in San Francisco on a trade fair, and wherever I went, BMW came into play. Very good cars, reliable, high quality, and all that. But on the other hand the future comes into play. When we hired an Uber taxi, all the people which were with me, they got big eyes when a Tesla came. Electric mobility is a way in future. And the future is not a car with lots of quality and high engineering, a car is something more. It's a technical thing connected with all these devices around. And so, we must take a look into the future. We should not find ourselves behind the others. So, I know that all the Chinese brands like BYD, for example, NIO, all these company brands, they come into Germany very strong.

Chinese cars - I know they are not her the biggest brands, but they come into play with also quality and a lower price range. It is on thing to design a country's branding with the help of a clever marketing agency. To life authentically the brand is very important. We should be like the brand. And I need to tell you. For example, the state of Germany or the Federal State of Bavaria... they must provide a good framework for the for the economy to work properly. And in some cases, I experience something else. For example, if a foreign investor comes to Germany in order to invest here, there is the need of employees. Sometimes this takes one year to get, for example, an expert in the IT, out of the IT branch to Germany waiting for the interview several months, maybe 4 or 5 months, just waiting for the interview in the Embassy in India, then it's not done. Then some paperwork is going to Germany, waiting for acceptance. Then it's not done. It must get back to India again, to the German Embassy. And this really takes tremendous time. And sometimes the companies cannot wait so long because the have to go on their projects. And this is just an exaple to show you that it's very important not just to create a brand on its own. We here must be less bureaucratic. For example, we must be faster in decisions. Think about Tesla, coming to a place to invest lots of money and to give some people work. We must be faster in our decisions. This is also what I want to say what is very important for the future.

We have a good branding and I'm always connected when I'm out on the trade fair, for example, with all these positive things like lifestyle, reliability, high quality... Because this is our mentality, and we have good products. But you must really taste with the others. Yesterday I told you in my speech that we maybe will get crushed a bit between the blocks of the U.S. and Asia or China. So, we must be very careful. I don't mean that we are a victim, but we should gather in speed. And because of the reason that we are poor in having own raw materials we just have our brain



in Germany. And this we should use and gather in speed with the others.

**Emin Akcaoglu:**

Thank you very much indeed. So far, so good. So, I please invite all the panelists and now we can just Google it and then we can start to get the questions from the audience. Then we can also ask questions later. So, we have got four panelists. Yeah. Yeah, please, Diederich, because I think you are also with us.

**Diederich Bakker:**

Yes.

**Emin Akcaoglu:**

Yes, great. So, I wonder if the audience would like to raise some questions? Yes, please.

**John A. Parnell:**

Thanks. It is an interesting discussion. It seems that when we think about branding and regions, that there could be regions and subregions. So, you think about Germany, for example, what it does well, then you think about Bavaria within Germany, or you can think about Europe broadly. In the States there are perceptions. About Asia, say manufacturing locales. And then you have settlements about Europe and other parts. So how does that how is that a factor if you consider what level we're talking about, country versus continent versus region versus even a smaller area of the country. So, and I'll just follow up by saying in Germany, you know, where VW and BMW are located or in America, we just see. So, we don't see that. How much is that within?

**Emin Akcaoglu:**

So, would you like to ask this to a specific panelist?

**Kurt Treumann:**

Yes. I think yes. I really, totally agree that we should find an answer inside the union that we are a little bit connected to each other, that we have, that we transport a picture internationally. I think this is really much missing. What we did already is in the past, we had to say again inside this Brexit affair. We had all the other states inside the European Union strong. We had one vote, we had one speech, and we said, okay, we are standing together. This was very good actually for the European Union. But this is not a real problem connected with a European brand. We are very diverse. I think inside the European Union, for example, Romania and then for example, Norway, Italy; we are very much different. You mentioned already all the states stand

for something different: Fashion industry, especially Italy or France, for example. And we are here in Germany, for example, the strong with the small and medium sized companies. So, this is also different. But we must find something which puts us together because on our own as a state of Germany itself, we are not powerful to be nothing between this. I told you yesterday these blocs black and white, and we are crushed between. So, I agree we must find. And so, we must actually find something which shows a positive view of the European Union. Because it's not enough that I am connecting Germany with the BMW or Oktoberfest or something like that, which is positive. But I'm also European and European citizenship and this should also be connected inside the schools and universities. But people, when they are in business with the crowds, maybe they reply to us from Europe that this should be also now online. This is also a branding because it doesn't matter anymore. Lots of people, when they finish university, they go out somewhere else to work and they are they are not any more one hundred percent German. They are maybe also a little bit Italian.

**Diederich Bakker:**

Not just the question. It was interesting from the audience and just I just reflect on the relevance of branding. And of course, yes, Germany has a positive connotation. You know, Lederhosen, Neuschwanstein, Oktoberfest, ... I think it has no; it has hardly any impact on really FDI decisions, you know, labor market, land...

You know, where Tesla put up its Gigafactory. Somewhere close to Berlin. Why is Intel planning? I think 100 billion investments in a chip factory in Magdeburg in Germany, in East Germany. I think they're getting 10 billion in subsidies from the German government. Those are the factors that really have an impact. And they are now contemplating whether or not they should ask for more something in the area of 20 billion taxpayers' money. Why? Because it's getting more expensive to build that plant because of the reasons we all are aware of.

So, one concept may be in branding is decision making and risk taking. I think we heard that today as well. You know, what are the risks involved in taking decisions? And here I see a correlation between financial and psychological risk.

The financial risk is by far more leading than any psychological factors like country image. Volkswagen, I think, has issues with the plant in Shenyang in China now because they are talking about forced labor of the Uyghur minority there. And that decision, having that plan there and continue it to run is more complex on the Volkswagen brand actually, because, you know, consumers might think, do I really want a car that was built with forced labor in the Xinjiang region? So here I see real, you know, areas of concern, but not in the initial direction to make that investment or not. Okay. Thanks.

**Emin Akcaoglu:**

Thanks a lot. Yes. Do we have any other panelists willing to contribute on this particular point?

**Musa Pinar:**

I think the EU is becoming in a bigger region. But I think within the EU there are different regions that are known for certain brand image that they can deliver different things and different ways. But the EU will be forcing in some ways is the direct or indirect some way and saying that you better maintain that quality because whatever happens in the EU region. It has an impact on EU brand image. Therefore, they need the outsider looking at the EU will maintain their standards, quality checks and therefore they want to make sure that they do whatever in the region that they have brand will deliver that sending the US in different regions have different things own. But they are maintaining because nation brand is at the end sum of all different activities, different things that get coming up and making that up.

So, I think EU quality perception is providing some support for the regions as they join. They may say, "Hey, you've got to do this, otherwise we will not support that". So, the region will be competing in my mind, like the NAFTA versus the EU versus other regions. If they can get their act together and maintain the region's brand image. So, in the EU, I think I would say I'll see different regions and maintaining their quality standards deliver the promise which adds to EU brand. Otherwise, like Volkswagen, workers are back and said, "Well, what happened in China will have an impact". And I think Volkswagen is worried about the damaging, that lower quality image not only in China. So, when you are attracting foreign investment, companies are thinking five or ten times. If that's any kind of negative thing, it will impact upon my overall image in today's digital world. When you see this in China, we hear there, therefore companies are really, really great brands. Now people will buy things like Nike has no factories, but they want to make sure that everything is done proper. I talked to one country textile owner and factory manager. He said, Champion comes here, Nike comes to checks everything, including child labor or the pollution, everything they check. And so, they are protecting that and forcing those companies are factories to be up to standard. But I don't think has a question. But region wise, I think that the regions are understanding the value of the brand as a region, which adds to all the companies' other areas there.

**John A. Parnell:**

So just one follow up. Interesting. One of the other comment that during the blogging crisis, both I was concerned about the company that Germany is concerned about. Germany, right?

**Musa Pinar:**

Correct.

**John A. Parnell:**

Well, I remember coming into space and specifically discussed and the direct reference that the EU was concerned about how this would reflect on the EU quality and the regulatory regime. So, you have the company level, nation level trading bloc, all these different layers that come into play that are likely to influence the industry.

**Kurt Treumann:**

In the end it is a mixture. The brand is transporting something and in the positive thing is brand very positive and helps industry must work inside a framework of policy is helping the economy. It's a good framework and of course reliable companies. That's important.

**Musa Pinar:**

They don't ever say the EU will not allow, and I guess in the US they say because it will impact on that. And we don't want to have any doubt in the mind that brand may not deliver the products because then it's delivering the promise better than competition. So, this is a big part of the branding and again, it takes a long time to build that and easy to destroy it.

**Emin Akcaoglu:**

Yeah, sure.

**Musa Pinar:**

Let me give you an example from Turkey. Investors think that changes in policies are not predictable. Therefore, nobody prefers investing. But actually Turkey is a great place to invest because Gateway all the places. But guys change their mind overnight and then how investors can go there and spend billions of dollars. It's a reality. That's why they brought a minister from London with the expectation that hopefully he will convince them. To basically say that I very much agree with everything I've said.

**Alfredo Jimenez:**

I think the question is very pertinent because we talk a lot about country in research. There are so many parts of our country, but then country is not everything. The supranational regions matter a lot. But the regional differences not that I think is dividing the main concerns. Firms capitalize on regional differences. I remember especially in countries that are decentralized like Spain.

Many multinationals negotiate with multiple regions within the country at the same time trying to get preferential treatment. Very well-known case about the casino or whether it's going to be reopened in Catalonia or Madrid. And the two regional governments are fighting like crazy in the area wasn't built. But let me just illustrate how the regional competition attract the FDI might matter, perhaps more than the government.

### **Emin Akcaoglu:**

Yeah. Thank you.

### **Musa Pinar:**

I would add one more thing. Yesterday there was a presentation on some populist activities in the public sector to attract sector support domestically. It may cause outside damage, and I think they even suggested that it should be looked at the possibility of the behaviors that are aimed domestically or international. They are to get a support in a domestic way. But as time goes on, I'm not going to come there to invest. So, the people's activities will have an intense impact on a nation branding depending on either positive or negative; internal or external. I think that will be something that Trump calls issues. I mean, the US, you know, "let's make US great again".

### **Kurt Treumann:**

Because this is quite interesting actually. Just reflect on how VW, it is of course the German brand, but on the other way, it's global. Yeah, it's a global manufacturer. It's producing both in the US, but it's also producing in China. And what he said and what happens there. It's also in the end, even if this is a job in China, it has an impact on Germany. That's also important. So we have lots of companies worldwide acting. This could also threaten our reputation or image in a positive way. We could transport our efforts to transportation.

### **Musa Pinar:**

Similar to that, I remember when Toyota had a problem within the US, the Congress called Toyota's top people and they started questioning them. Now they were questioning what happened in the US. But also, it was a questioning the Japanese car manufacturing industry's image. So, things are very interconnected, and companies have a zero chance of screwing up, making the same.

### **Emin Akcaoglu:**

Do we have any other questions? Well, the audience. Yes. Please.

### **Björn Baltzer:**

I have a question. Collecting works as a package that is no longer there and would use that because Mr. Pinar said it's a brand about brand management. Now, you said, and I fully agree, that you need to deliver on the promise. And here I see a big difference between the typical company brand and a nation brand, because if you look at the organization, the company, those who promise are the ones who have to deliver. When you look at the nation brand, however, those who promise would be the nation are not the same that deliver. Because if Germany is building up or Bavaria is building of a mind for whatever is building up, it will be the company and the people that deliver. So, my question will be an open question: How can you coordinate that? So, because if you just, they try to build up the brand, but others don't deliver on your promise you're just spending money.

### **Musa Pinar:**

Well for a company, I mean, branding process is saying you make a promise, deliver exceptional experience. Now, nations that are companies and nations in the countries that they are making a promise. The companies that to the administration managing the country, they shall make sure that that company delivers a promise outside the country. And they should give our support, guidance or make sure that the company X, Y, Z delivers the promise. And it should be a government's job to make sure help them, guide them and deliver the promise because the nation will have some promises for direct investment, but make sure that they try to provide the promise.

But also, the way those companies are exporting, selling outside that will be also nation branded, just like Japanese cars came to us and then they deliver it. Of course, when you are delivering the promise, they expect a promise and surprise. And I'd say in Chinese yin yang expect an unexpected. And brands are greeted with unexpected promises by Japanese power train. People bought it for fuel efficiency, but it was just a great car. Wow that's awesome car. So did the same thing. What the nation's whatever you are promising.

But remember nation will be branded outside the country when they are exporting their products. There should be a desire for exports outside, just like the German car. German thing is, there's a demand for that because the car delivery and then country Germany makes sure that those trams are delivered. So, the attack is, as we said, it's a promise issue of delivery consistently with exceptional service, exceptional experience. But the company do well in the country. That will add up to nation branding, which is the sum of all the promises delivering plus country's promise delivered for foreign direct investment. In Turkey, I don't know why. It was kind of surprising. There were building and shelling. I don't know what happened. Then they closed

because one guy came at him right now in a place that. So, it is a matter of delivering a promise. What the experience the brands are built with experience area and consistently not one time.

**Emin Akcaoglu:**

Thank you. Kurt, would you like to add something?

**Kurt Treumann:**

I think what you mentioned is all right. And there is coming one psychological moment as well. And the feeling for example, when the football championship was in Germany, we opened up our country. You showed us ourselves very open. I think this is also important just for the transportation in the end. So, I said, you must understand this framework and everything must become reliable, and this is important. There is a connection with history and heritage, with the present and the coming future. He must be lit up every day as a stay because give you all your state ready. It's not easy just to control it, what the company is doing.

**Emin Akcaoglu:**

Thank you.

**Alfredo Jimenez:**

Doesn't it sound the point of the question? Because, of course, within the company everything is more internalized and hierarchically structured. And when the CEO makes a promise, then probably has more control over what's going on in the company than when it comes to both of them. State promises something. So, although it's not exactly the same, there are some commonalities, I think, because still, if the top management team makes promises, whether or not the workers will be motivated and work well or not. To some extent it's beyond their control.

Whereas in the country, maybe we are focusing too much on the quality of the products of the country. But the brand of the country is not just the product; it is also the infrastructure, for example, the educational level. And that is under the control of the teachers, whether or not you invest, etc.

But I understand it is true that politicians to some extent rely on the rest of stakeholders of the country working in that direction and without that much control. Unlike the government, a company is much more under the control of the top management, so it's probably harder to manage for country.

**Emin Akcaoglu:**

Thank you very much indeed. If we do not have any debt...

**Heiko Fisher:**

I suppose raise a question about Industrial brands and national brands. And so, we did not mention long term education and secondary education. So how the state organizations, I guess in my opinion, if you educate the younger generation very early, they will promise otherwise you would probably not mention the industrial brands, promised in the donation. So, what do we which role is the organization and education.

**Alfredo Jimenez:**

I mentioned infrastructure investment. But in my mind, I also have education.

**Emin Akcaoglu:**

In a part of it. So, any thoughts?

**Musa Pinar:**

Education is the key. Delivering products if we don't have educated people in our country. When you attract a direct investment, if people cannot produce that, what do you do? Because I mean, in a different level, I heard at a conference in India, the gentleman from Hong Kong said the nation's wealth is created at schools, not at factories, because if we don't have an educated workforce, you cannot create a wealth. No.

Can you create a brand? So, you've got to have the education. Very fundamental. Very important. I mean, I also I haven't thought about it, but it was really clear message. Nation's wealth is created through education in schools. So, if you don't have an educated workforce, you cannot attract that. I told you that the giant Japanese company didn't like China because they didn't think there was enough educated people education that was not good enough to hire people. They didn't want to bring someone in from New York or L.A. or Mississippi, Texas. They want to have local things. So again, brand issue is a brand ecosystem, looking at all the factors that one change into one impact everything else and especially political risk. You know, kind of your area. Political risk means trust attainable to deliver everything. You better be the transparent and predictable. This is a problem with a terrific pacing coordination branding. But that's the reality, it is not predictable. So, education is a very essential part of creating a workforce that will deliver at the end.

**Kurt Treumann:**

Maybe very good example, the infrastructure. Just to make it clear as an example. For example, you are a foreign investor travelling inside Germany, you go inside an ICE train, receive a very important telephone call. And just once

in a while it's interrupted because we have no connection anymore. This is a proxy for the land of ideas of Germany. I don't know, something like that. It's a connection between lots of factors. The bracket, one thing. The other thing is just to work on it to make it better, the conditions to make it better as a business. The ICE thanks you all for travelling with the Deutsche Bahn. This is one good example and in the end for example also Portugal, quite interesting. Maybe the situation of trust comes also into play when for example, a German company is investing in Portugal like, like Leica camera did already with a big factory. They said, okay, we want to invest in Portugal with a big factory because also maybe the cost of the labor is a little bit low. But on the other hand, it's not just one factor. If, for example, Portugal that wouldn't be a democracy, for example, an unstable political system, they wouldn't have invested.

### **Emin Akcaoglu:**

Thank you very much indeed. I think it's time to wrap everything up. And so, I also would like to add something because I got some views about the topic, obviously. The key words: Building a brand requires, a long way through for which we should be investing in a number of areas in the minds or perceptions of the others. All the audience, all the potential investors etc. And those key points are credibility, promise, delivery of the promises made, quality and such other things which could be combined with those. But we should not forget, first of all, one fact: Foreign direct investors are investing in foreign countries due to a number of reasons. Some companies are investing for a large market. Some companies are investing to reduce production costs. Some are looking for efficiency. Some companies are investing to have access to strategic assets such as knowledge, technology, brands, etc. Some companies are investing to have access to natural resources. So, without understanding such differences, it wouldn't be possible to discuss the importance of nation branding because some

investors do not care about the nation. They cannot care, they don't care. For instance, can we imagine such a company that is investing in the Middle East for oil drilling. Do you think that such a company aiming to have access to natural resources in a foreign host country location would care about the nation brand or country image? Personally I do not think so. So, when we are looking at such a case with another case, we should be careful. We cannot generalize.

The other thing is that in the current world, all countries are trying to attract foreign direct investment. But of course, to that end, they are running marketing campaigns. When you just turn on the TV to watch an international channel such as CNN, what you see is that an advert broadcasted by a country to attract foreign investors. Does it really affect some people or some investors. Personally I am not convinced with that. So, depending on the industry, there will be significant differences in nation branding in terms of its effects on FDI attraction.

But at the same time, we should also add that nation branding requires that the government of a particular country should invest in a number of areas. Which areas are those? The infrastructure, including the education infrastructure. Infrastructure in terms of the physical infrastructure. Infrastructure in terms of the political structure, the legal infrastructure. All of those will be absolutely important, absolutely vital. We should add something in this process. It requires time. And the other thing is that without having man-made assets, the assets that they mentioned, you cannot be successful to attract foreign direct investments. If those investors are not particularly looking for God-made assets. Such as oil or other minerals, etc., etc., or forests or water or whatever.

So, thank you very much indeed, the panelists that we've got and the audience here. And now we are concluding the conference.

The audience and the members of the panel probably are going to enjoy the weather and the city in the afternoon. Thank you very much.





