



Hellenic Open University
Master in Business Administration

Postgraduate Dissertation
Shared Service Center Research – Greece in the spotlight

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Patras, Greece, June 2021

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Shared Service Center Research – Greece in the spotlight

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Abstract

In the current business landscape which is marked by globalization, new technology and fierce competition, companies are responding to intensifying cost cutting imperatives by centralizing the activities and by moving their operations offshore.

One of the most efficient methodology for the cost reduction without affecting the quality and efficiency of a company's operations, is the reshape of the financial function by creating a Shared Service Center which has shown a rapid development during the recent years. Organizations have been implementing Shared Services Centers since the mid-1980s because of its strategic value in reducing the cost base, improving controls and enhancing service levels.

In order to fully exploit the potentials of an SSC, an organization should conduct a location assessment, since the selection of the location is a strategic decision that should be carefully examined in terms of key attributes such as cost effectiveness, talent pool, infrastructure and the capabilities of the general business environment to support shared service operations. These key elements should be considered in a detailed business case analysis and comparison between the desired locations.

Keywords

Shared Service Center, Location analysis, Location Determinants, Cost reduction, Finance reorganization, Invest in Greece, Factor Analysis, Factors rating, SSC CEE countries

Έρευνα για Κέντρα Κοινών Υπηρεσιών – Η Ελλάδα στο επίκεντρο του ενδιαφέροντος

Αντώνιος Γαγγάδης

Περίληψη

Στο σημερινό επιχειρηματικό περιβάλλον όπου χαρακτηρίζεται από την παγκοσμιοποίηση, την ταχεία εξέλιξη της τεχνολογίας και τον έντονο ανταγωνισμό, οι εταιρείες ανταποκρίνονται στην ανάγκη μείωσης του κόστους, συγκεντρώνοντας τις δραστηριότητες και μετακινώντας τις εκτός έδρας.

Μία από τις πιο αποτελεσματικές μεθόδους για τη μείωση του κόστους χωρίς να επηρεάζεται η ποιότητα και η αποδοτικότητα των λειτουργιών μιας επιχείρησης, είναι η κεντροποίηση των οικονομικών λειτουργιών δημιουργώντας Κέντρα Κοινών Υπηρεσιών τα οποία παρουσιάζουν ταχεία εξέλιξη τα τελευταία έτη. Οι οργανισμοί εφαρμόζουν Κέντρα Κοινών Υπηρεσιών από τα μέσα της δεκαετίας του 1980 λόγω της στρατηγικής τους αξίας για τη μείωση της κόστους, τη βελτίωση των ελέγχων και την ποιότητα των υπηρεσιών.

Προκειμένου να εκμεταλλευτεί πλήρως τις δυνατότητες ενός Κέντρου Κοινών Υπηρεσιών, ένας οργανισμός θα πρέπει να αξιολογήσει την πιθανή τοποθεσία, καθώς η επιλογή της είναι μια στρατηγική απόφαση που πρέπει να ληφθεί μετά από προσεκτική αξιολόγηση των βασικών χαρακτηριστικών, συμπεριλαμβανομένης της αποδοτικότητας κόστους, της προσφοράς εργατικού δυναμικού, της υποδομής και ανάπτυξης / ευνοϊκού επιχειρηματικού περιβάλλοντος στις λειτουργίες των κοινών υπηρεσιών. Αυτά τα χαρακτηριστικά πρέπει να λαμβάνονται υπόψη στη σύγκριση επιχειρηματικών περιπτώσεων μεταξύ των προσδιορισμένων τοποθεσιών.

Λέξεις – Κλειδιά

Κέντρα Κοινών Υπηρεσιών, Ανάλυση τοποθεσίας, Μείωσης κόστους, Οικονομική αναδιοργάνωση, Επένδυση στην Ελλάδα, Ανάλυση παραμέτρων, Κατάταξη παραμέτρων, SSC CEE χώρες

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List of Abbreviations&Acronyms

SSC: Shared Service Center

FSSC: Financial Shared Service Center

CEE: Central and Eastern Europe

ERP: Enterprise Resource Planning

RPA: Robotic Process Automation

1. Introduction

In this chapter there will be an introduction to the case under investigation, defining the issue and how this research will contribute to the problem. Then, there will be an illustration of the general methodology used to reach the desired outcome stating also the fundamental parts and any limitation may arise during the research. Finally the overall dissertation structure will be presented, going through the chapters and their content.

The aim of this paper is to outline the process by which a country's investment capabilities are assessed in order to determine what are the figures that make it attractive to a potential investment in business. In the methodology part of the study, it is explained that based on the weight of the variables and the specific elements that distinguish a country as profitable or not, any investment is properly evaluated.

Then, in the results part, the final conclusions are drawn for Greece and illustrate how it reacts based on this process in terms of investment. A sensitivity analysis is conducted as well in order to show how the country reacts to the imposed changes and depending on these changes, how it is considered as a destination for investment.

1.1 Establishing a Shared Service Center

The creation of a Shared Service Center by centralizing a global company's financial operations, among various alternatives, is an efficient solution to benefit from economies of scale and significant labor costs advantages without affecting the quality of services while retaining the knowledge and control.

One of the most crucial factors to decide whether an SSC creation is the optimal solution for a company or not, is the assessment and evaluation of the location determinants where the company seeks to establish its operations. The chosen location will have a critical impact on both cost savings and the quality of the services provided. The decision of the appropriate location is a complex procedure where the country's mix of capabilities among with the company's specific niche in the global competition should be taken under consideration.

1.2 Selecting the Location – General Methodology

The strategic decision of the selection of a location for an SSC, should be made after careful evaluation and assessment of the country's key capabilities and their components including:

- Availability of qualified employees
- Labor Costs and legislation
- Proximity to core business location
- Location support infrastructure
- Co-location with other functions
- Economic Environment
- Quality of Life

The aforementioned main components have been pointed out by PriceWaterhouseCoopers research and there will be a further analysis in the related subcomponents on the chapter *"2.8.Critical Success Factors"*

(Shared Services – The Edge Over / PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft published by Michael Suska, Christiane Mänz and Christian Zitzen / January 2014)

In the current research we will focus on the below illustrated categories in order to have as more as possible justified and comparable data to analyze:

- Direct Operational Costs
- IT Hardware, software and telecommunications
- General Administration Costs (inclusive recruitment and training)
- Cost of real estate and office equipment
- Salaries and non wage benefits

After the evaluation of the key capabilities there will be a weighting and comparison of the findings between the countries under consideration, in order to choose the most beneficial place to start running the centralized financial operations. A sensitivity analysis is also important, in order to determine how the potential investment will react to the changes in each country.

1.3 Main Conclusion

Knowing that many multinational companies have already established SSCs around the world and focusing on those which are operating in Europe, there will be a comparison between the mix capabilities of the countries already chosen by large global companies to centrally operate the financial services and the mix capabilities of Greece which is a potential place of investment. From the sensitivity analysis of each factor contributing to the desired location, there will be a conclusion on which parameters to adjust in order to enhance the competitive position.

1.4 Limitations

The most challenging part of this research is related to the availability of sufficient and up to date information. Due to the lack of available information in terms of each country's level of output per each parameter, the assessment was made based on a general perception of the countries capabilities by each factor under examination. It is also not well known how the current health situation we are facing with the COVID 19 will affect the results of this research in the coming future.

1.5 Dissertation Structure – Remaining Chapters

The dissertation structure consists of five Chapters in total and in addition to the acknowledgments, references and appendices, with the first being the introduction including the main elements of this research. The second chapter includes the literature review where the broader idea of enhancing a company's competitive advantage meets the need to establish an SSC and conclude in identifying the most beneficial location. The third chapter is an illustration of the data analysis, the basis and the source of the data set and the methodology followed in order to reach the final conclusion. The fourth chapter deals with the results and the case of Greece and finally the fifth and last chapter with the basic conclusion derived from the overall research.

2. Literature Review

2.1 Introduction

The markets in which multinational companies operate is characterized by globalization, mergers, acquisitions and consolidations, requiring companies to search for efficiencies and cost reductions.(ACCA Research report No 79, p.5). In an attempt to gain competitive advantage, forward thinking companies focus on core activities and the reconfiguration of support activities, thus making the organizational structures more flexible and elastic by organizing their procedures either within or outside the group. For many years, firms preferred to use an outsourcing strategy to attain this flexibility. However during the recent years there is a shift in the organizational strategy that seeks to gain significant economic benefits and to create new competencies by exploiting the potentials of the Shared Service Centers, which act as a partly autonomous business units, consolidating supporting activities such as accounting, human resources and services to internal clients (Philipp Clemens Richter, Rolf Bruhl).

2.2 Rationale for Moving to a Shared Service Center

From the early 1990s and as companies expanded their operations beyond borders, it became highly worthless to retain various accounting activities within the country of their presence. Thus, large dispersed organizations sought to centralize basic transactional procedures such as accounts receivable, accounts payable, general accounting and payroll, by creating Shared Service Centers and recharge those services at cost to the individual business units (ACCA Research report No 79, p.5).

There was a skepticism among European Management about the cost benefit comparison when it comes to centralizing activities, caused by the thought that the overhead linked with the back office operations, is relatively low compared to the organization's total base cost. However this skepticism is insupportable, since there are significant and wide reaching opportunities for significant decrease in the company's cost base. The tangible opportunities for companies are coming from the elimination of low value added procedures like multiple authorization procedures and reconciliations. Improved efficiency and economies of scale

are gained by centralizing repeated or transaction based activities, while the processes are redrawn to exploit new technologies like Robotic Process Automation (RPA) focusing the staff's attention on providing a higher quality of service to customers. Ernst& Young Report on Services (1998) shows an average headcount efficiency of 21% and an average cost drop of 26%. Although the primary motivation is the staff cost savings, there are other important factors as well that work as a rational for a establishing a Shared Service Center and promotes the delivery of a quality service, the improved productivity and the process harmonization/standardization across operating units. Table 2.1 below illustrates the rational for moving to SSC (ACCA Research report No 79, p.18).

Table 2-1 Rationale for moving to shared services

Link accounting practices with business strategy
Eliminate non-value added activities
Back office process improvement
Centralize routine transaction processing
Process Standardization across business units
Homogenize information across sites and regions
Benefit from favorable tax schemes
Free up capital for core business operations
Improve and automate processes such as cash collections
Free staff to focus on strategic objectives
Enhance connectivity across the value chain

Source: ACCA Research report No 79, p.18

Apart from the operational savings there are also potential and considerable tax savings by using a commissionaire structure, where the sales could be recognized by a main business unit which then settles a commission to the local sales organizations. Under this scheme, a company could net off the group's profits and losses and to recognize the majority of the profits within a low tax regime. Moreover, from the increased connectivity within the organization and throughout the supply chain, the limitations in terms of talent pool and changing skill set will not considered as a deterrent to entry for both global and domestic operations.

The SSC will handle the staffing business, thus giving space to business units to focus on the critical staffing of the business units.

It is often difficult to obtain reliable and comparable information between separate business units due to the lack of process standardization. Shared Services, provide reliable cost

effective performance metrics in order to fulfil all the stakeholder's increasing need for transparency and sufficient information. Improved service levels and enhanced value is created through the reorganization of the personnel, the processes and organizational structure, while the concentrated information captured by the internal stakeholders can lead to new procedures and the prevalence of best practices.

Additionally, shared services provide flexibility allowing the organizations to expand geographically more rapidly, since the support function issues are resolved and the business units are able to focus solely in their core business and seek for new opportunities. Although the creation of an SSC requires an investment in the short term, the value added will pay off richly in the long run by (ACCA Research report No 79, p.20-22):

- Redirection of funds from the investment in incremental infrastructure to core business operations
- Operating efficiencies by standardization and automation
- Business risk is reduced in terms of infrastructure related risks of operating in emerging markets
- More speed when delivering products or services
- Increased knowledge obtained by sufficient, comparable and reliable information
- Dedication of senior staff to strategic functions
- Fast market development and post-merger integration from the already existing technologies and processes

2.3 Shared Service: Catching the next wave

One of the five pillars of smart financial operations is the Shared Service Centers (SSCs), which have grown exponentially in the 21st century as new technologies and globalization have allowed companies to focus on cost-free optimization with no impact on efficiency and effectiveness. In the last decade, they have gone through several rapid evolutionary cycles, shifting the focus to outsourcing and off-shoring, leading to significant benefits and economies of scale and freeing up resources for activities that add value to the business and improve profitability (Sliz&Brennenstuhl, 2020).

In addition to the traditional functions (finance and computer technology/IT), most

international companies now use them in functions such as human resources, research and development and procurement by consolidating strategically structured homogeneous practices.

Only the 1/4 of the respondents to “Being the best: Inside the intelligent finance function” survey conducted by KPMG in 2013 on top executives (CFOs) in 440 organizations worldwide, said that they plan to invest in SSCs, as many companies now reap the benefits of previous investments from consolidations. In order to derive more value from the SSC establishment, companies must activate the optimal combination of processes (currently maintained and provided that will fully manage all processes), technology (need for continuous improvement and innovation) and people (employment and incentives for new staff and management careers) (Avdekins&Savrasovs, 2018).

Upon the arrival of the Shared Service Centers and outsourced service providers, companies have transferred mainly financial procedures such as accounts receivables/payables, and systemic maintenance activities for payroll and financing. Currently, other of higher value processes are taken under consideration such as strategic procurement, cash/collection activities, taxation, transfer pricing, controlling activities, managerial activities, reporting and preparation of financial statements. According to the results of the research it is highly probable that the activities to be transferred are mainly related to high volume and low value activities such as general accounting, accounts receivable and payable functions, tax compliance but also activities considered of low volume and high value such as reporting and debt collection.

Outsourcing of strategic operations to more specialized areas is also increasing. Cash and tax activities that require specific knowledge, is supported internally until there is a need for hedging or tax resolution support and when the companies seek advice from experienced global networks in those fields (Wuet al., 2020).

Traditionally, the Financial Management maintains high value activities that uphold the business operation and facilitate the decision making, in an attempt to retain the knowledge within the company and to comply with local legal regulations or to enhance the control over the business critical activities. As recorded through the research, the need to prepare the next leaders of the Financial Management also leads to the maintenance of certain financial functions, to benefit from the preparation and analysis of financial reports and

practical experience with the use of tools for projections and analysis. Some large global organizations consider it necessary for senior and younger financial executives to spend some time in SSC and switch to functions to improve their understanding of the business. As mixed practices are preferred, companies are now paying attention to what activities they maintain. For example, consumer goods companies prefer to keep activities where the volume of customer contact is low but the value is high, as they have more to gain from close customer relationships and the continuation of such contact.

Evaluating and approving end-of-period results and planning, budgeting and forecasting are areas that should remain in the business in terms of control and functionality, but not necessarily geographically proximate. Indeed, a hybrid model with an SSC that works closely with financial analysts and business executives seems to be the best practice. The research makes it clear that the perception of the shared services model to be mature enough and does not require further consolidation or investment can be risky as new technologies, business models and market opportunities emerge. Companies that remain satisfied with the current situation due to the lack of new investments in this model, are losing their competitive advantage (Tarvainen, 2019).

Shared Services are a relatively new scheme when it comes to regions other than North America and Western Europe, but are rapidly expanding due to the significant technological changes that have introduced new tools and processes to support them. Financial Statements that have been previously reported from an ERP system are now produced by sophisticated financial reporting tools that are easily bridged with the traditional ERP systems in order to retrieve information. Similar progress is also made in processes and tools related to receivables, payables and month end closing activities.

The trend, as shown from the survey, is that an innovative way with which some companies manage the introduction of a new SSC, is through the Build-Operate-Transfer model, where the companies hire experienced third party consultants to build the new business, to run the transition and to supervise the operations under the new scheme for a limited period, until the operational responsibility returns back to the company. With this way, the company gains access to all the related knowledge linked to the start-up phase and retains the right to internally run the standard business when the implementation is finally completed.

Companies need to accept that it is unlikely that everything will run perfectly from the

beginning. The new operating model will be evolved over time and there is an increased need of establishing change management in order to facilitate continuous improvement. With this way the company can ensure the maximum value to be derived from the SSC for both short and long term.

2.4 Shared Service Centres and Financial Operation

Businesses with multiple subsidiaries have the opportunity to reduce their administrative costs by setting up a so-called “Shared Service Centre”, a unit of the company that brings together the financial, management and supporting services of the company. Shared Service Centres (SSCs) have become possible by the increasing consolidation of regulations between markets, the introduction of the euro adds management and the transfer of the financial functions to the centralization strategy. Many international companies in Europe, saw a good opportunity to change their management from their local currency to euro and considered it a good time to set up a Shared Service Centre (Owens, 2013). Shared Service Centres consist of several types such as: a) Corporate securities offices, b) Financial service centres, c) Data processing centres, d) Training centres.

Shared Service Centres also offer the advantage of pooling the right skills and resources, in order to enable companies to focus on new markets. Achieving economies of scale can provide more useful services, reduced costs and improved efficiency. The conditions for creating a successful Shared Service Centre are the following: a) Language proficiency for the financial services, data processing and training centres, b) The central location for the training and the financial services centres, c) The quality of work for the data processing centres and the financial services.

2.5 Description and General Uses Of Shared Service Centres

It can be said that a Shared Service Centre is the modernization and convergence of the back office functions of a company, in a separate and shared business unit. Its objective is to ensure that the required services are provided as efficiently and effectively as possible.

Shared Service Centers (SSCs) have the ability to lower costs by merging same functions that run in different parts of the same organization. These functions are mainly related to

finance, information technology, customer service and human resources. By creating an autonomous or non-autonomous SSC, companies can create efficiencies, eliminate unnecessary activities and improve customer service and overall satisfaction.

Financial Services and Human Resources Management as well, are considered to be a common opportunity for establishing an SSC. The main beneficial outcome is coming from the new technology and the standardization of the processes on both national and regional level, where it becomes easier to provide support in multiple business units while improving the speed and quality of services. Despite the initial success of the SSCs, some companies may reassess the model and move to alterations such as the outsourcing of some of the back office operations to a third party provider or consolidating and relocating the SSCs to countries that offer lower labour costs (Spokes &Modrzyński, 2020).

The successful transition into a Shared Service Center requires detailed planning and change management mindset. This change management should: a) standardize prior to change, b) merge procedures held by the key employees without losing them and interrupting the business, c) redesign of the systems and processes which will lead to cost savings, d) clearly illustrated vision from the top executives, e) benefit from the functions that will be transferred to the SSC.

The Shared Service Centers are established not only for cost savings, but also for supporting companies to react on the ever changing market and adapt growth strategies from: a) execution of higher quality services and improved customer satisfaction, b) creating economies of scale, c) process improvement, standardization and new technologies, d) allowing employees to devote their time and capabilities to their core and essential tasks, e) the flexibility on adding new business areas and geographical expansion, f) boosting the time of integrating new acquisitions.

The reason why we might consider the shared services as a choice may be external, internal, and often depending on the situations. Many conversions have begun because of important inefficient business mechanisms.

Businesses may want pre-determined results, such as lower costs, lower risk, or higher quality. It is important to know why they implemented the shared services from the beginning and what the objectives are. It is useful to be clear in defining the goals otherwise their completion is jeopardized (Spokes &Modrzyński, 2020). Shared services release value

in many different ways such as: a)Reduced cost, b)Higher quality, c)Reduced risk, d)Standardized procedures, e)Utilized technology, f)Quicker decision making, g)Improved attention to business management, h)Improved customer service, i)Increased efficiency, k)Applied economies of scale, l)Improved audits, m)Timely and accurate information, n)Supported mergers.

2.5.1 Starting with the establishment of an ERP for the implementation of shared services

ERP systems strongly support the financial procedures, especially when it comes to general accounting and accounts receivables/payables. Financial management systems have contributed to the upgrade and improvement of the transactional financial business processes through automation initiatives. Moreover, those improvements purely related to the financial ERP systems, allowed us to go one step further from the traditional support functions, achieving advanced workflows and enhanced collaboration capabilities.

The implementation of the shared services is related to providing services by a central location that is separated from the other departments of the served organization. This requires trading systems that are not compatible with traditional business software solutions. Using a single ERP for the whole business will lead to the maximum benefit from the shared services.

This unique approach will also facilitate the standardization of processes, business policies and data structure, which within the short term is difficult to be achieved due to the differences between the systems and the processes followed by each business unit. However, heterogeneous information technology environments is not an obstacle for a transition to a shared service, since the new scheme could use the existing systems until the unique platform is implemented.

Another key factor in order to successfully implement a shared service center, is the automation of the business processes. Although not a new established approach, the automation of the operations by advanced software technology such as common ERP systems, workflows, data analysis, electronic data exchange systems and standard connectivity, can lead to remarkable efficiencies. The benefits from the process automation

initiatives are much more compelling upon the shared service center implementation where it can facilitate a wide range of user in a large number of organizations (Harritz, 2018).

This is especially true when it comes to the financial operations. If we consider the manual invoice posting in the accounting system, we will find out that it is not only a time consuming but also a risky process. Errors in the entered information can be detected at a later stage of the related transaction. For example, when the payment proposal has already been scheduled and as a consequence it creates a disproportionate cost to the initial cost of processing the invoices. An invoice paid to a wrong recipient or paid incorrectly will cause inconvenience to the supplier and the individual who ordered the goods or services, leading to their dissatisfaction. Depending on the process, human errors could have consequences in various types of stakeholders. The solution is the integration of complete and automated processes into one shared service centre (Harritz, 2018).

2.5.2 Shared Service Centres and Financial Operation

More and more organizations are considering the application of shared services in the financial operation as well as that of the human resources management. This trend started about 10 years ago and we have observed that this initiative has taken place in different stages. Initially it was embraced by a few private sector companies - mainly multinationals in the US - and later this idea was adopted by European companies, around the same time as global shared services and outsourcing become widespread. Many companies are now rethinking their shared services in search of benefits and of course the public sector is now an important area of the shared service establishment. Shared services are becoming more common but businesses are still struggling to figure out how they can add value (Chris Price). As shared services, they require significant investment and businesses are trying to reap the rewards of their investment decision. They usually seek the benefits of cost reduction, through economies of scale, standardization of processes, etc(Harritz, 2018).

There is much more available value from shared services than it is recognized in many business cases. The use of shared services solely for efficiency reasons is not ideal and in fact, significant opportunities are lost due to the misuse of the managerial time. Companies need to focus more on transforming operations and identifying relevant strategic benefits. For the reasons mentioned above, greater involvement of companies in the development of

shared service programs is required and also a greater understanding of how the related functions should contribute to the achievement of the strategic business objectives is essential (Zhang, Lawrence & Anderson, 2015).

The contribution of the shared service centers is widely acknowledged and many organizations have moved or relocated parts of their operations to the new scheme, as mentioned above. For those that have already implemented the shared services, the ultimate goal is to look for initiatives that will reduce costs and will improve the quality of the business processes, while for the companies that are currently assessing the new structure, it is important to identify the correct starting point (Zhang, Lawrence & Anderson, 2015).

Many financial processes, such as the management of accounts payable and receivable, the processing of expenses and the payroll, are candidates for the pooling of services for various reasons:

- They are very time consuming. The best candidates for moving to shared services are the functions that require large repetition rates, specialized skills and intensive effort
- The workflows are standardized. Activities are separated by the length of the business process
- They have the ability to benefit from large economies of scale. A SAP study showed that organizations under the SSC scheme can perform certain financial activities at only one-third of cost

However, the transition to a shared service scheme requires detailed planning and it is not the rule that the financial operation should just proceed with the correction and amendment of all its processes. Business Units usually come from diverse business operation environment that reflects all their internal procedures and technology. While assessing the transition to an SSC, a company should investigate and identify which set of processes can add value to the business. These procedures should not interrupt the operating module of the company. In this manner, the shared services can create an opportunity for the establishment of superior processes without the need to transform the whole organization. The following three examples are related to procedures that are highly likely to be transferred to an SSC.

Example 1: receivables management

One of the most common reported opportunity for transferring business processes in shared service centres is the receivables management. Accounts receivable operations are often performed outside of local hubs which prevent the standardization of the process and which operations are usually time consuming, manual and paper-based. By consolidating the accounts receivable management function into a shared service centre, the process standardization and the achievement of economies of scale become much easier. Advanced software solutions can automate most of the exceptions, such as late payments, based on the same rules that are used from the shared service centre for all the business units.

In the context of the accounts receivable management, disputes and customer receipts are financial business processes that are suitable to employ a common services approach. However, in some cases this is something that generates second thoughts. Overdue items are required to be paid at the time they are identified and customer transaction information is not monitored or used in a way that helps to the resolution of the issue. This result in the slow collection of Cash, or even worse, the risk of complete amortization/write-off of the amount owed (Barbosa, 2016).

Example 2: accounts payable

Shared services offer many possibilities for organizing and streamlining complex processes such as the accounts payable management. This process is usually managed using a compact model that changes easily and when it collapses, it can lead to a large number of dissatisfied suppliers and buyers of goods or services.

Example 3: supply

Shared service centers that operate based on a unique ERP system can achieve considerable benefits simply by processing the same activities in a better or cheaper way. By gathering information about a specific function, such as supply, SSCs can collect knowledge that allows the business to alter the way that the function is processed.

In a shared service environment, a specific vendor can be viewed by the whole business and not just by one area or subgroup. By consolidating supply, it is easier to view the suppliers in terms of overall costs and thus increasing the company's capability in price negotiations. Moreover, each supplier can be assessed based on its performance in more than one country.

The question of which processes can be moved to a shared services model, is the point of

the company's understanding in terms of the relevant strategic importance of its processes. Just a few years ago, many customer-related procedures were considered impossible to be moved to public service centres; however, it is not uncommon today to sell even complex services through external call centres. The same was true for the revenue management, which in the past was considered risky that the customer relations are carried out through a shared services centre.

Common financial services companies have the potential to become a well-functioning centre close to their administrative centre. Utilizing the latest technology innovations, future shared service centres will constantly lead to the standardization, automation and excellence of business processes. The wealth of information gathered into a shared service centre from the millions of business transactions processed each year can provide the company with value-added information and services to support decisions.

Financial service centres will become experts in the automation of repetitive transactions and transactional processes. While the implementation of shared service centres is mostly a business decision, the key to a successful delivery of shared services at an enterprise level is a strong and flexible technology platform. Such a platform must support the high trading volume that characterizes global companies. Moreover, it must provide scalability, reliability and security while maintaining the flexibility to adapt to a changing business environment (Spokes &Modrzyński, 2020).

There are almost no companies today that do not use common services of any kind. The motivators behind the common services, as with any new idea, are practical and real. After entering the new millennium, with the new economy promising more than it could actually deliver and where declining markets are pushing all companies to their limits, businesses found themselves facing the same problems as in the past, significantly more demanding and having much less time at their disposal.

In addition to the external pressure, CFOs are facing another problem: internal dissatisfaction with financial performance. Numerous studies have shown that both financial and other corporate employees consider the average financial operation to be poor in terms of: a) The availability of the right skills within the financial operation, b)The general administration and organization, c)The standardized and integrated systems, d)Decision making and flexible and accessible data, e)The balance between ordinary / daily and value-

added work, f)The availability of the right performance indicators. The CFO has to deal with a number of issues, the most important of which are the following: a)How to provide reputable financial services at significantly lower costs, b)How to be a partner that adds value to the other business functions, c)How to achieve a higher equity value.

The simple answer is to achieve the highest possible cost reduction, while what is actually required is to create a financial function that can provide more value to the business at a lower cost. Given the constraints on the resources available to an organization, the main focus is on balancing the work duties. Increased demand on business planning and risk management need to be addressed. The risk of not meeting these requirements is significant and cannot be avoided. The activity pyramid that is currently at the top of the trading activities and that have wasted most of the time instead of strategic value-added activities, should be reversed.

The CFO is available a maximum of 24 hours each day, so the increased attention required in the area of higher value-added activities is a critical issue. It is important for the financial operation to be properly managed, but at the same time, the decision to support activities that help identify new business models and manage relationships with the investors, are becoming increasingly important. Risk management is also increasing. The CFO must be a financial superhero, capable to deal with all of the above tasks as well as freeing up resources, in order to reduce the time spent on the financial transactions. The difficulty in designing a future financial operation that adds value to a lower cost, lies in the fact that there are no clear answers on to how this can be achieved (Šindelář&Anasová, 2020).

2.5.3 Opportunities and Challenges

Multinational companies operate in markets that are driven by globalization, mergers and acquisitions, which require organizations to optimize and standardize their operation in order to gain or maintain a competitive position. A practical way to cut costs and improve efficiency is to centralize the main functions in one location. One way for companies to achieve this goal is to form an SSC.

Common services were first introduced into the corporate environment in the early 1990s as many decentralized companies tend to consolidate basic procedures such as payroll, purchase and accounts receivable/payable and sell their services to the separate business

units. As companies expanded their operations beyond borders, it became highly worthless to retain various accounting activities within the country of their presence.

The benefits of the SSC implementation are also recognized by many public companies.

The main motivator for moving to an SSC structure in Europe is the need to have the staff sufficiently trained through continuous improvement initiatives, without affecting the business strategy and the financial and management processes. Businesses have reported a reduction in staff costs up to 35% and currently the Shared Service Centers are considered to be a part of the business landscape. This seems to be the case in the near future as well (Liu, 2021).

The main disadvantage in setting up an SSC is the issue of staff reorganization. During the start-up phase, the SSCs can create a rapidly changing environment. However, once the activities are finally concentrated into the one place, the repetitive daily work lose its interest and a large number of the staff will seek for new and more interesting opportunities. Also, the lack of a common ERP system will make the things worse, since it can hinder the standardization process and eventually, the creation of efficiencies.

Finding and motivating high quality staff to process with routine transactions and the desire to keep the costs into a minimum level, seem to be a double challenge for the SSCs. A common problem is to attract and retain multilingual staff that will work in remote positions. The great importance of cultural and linguistic differences in the context of the centers which provide common financial services should be emphasized, since a large number of such issues could negatively affect the long term viability of the financial services, despite the technological and economic benefits (Kulju, 2016).

The key decisive factors for success are the clear mission and vision, the proper strategy and the full engagement of the senior management. This kind of projects that alter the course of the organization and as in any case of having to relocate a set of activities in another location, will meet resistance during the implementation. Thus the management support is more than important in order to ensure that the project will move on as expected (Yang et al., 2015).

2.6 Financial Shared Service Center Structure

When deciding the transition to an FSSC model, one of the key points to assess is the pace of this change towards to the centralized function. The factors to be considered are the number of the sites involved, the level of integrated IT platforms and the general climate for change. A structured transition plan should be put in place before the project begins following the below fundamental steps:

Phase 1- Establishing the business case: Raising awareness at CFO and board level about the FSSC concept will trigger the information gathering by 3rd party providers and firms that have already proceed with this initiative in order to achieve a common understanding on the nature of the FSSC, its limitations and the timescales, benefits, drawbacks and critical success factors. Once the firm has achieved a clear view of the business case then there will be a cost-benefit analysis related to human capital, processes, technology and infrastructure. A location analysis is also important which involves the comparison of green fields versus brown fields versus existing locations. Cost and other comparative data is available from consulting companies, recruitment specialists and government bodies. A major part of this initial assessment is the status of the standardization across the different business units of the organization.

Phase 2 – Design and Configure FSSC Model: Once the business case is finalized and the location is chosen, the operating structure should be defined and there will be a decision on which activities are to be transferred under the FSSC responsibility. This will allow the organization to design the structure and processes and to specify the discussions with experienced staff and managers from already successfully established FSSCs. In the table 2.2 below we can find the services provided by an FSSC.

Table 2-2 Services provided at the FSSC

General Ledger Accounting
Intercompany Transactions
Statutory Accounting
Consolidation Workings and Packages
Accounts Payable Accounts
General and Travel Expenses
Accounts receivable Accounts
Third party Invoicing and Billing

Fixed Assets and Depreciations
Inventory Accounting
Cash Management
Treasury Activities
Payroll Activities
Tax Accounting
Management Reporting
Records Filing and Retention

Source: Yang et al.(2015)

What is common during transition is to apply the “lift and shift” of the processes since it is difficult to firstly apply the new processes and then transfer them to the FSSC (“shift and lift”). *Ernst and Young Report on Shared Service Centers (1998)*, clearly illustrates the preference of transferring the processes in their current status and to redesign upon the finalization of the migration into the SSC. Then, service level agreements on a customer focus basis are addressed and the cooperation with the local and corporate IT staff is intensive in order to define the structure and the related processes.

Phase 3 - Roll out and Implementation: The project team is now working close to the local controllers over a large period of time in order to identify and enlist the support of the local controllers and HR during the work shadowing and the transition period. The workshops between the project team and the locals is to explain the impact on their organizations and ensure their support for this change. The two crucial goals to be achieved are:

- Enlist local support and identify which local staff will stay at the company in the future and which people is to be persuaded to stay at least for the transition period
- Manage expectations by ensuring that there will be no business disruptions and that the service provided would at least match what was used until now. The process improvements will be implemented in a later stage

It is vital for the FSSC to understand and learn the local accounting, the reconciliation processes, the reporting practices and the communication with the locals during the work shadowing. Some staff members will have the opportunity to move into another business unit but for the majority of the staff this will not be the case due to the lack of the required skill set and the cost of the retraining. Thus critical knowledge to the organization will be lost forever. Recent advantages in technology have enabled finance procedures to be held

by remote locations and thus in many cases there is no need for a work shadowing to be made with a physical presence of the trainer and the trainee. This gives the opportunity to reschedule the related sessions upon the fully completed knowledge transfer.

Phase 4- Extend and expand: Following the FSSC set up and running, the challenge is to add value and ensure the continuous improvement mindset will take place. In order to monitor the effectiveness and efficiency of the services provided, key metrics are established and followed up. Some of them are illustrated below: a) Number of manual entries performed, b) Posting errors, c) Overtime in FSSC, d) Customer Complaints, e) Total payments processed, f) % payment matching to specific invoices, g) Total finance cost, h) Number of systems, i) Total invoices booked.

During the post implementation period it is vital to ensure not worsening the process performance. It is shown that for a period after the implementation of the FSSC there is a decrease in the quality of the processes. Although it is almost impossible to avoid this drawback, steps should be made in order to minimize the duration of the decline in the quality of the process. Upon the establishment of the FSSC as a part of the organization support activities, it should (ACCA Research report No 79, p.26-30):

- Focus on adding value in finance activities instead of acting as a cost center
- Adapt a continuous improvement strategy
- Realize that since the FSSC is a business within a business, in the future there may be a pressure from other sites to perform the accounting activities in a cheaper price than the organization's internal FSSC can offer
- Be flexible when it comes to take over new activities because of economies of scale

2.7 Financial Shared Service Center in European Market

“There has rarely been a time when the finance and administration departments –the back office– have been out of the firing line” (Ross 1995). The increasing awareness among leading organizations in achieving quality of services has led to changes in the finance function in order to create value and eliminate the inappropriate handling of customer complaints, the inaccuracy of invoice processing and the late or inaccurate management information. This pressure to change is caused from various reasons such as:

- The high competitive markets lead the organizations to cut costs further in order to maintain their margins
- There are limited opportunities for developing and sustaining competitive advantage within the European mature markets
- High cost of back office when doing business in Europe compared to North America
- Additional competition is created by the opening of Far Eastern and Asian countries as distribution centers and product locations
- Greater flexibility for board less operations is created by the harmonization of the European legislation

When considering back office restructuring, one of the major organization's concern is about any restriction, fiscal or legal, on handling accounting activities outside the country in which the actual transaction occurred. This has given rise to argue from anti-centralization lobbies that the centralization of activities would not work. Due to this fact, many organizations are actively requesting from the governments and tax authorities to relax restrictions. Over 50% of the major multinational companies have established SSCs in Europe by the year 2000. Although some governments can put restrictions in performing some accounting activities outside the country, precedents have been set in order to establish an SSC and eliminate the delays caused by bureaucracy. There are now opportunities created from the establishment off an FSSC:

- Data entry and transaction processing is made by specialized lower paid staff
- Management supervision in order to deliver a quality service is reduced
- Improved quality
- Harmonized procedures across business units and regions
- Homogeneous and comparable information across business units, countries and systems

As companies are expanded beyond their borders, the European market is altering through acquisitions or organic growth. Moreover, Europe is becoming more homogeneous through the introduction of the EURO and the alignment of fiscal, legal and tax regulations. While the FSSC allows common standards facilitating and concentrating the local finance function, the maintenance of duplicate infrastructure within each country of business becomes increasingly illogical.

Under the FSSC scheme there is also an opportunity to eliminate large number of manual checks and spreadsheets caused by poor integration between systems or inadequacy in current processes, since modern integrations systems are introduced and harmonization of operational processes is applied. This improvement of the quality of services and the relief of the burden of the transaction processing will enable the individual country controllers to concentrate in providing support for management (ACCA Research report No 79, p.7-9). The main drawbacks when setting up an FSSC is related to:

- **Staff turnover:** Although during the startup face, Shared Service Centers can offer a fast pace and a challenging environment to the people that work within the company, it is often common that once the initiative has been successfully finalized, the job is becoming less challenging as much of the work tend to be routine transaction processing . This creates a double challenge, since the firms should find ways to keep the costs at minimum while keeping the motivation of staff in high levels in order to ensure that the knowledge gained during the work shadowing will not be lost into the organization.
- **Common IT system:** The lack of a common IT system will jeopardize the attempt to create efficiencies through standardization and process improvements through automation.(ACCA Research report No 79, p.6)

2.8 Critical Success factors in SSC Implementation

There are number of critical factors to consider following the decision to centralize the activities in SSC, the most important are as follows(ACCA Research report No 79, p.41).

-Communication: There is an imperative communication need between the Local Parties and Administration staff. In order to successfully finalize the Knowledge Transfer, training sessions should be scheduled and periodic assessments to be established.

-Motivation: Work shadowing during the Knowledge Transfer is stressful and the related parties should be kept motivated by the people in charge.

-Team spirit: Support to the SSC personnel and team working should be encouraged, especially for those that are working away from the home country for extended periods.

-Problem Solving: Work shadowing processes and resolution of issues arisen should be

effectively managed by the people in charge.

-Investment: New technology and initiatives related to process automation and optimization are required.

-Training: All the interested parties involved, should be properly informed and trained.

-Services: Service Level Agreement between the SSC and the local organization should be set up.

-Location: Careful examination and assessment of the location determinants should be carried out.

-Work Shadowing: As local organization structure does not mirror the SSC organization, one to one work shadowing methodology is required in order to ensure that all the activities under the SSC responsibility are covered.

-Lift and shift: Any process improvement, incorporating best practices and harmonization should be conducted after the work shadowing process due to the lack of sufficient time. Thus the SSC should take over the activities as described by the local colleagues and establish new and more efficient processes in a later stage.

-Stabilization phase: Upon the transfer of the activities to the SSC, there is still a need of support from key staff in order to ensure that the learning process is continued.

-Expertise: Recruitment firms, consultants and development agencies are required to reach the most beneficial outcome.

2.9 Location Criteria - General Underlying Dimensions

Past studies related to location selection, were mainly based in cost factors. However there are many other parameters, other than cost which are qualitative and intangible in nature and which are proven to be significant when deciding a place to establish business. From the survey of the 84 fastest growing companies in New England and New York it came that 27 variables in total are linked with location decisions and their significance depends on the industry under consideration. Following a factor analysis that uses principal component analysis and varimax rotation, it seems that six underlying dimensions exist when deciding for a business location as illustrated below (FahriKarakaya&CemCanel, Industrial

Management & Data Systems 98/7 (1998) 321-329):

1. Cost (Start Up cost and cost of running business)

- 1.1. Construction prices
- 1.2. Land prices
- 1.3. Cost of utilities
- 1.4. Real estate tax regime
- 1.5. Local tax rate

2. Quality of life

- 2.1. Number of available universities
- 2.2. Education level of local residents
- 2.3. Availability of recreational facilities
- 2.4. Accommodation Cost

3. Accessibility

- 3.1. Proximity to major airports
- 3.2. Highways

4. Resources

- 4.1. Availability of skilled labor
- 4.2. Labor Cost
- 4.3. Local investment incentives
- 4.4. State regulatory environment

5. Business Environment

- 5.1. Availability of suppliers
- 5.2. Competition
- 5.3. Distributors
- 5.4. Capital Financing
- 5.5. Transportation facilities

6. Existing Buildings

The importance of these six underlying dimensions is affected by the type and size of the industry. We can see that the availability of skilled labor is important for manufacturing, insurance and banking industries, proximity to major airports is the most important factor to the consulting business and the most important factors for retail business are land prices and construction cost. Similarly, the importance factors varies depending on the company

size. Availability of low cost labor is important for large firms with >1000 employees compared to smaller firms with <500 employees. Availability of skilled labor is more important to medium size companies with >500 and <1000 employees, compared to large firms. Finally, the proximity to major airports is more important to small firms than to large firms. (FahriKarakaya&CemCanel, *Industrial Management & Data Systems* 98/7 (1998) 321-329)

2.10 Location Criteria – Shared Service Centers

The centralization of dispersed finance activities is consider a major achievement itself, either referring to the centralization or to the creation of an SSC. Although the SSC approach may seem to be as “halfhearted” approach for some people, the need for change should be assessed on a repetitive basis in order to stay competitive in the business dynamic environment. For large multinational companies, the expansion over time, may have created a dispersal of finance staff across multiple entities operating in different locations.

The first move towards a more conventional FSSC approach is considered to be the relocation of the activities performed by the finance staff across dispersed locations, into a single one. With this way there may be an elimination of the historical fragmentation of processes and a reduction of expenses related to fixed assets/real estate by operating in a lower cost and more accessible locations. Upon the concentration of the activities and finance staff into a single place, processes are reorganized and IT platforms are harmonized by migrating all the data coming from different ERPs into a new and single ERP in order to create efficiencies and to achieve cost savings related to staff, fixed assets and IT support. The SSC in this case has limited independence and the new costs are typically recharged back to the entities that they refer to (ACCA Research report No 79, p.16).

Location is one of the most significant criteria when establishing an SSC. In order to ensure that this initiative will be successful we need to analyze and assess the following key site selection criteria. From a conducted postal survey of SSCs in Ireland/UK, the fifty percent of the respondents answered that the location of the center was a major critical success factor in moving to shared services. The total of 35 firms responded to the study and outlined the key site selection criteria illustrated in the following table 2.3 (ACCA Research report No 79, p.23-25).

Cost/Benefit

- Equipment capacity, the network capability and whether there is staff to maintain the new capacity or not
- Wage scales and government incentives like employment subsidies and company allowances
- Tax and duty advantages and disadvantages. The location and tax treatment of an SSC are critical since by locating in a low tax area, a firm can account for its multinational revenues under a low tax regime.
- Startup costs related to expenses for people, technology, equipment, government grants and whether there is a need for relocation or training for the new employees or not
- Overall business environment for an SSC, the political and economic stability or not, time zones and compliance issues with company/personal data and if there are any restrictions to exchange the data within or outside the country

Treasury/Legal

- Banks and related accesses
- Local requirements for bookkeeping and Intercompany Invoices/Practices
- Language and Cultural norms and practices

Human Resource

- Total population and skill levels, job rotation from the local business to the SSC, language skills
- Assistance or Barriers in employee relocation, employee councils and unions, limitations in movements between the legal entities

Table 2-3 SSC Location criteria

SSC LOCATION CRITERIA	
Cost/Benefit	Labor costs, government incentives and company allowances, fringe benefits
	Tax regime, tax holidays and incentives, general tax requirements
	Government support and grants
	Grants for relocation or training of the new employees

	Closing cost of existing sites
	General Local Environment and Political stability or instability
	Framework and compliance on general company data and/or personal data
	Data transfer within and outside the country, time zone differences
	Roads, infrastructure, telecommunications, utilities
	Country culture, norms, language
Tax/Treasury/Legal	Accessibility in banking portals
	Government framework on information moving in/out of countries; consider: regulations regarding data processing, paper invoicing, record retention
	Confidentiality, restrictions on the location for the bookkeeping, exchange control in/out of the country,
Human Resource	Total talent pool and quality of skills
	Foreign Language Knowledge
	Knowledge of accounting practices within the multi-entity, exposure in multi-currency environment

2.10.1 Critical Success Factors

From a survey conducted by Price Waterhouse Coopers between April and September 2013, one hundred companies representing 377 Shared Service Centers worldwide answered to the importance of the criteria used to select a location for a future SSC. The most important criterion when choosing an SSC location is the availability of qualified staff related to professional and language skills.

Besides citing workforce availability, a large number of respondents attributed high importance to labor costs and legislation, which is not surprising since using labor arbitrage in achieving cost savings is the major benefit of establishing a Shared Service Center. Then follows proximity to core business location, location support infrastructure, co-location with other functions, economic environment and quality of life.

The importance metrics are shown in the Figure 2.1 below according to the answers given by the companies participated in this survey. (Shared Services – The Edge Over, PriceWaterhouseCoupers, Michael Suska, Christiane Mänz and Christian Zitzen, January 2014)



Figure 2-1 Weights

Source:Deloitte(2018)

According to Deloitte (Shared Services Handbook, Deloitte, 2011), the chosen location will have a critical impact on quality of the services and the cost savings achieved. Thus, a high level site location analysis should be conducted in order to identify and address any serious obstacles.

This high level analysis considers the below categories and subcategories:

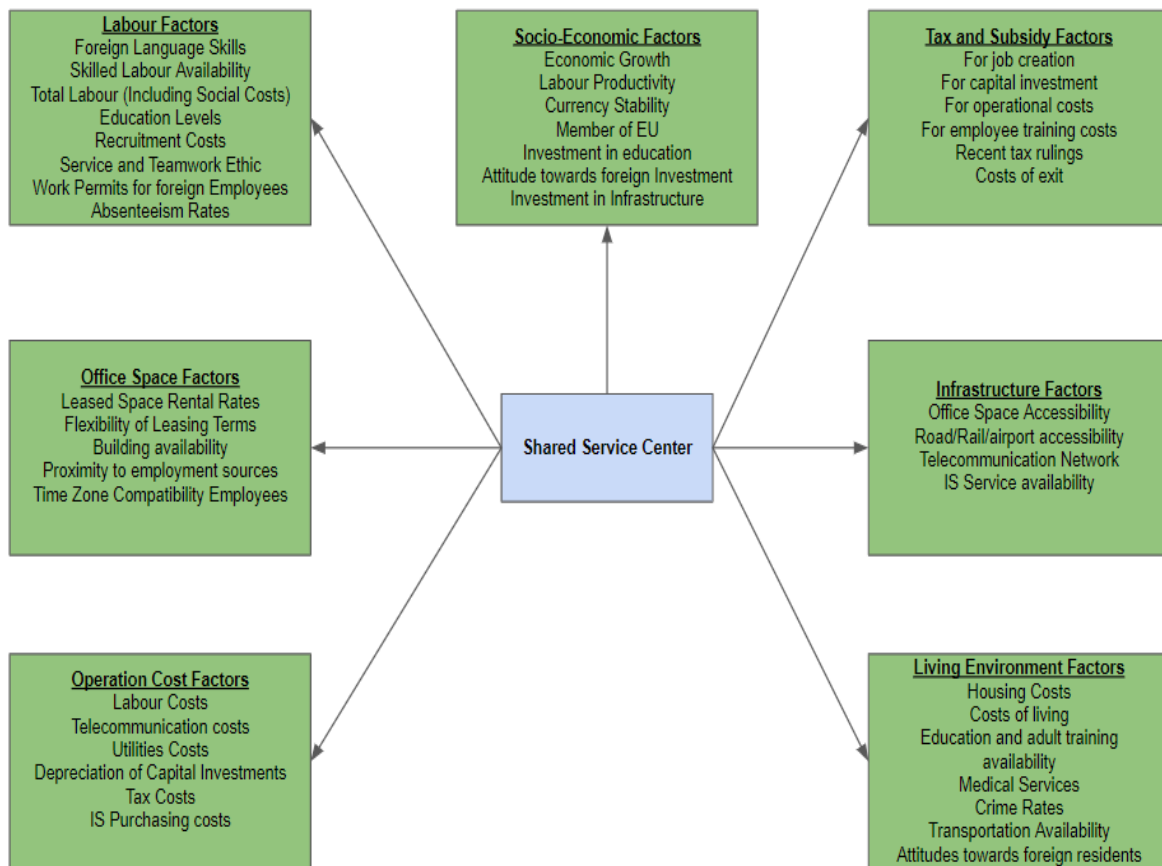


Figure 2-2 Shared Service Centers

Source: Deloitte(2018)

2.10.2 Critical Success Factors - Subcategories

Each critical success factor (figure 2-1) could now be divided into subcategories and assessed in order to evaluate the key country capabilities according to the combined information obtained by the chapter 2.9 (Location Criteria - General Underlying Dimensions) and the chapter 2.10 (Location Criteria –Shared Service Center). Thus the 7 critical success factors are divided as follows:

1. Qualified Employees

- Availability of skilled labor
- Language skills

2. Labor Costs and Legislation

- Labor Cost(Including Social Costs)
- Recruitment costs
- Work permits for foreign employees

- Absenteeism Rates
- Labor Laws

3. Proximity to business location

- Proximity to major airports
- Highways

4. Location support infrastructure

- Business property availability
- Leased space rental rates
- Flexibility of leasing terms
- Telecommunication network

5. Overall BusinessEnvironment(Economic and Social Factors)

- Corporate tax rate
- Tax allowances and incentives
- Government grants and assistance
- Bureaucracy
- Political Stability
- Currency Stability
- Inflation Rate
- Business ethics/environment (Corruption Index)
- Member of EU
- Investment in Education
- Telecommunication Costs
- Utilities Costs
- IS costs

6. Co-Location with other functions**7. Quality of life**

- Availability of college/universities
- Education of residents
- Availability of recreational facilities
- Cost of Housing
- Cost of Living
- Medical Services
- Crime Rates

- Transportation Infrastructure

2.11 Shared Service Centers in Central East Europe

In the CEE, the salary levels, the geographical proximity, the cultural homogeneity and the development of infrastructure during the last years have played a major role on attracting investor companies and thus achieve growth in the national economies. The Shared Service sector has also played an increasingly important role to this direction since it is considered very popular in CEE countries among recent graduates because of the quite high salaries, the international environment and the young work culture.

The first Shared Service Centers were created in the late 90s in the CEE region following the Nordic region, Great Britain and Netherlands which have launched the first SSCs in the early 90s. However, after the discovery of the region, the SSC sector begun to grow increasingly, when 91 SSCs were established in the CEE region and with nearly one third of them in Hungary (Chikan& Petenyi,2009). There are many reasons to justify the preference of the region in the early 2000s, where the most important were the:

- Attractive environment: Favorable tax regime and available labor advantages because of the lower salaries which compared to be 30% - 40% lower than those of the Western Europe
- Language Proficiency: There was a wide range of European and global languages

NATO and European Union Membership also played a significant role in the development of the business and until the year 2006, 183 SSCs have been established in CEE region. Up to the year 2004 where the CEE countries did not have access to the EU, the Western Europe and the CEE were managed as different markets. Comparing those two and since the CEE is more cost-advantage region and it was easier to find and use Eastern European workers to who speak Western European languages there was a relocation of the standardizable functions from the West to the East, creating Shared Service Centers.

The huge interest for the CEE region countries was also triggered by the fact that global companies which have established SSCs in India and other geographical locations apart from Europe, wanted to deliver business services globally on 24/7. These companies began to building service delivery networks in order to cover their customer needs in all time zones. Beyond the location advantage in terms of time zone, the CEE region has a developed office and IT infrastructure and the skilled workforce is relatively cheap compared to that

of Western European countries.

The level of the region is classified as the third most attractive investment location (Lhermitte et al., 2010) and the CEE countries have begun to competing each other making attractive offers and providing incentives in order to attract and retain potential investments in the shared services sector. The Global Rankings until the year 2014, show that although the below CEE countries, have not been placed in the top twenty, the size of the business service sector continuous to increase: a) Hungary, b)Czech, c)Poland, d)Slovakia. Also, there is a significant strengthening of the position related to Baltic countries: a)Estonia, b)Latvia, c)Lithuania and an improved perception of the below as well: a)Romania, b)Bulgaria Marciniak(2014).

2.12 Shared Service Center in Greece

Greece offers today a pro-business environment, a legal framework suitable for global business services, a highly skilled/multilingual talent pool, competitive labor and office space rental costs and motivators to encourage new job creation and professional training courses. The business environment for SSC in Greece is currently growing and many leading business process outsourcing providers have set up large scale operations in major areas. This has created about 5,000 new job openings ready to invest in the local high quality workforce. The main business areas that are currently evolving is Athens and Thessaloniki, the number one and two largest cities in Greece. However, other Greek cities that are also considered as top tourist destinations, multicultural communities and advanced technological environment are included as investment destinations as well.

With the Law 3427/2005, a regulatory framework has been set, which creates a very favorable business environment and ensures legal stability and predictability for multinational companies to centralize their middle and back-office activities in Greece. More particularly, the legal framework provides competitive advantages as follows: flexibility with regards to the type of the business entity, simple, fast and transparent licensing, and legal certainty with pre-defined profit margin on costs, residence and work permits for its foreign staff.

In addition, it should be noted that Greece also offers a set of financial incentives in the form of financial grants to enable companies centralizing captive operations and achieve cost

effectiveness. In particular, the Law 3427/2005 as amended by Law 4605/2019 offers generous, easy to apply investment incentives of various types to support new operations for global business services. The financial incentives include:

- a) Job Creation Subsidy-Grant
- b) Training Program Subsidy-Grant
- c) CAPEX Subsidy- Grant & Wage Cost Subsidy-Grant
- d) R&D Grants

2.13 Comparison between CEE Countries and Greece

In Chapter 2.10 we have identified the location criteria and the related weights (Table 2-1) when assessing the location attractiveness in order to establish a Shared Service Center.

In Chapters 2.11 and 2.12 there is an illustration of the main benefits for establishing SSCs in CEE countries and Greece.

There will now be a comparison between the location criteria of the CCE countries which have already successfully established such business services for a large number of companies and Greece which is considered to be a new field for attracting related investments.

2.14 Empirical research on crucial factors for chosen SSC location

Based on what has been analyzed so far, the shared service center is a separate unit that supports organizationally on a process level and provides the central company and its broader market, strategy support functions in the form of outsourcing. In order to be successful and to maximize their effectiveness and the quality of their services, the processes that characterize them are implemented independently and separately from each other, in order to create value for the organization (Slusarczyk, Golnik 2015, p. 195). Each company has its own criteria for setting up and developing a shared service center; however there are specific criteria that must be considered, first to ensure a balanced cost and then to implement an effective solution (Jennings, Pavukova, Appleton, Smizanska, 2014, p. 9). In

the following illustration there will be an attempt to identify the key location selection factors for a shared service center through various empirical studies.

According to Golnik (2017) there are two main dimensions of selection: the external and the internal. A similar view was expressed by Frackowiak, (2008, p.16). External one refers to all those that affect the unit from the external environment, while internal one refers to the development of capabilities within the unit, depending on the selected location. Gupta (2013, pp.13-17) cited strategy as the key selection factor, i.e. which location internally and externally, helps an organization to support its shared service center strategy.

The external criteria according to Frackowiak (2008), Gupta (2013) and Golnik (2017) are separated into three basic dimensions, specifically to geographical, business and financial dimensions. Each of them must be analyzed separately. This means that a table of variables is developed in order to analyze each dimension and considers the selection process related to the location for the establishment of a shared service center. This process, as reported by Murphy and Knight (2009, pp.2-3), will help reduce the risk and maximize the benefits of this initiative. The following figure shows the components that describe each dimension.

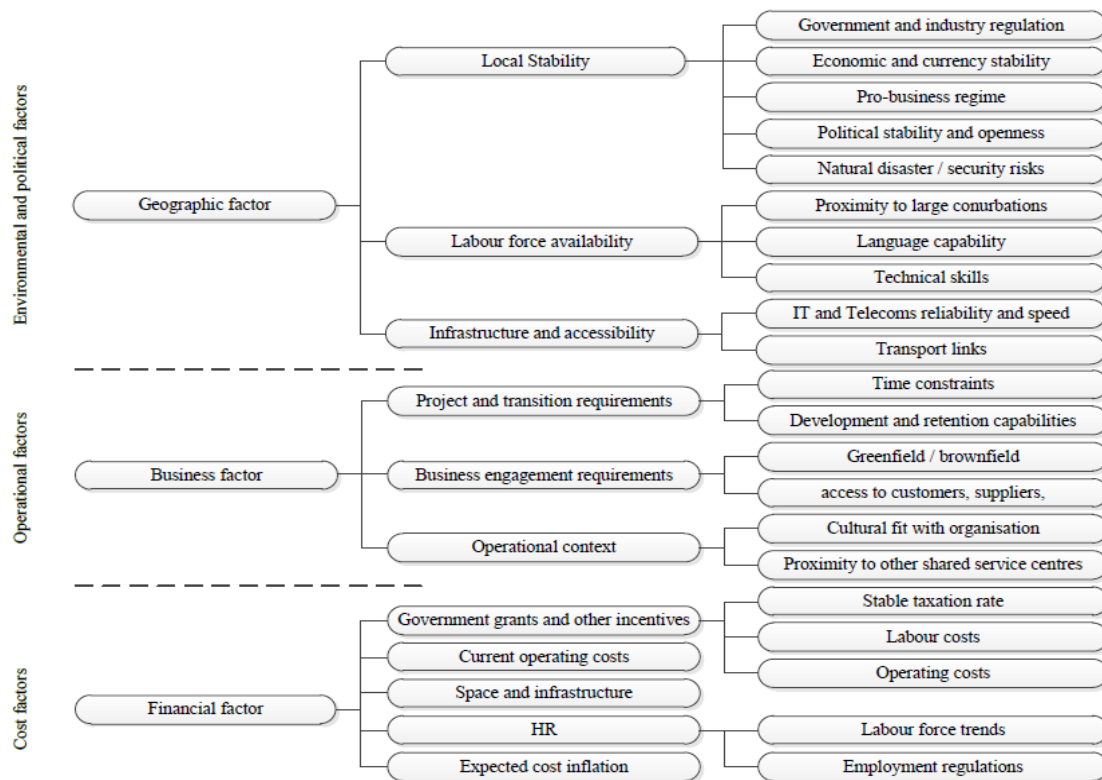


Figure 2-3 Crucial factors for chosen location for Shared Service Center

Source: Murphy and Knight (2009, p.2)

On the other hand, internal factors, refer to the possibility of creating added value for the Shared Service Center; this is related to the configuration of financial resources, effort, supplies, equipment, etc. Based on the value chain of Michel Porter, a model developed in the 1980s, the selection factors for the establishment of the Shared Service Center can be defined. According to Hill (2011, pp.403-405) these criteria refer to the technical and organizational capabilities provided by an area, local market plans, etc. An important criterion is the supply chain and the way it responds based on the needs of the global market. The key values during the selection process of a location for the establishment of the Shared Service Center are related to the financial resources, to the income that is secured, to the quality factors, to the competition trends and pressures, to the brand value and to the possibilities of product pricing. Also, another criteria refers to the ease of internal processes, in relation to suppliers, delivery times and in general the criteria refer to internal procurement, processes, new technologies, innovation, etc. (Swientozielskyj, 2015, p.49-60). Table 2-4 presents the chosen locations and the description of their subject features.

Table 2-4 Location main features

Location	Selection criteria	Localization Types
Poland	The Polish market provides a wide range of skills in human resources at competitive prices compared to other Western European countries. Also the knowledge of foreign languages is an additional beneficial criterion. Poland is a center in Europe; its culture is close to European countries and the USA.	Dedicated localisation
Brazil	An important selection criterion for Brazil is the existence of human capital that is familiar in using information systems, while its location, which is close to the USA is considered an additional selection advantage.	Dedicated localisation
Canada	Canada is a very good location for the US competing with South America, while its culture is closer to the North and presents a low risk of new entries.	Dedicated localisation
Costa Rica	Costa Rica provides a very good infrastructure and skilled professionals. The people have good knowledge of English and Spanish. It is one of the best and most competitive places for the American investors, and it is also interesting for Spanish companies	Dedicated localisation
Germany	Provides a well-educated and trained human capital who possess sufficient technical knowledge and foreign language knowledge as well.	Dedicated localisation
Mexico	It is the closest place to the US market providing people with IT skills and good knowledge of English and Spanish.	Dedicated localisation

The Philippines	The country has skilled workers with a strong culture; there are many companies established from the USA. There is a good infrastructure and low cost human resources.	Dedicated localisation
Great Britain	Domestic companies already provide outsourcing services to their customers, well-trained employees and very good infrastructure.	Dedicated localisation
USA	USA has access to a large pool of employees with different levels of knowledge and skills. Employees are well trained, there is a well-structured financial, legal and administrative system and there are many employees who have technical knowledge without any academic training and which reduces the cost of employment.	Dedicated localisation
India	It is a key destination for a Shared Service Center. The country is well organized to support business, the people have sufficient knowledge and academic training and there is a low cost workforce.	Volume localisation
China	This market is maturing over time in terms of business needs. Investment support is provided by the state. The market has sufficient knowledge in supporting foreign investors.	Volume localisation
Bulgaria	Bulgaria is the cheapest host country of a Shared Service Center in Eastern Europe in terms of staff salaries, taxes, and establishment costs. Its citizens have knowledge in new technologies.	Developing localisation
The Republic of Chile	It is a competitive market, beneficial mainly for Spanish companies, has good infrastructure and a stable economy	Developing localisation
Columbia	Colombia specializes in the services market, offers low cost employees and low cost rental areas. It also has many talented and hard working employees.	Developing localisation
The Republic of South Africa	It is mainly offered for African countries and companies based in this region. It has a stable legal system and good infrastructure to support outsourcing services.	Developing localisation
Indonesia	Low labor costs, low infrastructure costs and a large supply of labor.	Developing localisation
Sri Lanka	High quality of services provided, trained human resources, competitive salaries	Developing localisation

Source: Golnik (2017,pp.105-106)

There is a list of locations for the Shared Service Centres, which was concluded by Swientozielskyj (2015, p.14), based on the following:

Dedicated localization: These are perfectly adapted to investors who want to develop Shared Service Centers. They provide very well trained staff, with a degree in higher education and

a culture very close to the source countries. They are medium to high costs locations but they have good infrastructure and business development processes.

Volume localizations: These locations are characterized by highly educated employees well trained and specialized. The cost is usually low and there are several economic zones from which investors can choose the Shared Service Center. These locations are of high productivity. However there are issues in terms of quality, delivery and organization.

Developing localization: Their main feature is the low cost of both process development and investment maintenance. The infrastructure is in low levels and they do not have well-trained staff, at least more than the source country.

The choice of the location is a complex situation and through the research study it was found that *“the most repetitive value driven locations are: low cost locations, vast pool of skilled people, good and new office infrastructure, low training cost, etc. Each location has a certain number of advantages and disadvantages. It can be observed, for example in developing locations that the cost reduction is the significant driver, but infrastructure can be poorer or workforce could be less educated. That is why organization which decided to implement shared service model has to weigh up disadvantages against the cost saving”* (Golnik, 2017, pp.105-106).

Using Shared Service Centers is more effective than old strategies of either entering new markets or acquiring smaller units. This use greatly reduces production costs, while enabling innovative actions and the use of robotic production units that process low cost and high quality business products. Especially in heavy industries the use of robots reduces the risk to human resources and actions harmful to health. Locations that promote automation are preferred as well as locations that promote actions such as robots, the use of artificial intelligence, advanced new technologies. Automation reduces costs by 20% -30% (Steens 2011, p. 16). Based on the above and according to Górecki et al. (2014, p. 29) additional criteria are low labor costs, administrative costs, reduced use of human resources, technological infrastructure and dynamics, the use of more specialized service centers, financing options, etc. Based on the above, it is found that the basic criteria for selecting a country location for the establishment of a shared service center are first, the country specifics, then the characteristics of the region and society and finally the location itself.

Regarding the country specifics, the criteria are: state laws, mentality, political risks,

incentives, culture & economy, market position, workforce availability, productivity and costs, availability of suppliers, communication network, energy, trade, the risks of inflation and fluctuations in the national currency. Regarding the region and the society of the location, the criteria are: attractiveness of the location (culture, taxes, climate, etc.), labor force availability, costs, mentality, trade union, costs and availability of facilities, environmental rules of the location, government incentives, distance from raw materials & customers, cost of land purchase, construction, etc. Going forward and regarding the location criteria, the following can be found: size and cost of plots, proximity to airports, trains, highways, ports, zone restrictions, distance from necessary services & suppliers, environmental impact issues. From the above, a location evaluation method can be drawn, which can later support this paper in terms of methodology to evaluate Greece as a host country of a Shared Service Center. This method is the factors rating. The presentation accepts quantitative and qualitative evaluation factors. The quantitative evaluation factors are labor costs, the cost of renting spaces, etc. On the other hand, there are qualitative indicators that measure the quality of training, the skills of the staff, etc. Table 2-5 is an example of the factors rating method.

Table 2-5 Factors rating

Sl. No.	Location factor	Factor rating (1)	Location 1		Location 2	
			(Rating) (2)	Total= (1) . (2)	(Rating) (3)	Total = (1) . (3)
1.	Facility utilization	8	3	24	5	40
2.	Total patient per month	5	4	20	3	15
3.	Average time per emergency trip	6	4	24	5	30
4.	Land and construction costs	3	1	3	2	6
5.	Employee preferences	5	5	25	3	15
			Total	96	Total	106

Source: Golnik (2017,pp.105-106)

Based on this method, relevant findings will be presented with the locations examined in Table 2-6

Table 2-6 Location main features

Dedicated localisation	Eastern Europe, USA, Poland	Most of the Shared Service Center must be located out of the main cities in order to eliminate the operating costs. As already said, Poland is the most preferred location for an
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		SSC. According to Global Report Tholons of 2016, there are three cities in Poland that be the best for the Shared Service Center(Krakow 9th place, Warsaw 25th place, Wroclaw (58th place) (Tholon 2016, p. 2-6)
Developing localisation	Czech Republic, Hungary, Bulgaria, Romania	Here there is no popular location, each country has different advantages and can be chosen for different reasons. Czech Republic consist a small country with limited work force that is highly educated. Hungary is similar to Poland but is lower in education levels. Bulgaria and Romania are the cheapest locations. The countries have low infrastructure level but a high level of knowledge. Finally, it is easy to access the Middle East with low risk.
Volume localisation	India	This country is the cheapest choice for a Shared Service Center. It is a location with good quality services, highly experienced and educated workforce and a large number of young population. Also the labor cost is low.

Source: Golnik (2017,pp.105-106)

Table 2-7 presents an example concerning the factor rating model in the evaluation of specific countries.

	Czech Republic	Poland	Hungary	Bulgaria	Greece	Romania	Italia	USA	Western Europe
Other direct operational costs	4	3	3	2	2	2	1	6	9
IT hardware, software and telecommunications	4	4	4	2	2	2	1	7	10
General administration costs (inclusive recruitment and training)	6	6	5	4	5	3	2	10	15
The cost of real estate and office equipment	8	7	6	4	4	3	3	12	18
Salaries and non-wage benefits	42	36	35	23	21	17	14	66	96
Total	66	56	53	35	34	27	19	101	148

3. Methodology

3.1 Aim

The purpose of this study is to explore the ranking sensitivity of different countries according to the ranking procedure followed. Specifically, we have examined the ranking sensitivity of the countries in relation to the compensatory, which aggregate function the researcher will use, (Giacomo Solano, 2021) or a non compensatory method. The main difference between the two procedures is that the non compensatory method does not permit trade offs between attributes. This means that an unfavourable value for example, in one attribute cannot be compensated by a favourable value in an other attribute or attributes.

3.2 Data

The collection of the Greek data was performed using studies as guides that refer to Greece, before the period of the pandemic and after the economical crisis. This period shows two different pictures for Greece; on the one hand, the country showed increasing trends in terms of indicators exactly after the crisis and on the other hand, somewhere in the transitional phase from 2019-2020, there was a downward trend which was common throughout Europe and in all the countries affected by COVID-19. The studies that were used as guides for Greece, include the Enterprise Greece Invest & Trade and a guide from Adecco that is related to Human Capital in Greece and a study which aimed to show the level of education, skills and experience of the human workforce in the Greek market. Additional data were collected from the study of 2018 in relation to the examination of the capabilities of Greece as an investment destination. Finally the study “Invest in Greece” was used, since it represents all the areas that are worth investing in Greece. Driven by the Deloitte study, data were also extracted regarding the weights that must be taken into account when evaluating an investment. According to Deloitte (2018, p.6) it was found that a variable has a weight set by the designating body where the weight is the percentage of the final rating of a country. For example Deloitte (2018) evaluates the political risk with a 10%. So if a country (excellent score 10 or 20) receives a high score in this indicator, for example 8 or 18, it should be multiplied by the weight of the index. The weight determines whether a score should be taken into account or not, in relation to the evaluation of specific countries. For

example, according to Deloitte (2018, p.6), human resources have a high weight of 40% and thus, if a country receives a score on the index of 5 or 15, it will be multiplied by a high weight and will definitely determine the investment prospect of a company. Table 3-1 gives the Deloitte Table as an example.

Table 3-1 Location selection criteria

Location selection criteria (used for business fit assessment)	Weight
Risks Political stability	10%
Human resources	40%
Availability of general and specific tertiary education graduates	
Availability of relevant junior and experienced process skills	
Availability of (relevant) language skills	
Labour regulations and practices (firing, hiring, working time)	
Labour fit (cultural proximity to markets served)	
Infrastructure, accessibility, hazards	20%
Suitable facilities availability (6-12 months)	
Quality of telecommunications infrastructure	
International airway connectivity	
Operating environment	10%
Relative absence of corruption	
Location appeal	15%
High quality of life appreciation for nationals	
Local public transport network quality	
Taxation & incentives	5%
Tax policy stability	

Source: Deloitte(2018,p.6)

3.3 Sensitivity Analysis (Procedures / Ranking scores)

In this study and in the case of the compensatory methods, we have used the arithmetic mean and the geometric mean approach. In the case of the non compensatory methods we have used the dominant method (it eliminates all dominated alternatives and there may be a case where the result is more than one solution), the maxmin method with which the researcher selects the weakest attribute value of each alternative and is followed by the selection of the best weakest attribute and finally the maxmax method, with which the researcher selects the strongest attribute value of each alternative and is followed by the selection of the best of the strongest attributes. (Hwang and Yoon, 1981)

Additionally, we have implemented a sensitivity analysis for Greece related to the case of the average or the geometric ranking procedure. Specifically, we have tested the first four

factors/criteria:

- Other direct operational costs
- IT hardware, Software and telecommunications
- General administration costs (recruitment and training included)
- Cost of real estate and office equipment

The average and the geometric score of the ranking of Greece were calculated keeping stable the three of the four factors/criteria while the ranking values of the other countries remained stable as well. The calculated values were compared to the initial ranking of Greece.

4. Results

In this section, following the analysed studies and the data collected, specific results are presented based on the relevant calculations in order to explain the process of selecting a country as an investment destination for a company. The countries were selected according to the data identified in the article published by Golnik (2017), while the sensitivity analysis was based on this process, so that with the completion of the workings a comparison could be made on the results of this present study, but also with any new research related to the subject.

Table 4-1 Compensatory method, Arithmetic and geometric mean

	Other direct operational costs	IT hardware, software and telecommunications	General administration costs (inclusive recruitment and training)	The cost of real estate and office equipment	Salaries and non-wage benefits	Arithmetic mean	Geometric mean
Czech Republic	4	4	6	8	42	12.80	7.97
Poland	3	4	6	7	36	11.20	7.11
Hungary	3	4	5	6	35	10.60	6.61
Bulgaria	2	2	4	4	23	7.00	4.30
Greece	2	2	5	4	21	6.80	4.42
Romania	2	2	3	3	17	5.40	3.61
Italia	1	1	2	3	14	4.20	2.43
USA	6	7	10	12	66	20.20	12.72

In the table 4-1 it can be observed that using the arithmetic mean, the ranking classifies in the first position USA, in the second position is Czech Republic, in the third position is Poland, in the fourth position is Hungary, in the fifth position is Bulgaria, in the sixth position is Greece, in the seventh position is Romania and in the eighth position is Italia. Under the geometric mean approach, the results are slightly changed where we can see that Greece and Bulgaria alter their position by having Greece in the fifth position and Bulgaria in the sixth position. USA, Czech Republic, Poland, Hungary, Romania and Italia keep the same positions as in the arithmetic mean approach.

Table 4-2 Non Compensatory method, Maxminmethod

	Other direct operational costs	IT hardware, software and telecommunications	General administration costs (inclusive recruitment and training)	The cost of real estate and office equipment	Salaries and non-wage benefits	Minimum	Maxmin
Italia	1	1	2	3	14	1	6
Romania	2	2	3	3	17	2	
Greece	2	2	5	4	21	2	
Bulgaria	2	2	4	4	23	2	
Hungary	3	4	5	6	35	3	
Poland	3	4	6	7	36	3	
Czech Republic	4	4	6	8	42	4	
USA	6	7	10	12	66	6	

According to the table 4-2 it can be observed that the maxmin procedure results in the first position USA, in the second position is the Czech Republic, in the third position are Poland and Hungary, in the fourth position are Greece, Bulgaria and Romania and in the fifth position is Italy.

Table 4-3 Non Compensatory method, Dominance method

	Other direct operational costs	IT hardware, software and telecommunications	General administration costs (inclusive recruitment and training)	The cost of real estate and office equipment	Salaries and non-wage benefits
Italia	1	1	2	3	14
Romania	2	2	3	3	17
Greece	2	2	5	4	21
Bulgaria	2	2	4	4	23

Hungary	3	4	5	6	35
Poland	3	4	6	7	36
Czech Republic	4	4	6	8	42
USA	6	7	10	12	66

In the table 4-3 it can be observed that the dominance method results in the first position USA (all values of each attribute dominate the values of the other six countries, the same is true for Czech Republic in relation to the remaining five countries e.t.c), in the second position is the Czech Republic, in the third position is Poland, in the fourth position is Hungary, in the fifth position is Greece, in the sixth position is Bulgaria, in the seventh position is Romania and in the eighth position is Italy.

Table 4-4 Non Compensatory method, MaxMax method

	Other direct operational costs	IT hardware, software and telecommunications	General administration costs (inclusive recruitment and training)	The cost of real estate and office equipment	Salaries and non-wage benefits	Maximum	MaxMax
Italia	1	1	2	3	14	14	66
Romania	2	2	3	3	17	17	
Greece	2	2	5	4	21	21	
Bulgaria	2	2	4	4	23	23	
Hungary	3	4	5	6	35	35	
Poland	3	4	6	7	36	36	
Czech Republic	4	4	6	8	42	42	
USA	6	7	10	12	66	66	

In table 4-4 it can be observed that the maxmax method results in the first position USA, in the second position is the Czech Republic, in the third position is Poland, in the fourth position is Hungary, in the fifth position is Bulgaria, in the sixth position is Greece, in the seventh position is Romania and in the eighth position is Italy.

Table 4-5 Sensitivity Analysis of four factors

	Other direct operational costs					Arithmetic mean		Geometric mean	
	IT hardware, software and telecommunications								
	General administration costs (inclusive recruitment and training)								
	The cost of real estate and office equipment								
	Salaries and non-wage benefits								
Other direct operational costs - Ceteris paribus	0.1	2	5	4	21	6.42		2.43	
Other direct operational costs - Ceteris paribus	1	2	5	4	21	6.60		3.84	
Other direct operational costs - Ceteris paribus	2	2	5	4	21	6.80		4.42	
Other direct operational costs - Ceteris paribus	3	2	5	4	21	7.00		4.79	
Other direct operational costs - Ceteris paribus	4	2	5	4	21	7.20		5.07	
Other direct operational costs - Ceteris paribus	5	2	5	4	21	7.40		5.30	
Other direct operational costs - Ceteris paribus	6	2	5	4	21	7.60		5.50	
IT hardware, software and telecommunications - Ceteris paribus	2	0.1	5	4	21	6.42		2.43	
IT hardware, software and telecommunications - Ceteris paribus	2	1	5	4	21	6.60		3.84	
IT hardware, software and telecommunications - Ceteris paribus	2	2	5	4	21	6.80		4.42	

IT hardware, software and telecommunications - Ceteris paribus	2	3	5	4	21	7.00	4.79
IT hardware, software and telecommunications - Ceteris paribus	2	4	5	4	21	7.20	5.07
IT hardware, software and telecommunications - Ceteris paribus	2	5	5	4	21	7.40	5.30
IT hardware, software and telecommunications - Ceteris paribus	2	6	5	4	21	7.60	5.50
IT hardware, software and telecommunications - Ceteris paribus	2	7	5	4	21	7.80	5.67
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	0.1	4	21	5.82	2.02
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	1	4	21	6.00	3.20
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	2	4	21	6.20	3.68
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	3	4	21	6.40	3.99
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	4	4	21	6.60	4.22
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	5	4	21	6.80	4.42
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	6	4	21	7.00	4.58
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	7	4	21	7.20	4.72
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	8	4	21	7.40	4.85
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	9	4	21	7.60	4.97
General administration costs (inclusive recruitment and training) - Ceteris paribus	2	2	10	4	21	7.80	5.07

The cost of real estate and office equipment- Ceteris paribus	2	2	5	0.1	21	6.02	2.11
The cost of real estate and office equipment- Ceteris paribus	2	2	5	1	21	6.20	3.35
The cost of real estate and office equipment- Ceteris paribus	2	2	5	2	21	6.40	3.84
The cost of real estate and office equipment- Ceteris paribus	2	2	5	3	21	6.60	4.17
The cost of real estate and office equipment- Ceteris paribus	2	2	5	4	21	6.80	4.42
The cost of real estate and office equipment- Ceteris paribus	2	2	5	5	21	7.00	4.62
The cost of real estate and office equipment- Ceteris paribus	2	2	5	6	21	7.20	4.79
The cost of real estate and office equipment- Ceteris paribus	2	2	5	7	21	7.40	4.94
The cost of real estate and office equipment- Ceteris paribus	2	2	5	8	21	7.60	5.07
The cost of real estate and office equipment- Ceteris paribus	2	2	5	9	21	7.80	5.19
The cost of real estate and office equipment- Ceteris paribus	2	2	5	10	21	8.00	5.30
The cost of real estate and office equipment- Ceteris paribus	2	2	5	11	21	8.20	5.41
The cost of real estate and office equipment- Ceteris paribus	2	2	5	12	21	8.40	5.50

Note: the red values depict the values when the ranking of Greece changes

In the table 4-5 it can be observed that the overall ranking of Greece, according to the average ranking procedure, is stable when the score is 2 to 3 for the factors “Other direct operational costs” & “IT hardware, software and telecommunications”. Under the geometric mean procedure, it is stable when the score is 2+. The overall ranking of Greece, according to the average ranking procedure, is stable when the score is 5 to 6 for the factor “General administration costs (inclusive recruitment and training)”. Under the geometric mean procedure, it is stable when the score is 5+. Finally, the overall ranking of Greece, according to the average ranking procedure, is stable when the score is 4 to 5 for the factor “The cost of real estate and office equipment”. Under the geometric mean procedure, it is stable when the score is 4+. The geometric mean approach in all the cases of the aforementioned score values below the lower bound, indicates a reduction in the ranking of Greece and when using the arithmetic mean approach, values above the upper bound indicate an increase in the ranking of Greece. In the case of the average ranking procedure Greece will be ranked below Romania or above Bulgaria and in the case of the geometric ranking procedure Greece will be ranked below Bulgaria or above Hungary.

4.1 The case of Greece

Foreign Direct Investment (FDI) will play a central role in the recovery of the economy in the post-corona era. However, the country’s performance in the recent decades and in terms of attracting investment is disappointing. According to EY European Investment Monitor (EIM), an extensive database processed by EY, which monitors investments in projects that create new facilities and new jobs, Greece, in 2019 received only 0.34% of the European FDI, a percentage disproportionately small in relation to its population and GDP. However, it has improved its ranking compared to last year and the decade 2009-2018, as it was ranked in the 29th place for 2019, compared to the 35th in 2018, and the 32nd place that was held for a decade. It has also improved some quality indicators, such as the share of the critical digital technology sector in total FDI, which has risen to 15% in the last three years, approaching the European average (19%) for the same period (Enterprise Greece Invest & Trade, 2020).

Looking ahead and in contrast to the country’s low performance over time, investor sentiment as recorded in last year’s survey, remains positive and despite the hesitated

attitude created by the pandemic, it has improved some critical indicators, especially among businesses that have already invested in Greece. On the other hand, investors who do not have a presence in the country remain cautious.

According to the 38% of the investors, the perception of the country as a possible investment destination has been improved during the last year, an encouraging percentage, although reduced compared to the last year (47%). 62% of the companies, from 50% last year, believe that our country is pursuing an investment policy today, which makes it attractive, suggesting that investors now attribute the continuous improvement of the country's placement to the existence of a clear and attractive investment policy.

At the same time, 69% estimate that the country's picture will improve over the next three years, while 28% intend to invest in Greece next year, by far the highest percentages among countries where similar surveys were conducted this year. In terms of the type of planned investments, the increased participation of the industry (26% from 9% last year) is positively impressive. At the same time, the percentage of those who believe that tourism will be the driving force of the development of the Greek economy, decreased from 69% to 52% (Enterprise Greece Invest & Trade, 2018).

Key elements of the country's attractiveness are the quality of life, telecommunications infrastructure and human resources skills, while an increased number of companies refer to the political/social stability and the country's policies for sustainability and climate change as well. At the same time, investors believe that, in order to improve its position, Greece should focus on supporting innovation and high technology (first choice this year, 38% from 25% last year), tax cuts (in second place with 36% from 49%), improving the justice process (33%) and enhancing education and skills (31%).

Table 4-5 Key elements of the country

81%	Quality of life remains the primary element of the country's attractiveness.
65%	Stable political and social environment. It is emerging as a new key element of attractiveness.
56%	Sustainability and climate change policies. The perception of the country's performance in this area is significantly improved.

(Enterprise Greece Invest & Trade, 2020)

Two out of three investors (67%) state that they would be more willing to invest in the country, if the negative points that currently act as a deterrent are addressed, a percentage

that reaches 83% adding those who are already established in Greece. The investment community recognizes the successful response to the health crisis from Greece (77%), the speed of digitalization of the State during the crisis (73%) and the impact of measures to support the economy (72%), while 41% report that these factors improved the image of the country as an investment destination. Finally, the pandemic seems to affect the plans of investors for the country, but not dramatically, as 50% state that they will not change their plans, 28% responded that they will “freeze” their plans temporarily, 4% that they will lessen them, 3% that they will reinforce them and 6% that they will cancel them completely (Adecco Group, 2020).

5. Conclusion

This study aimed to examine the sensitivity of ranking different countries according to the ranking procedure followed or the ranking of the countries in the different factors/criteria. The ranking procedure examined whether the ranking of the countries changes in relation to the use of a compensatory or a non compensatory method. The use of the compensatory methods, arithmetic and geometric mean resulted in the first position USA, in the second position was the Czech Republic, in the third position was Poland, in the fourth position was Hungary, in the fifth and sixth position was Greece and Bulgaria (the ranking between the two methods was slightly different but very close), in the seventh position was Romania and in the eighth position was Italy.

With regards to the non compensatory methods, two of them, the dominance and the maxmax method resulted in the same ranking as in the compensatory methods. However, the ranking of the maxmin method was slightly different. In the first position was USA, in the second position was Czech Republic, in the third position was Poland and Hungary, in the fourth position were Greece, Bulgaria and Romania and in the fifth position was Italy. The different ranking systems indicated that Greece is somewhere in the middle with countries like Bulgaria and Romania and certainly above Italy. However, the countries Czech Republic, Hungary, Poland, USA were in a better position than Greece.

In the case of the results of the sensitivity analysis of the scores attributed to each factor / criteria regarding Greece, the analysis resulted that the overall ranking of Greece according to the average and geometric ranking procedure is stable when the score is 2 to 3 and 2+ in terms of “Other direct operational costs” & “IT hardware, software and telecommunications”. Also, the overall ranking of Greece according to the average / geometric ranking procedure is stable when the score is 5 to 6 / 5+ in the case of the factor “General administration costs (inclusive recruitment and training)”. Finally, the overall ranking of Greece according to the average / geometric ranking procedure is stable when the score is 4 to 5 / 4+ in the case of the factor “The cost of real estate and office equipment”. The above results suggest that it would be wise for Greece to improve its score in the factors / criteria of “Other direct operational costs” & “IT hardware, software and telecommunications”.

Based on the above and in relation to Greece, which was found to be a favorable destination

for an investor, the following are proposed for the future: 1) Further strengthening of the digital infrastructure, with priority on fast and reliable connectivity and reduction of connection costs 2) Utilization of Artificial Intelligence. The integration of Artificial Intelligence in the private and public sector, is a key priority; 3) Strengthening R&D and closer cooperation between academia and the business community, so that the product of primary research can be turned into marketable applications 4) Establishment of shared service centers according to the model abroad, close to the educational and business centers of the country, which will co-host a wide range of professional services to third parties (human resources management, cybersecurity services, anti-money laundering, etc.). This is a wider and very important labor-intensive activity, which can contribute to the wider reduction of unemployment and the repatriation of Greek scientists from abroad (brainregain) 5) Establishment of a performance-based research funding system 6) Support for start-ups through easier access to funding 7) Strengthening the digital skills of human resources through graduate retraining programs 8) Simplifying tax and other incentives to boost innovation and research and development, but also promoting these incentives 9) Establishment of innovation centers based on public-private partnerships, with an emphasis on areas such as Artificial Intelligence and Robotics, 3D printing, nanotechnology and biotechnology.

Based on the studies by Golnik (2017) and Deloitte (2018) as basic and some secondary studies related to the subject that focused on more specific investments using destination evaluation criteria, some final findings were made regarding the present study. Golnik (2017) concluded that there are various criteria that are consistent for each country and which refer to raw materials, labor security, economic situation, etc. These indicators are then scored based on how each researcher deems fit and also based on the dynamics of each indicator. For example if a country is strong in human resources it receives more than 5, which is the index based on its weight and is evaluated in order to reach a final conclusion. This was also performed by the Deloitte study (2018) which focused mainly to the indicators and their weights. Studies such as those of Guler and Yomralioglu (2020) evaluate a point based on the energy and technological infrastructure and virtually all the criteria and weights consisting them in order to decide about the investment in a relevant reference field and the installation of relevant technologies.

Wang et al. (2021) conducted a broader study of indicators for the development of public

services to better meet large-scale needs at the district level based on population dynamics. All the studies were found to be based on weights referred in previous studies and the authors performed the criteria evaluation based on a database identified in previous studies as well. Finally the score assessment was based on a level that they considered more realistic. This was also performed in the present study and led to conclusions regarding the general potential of Greece as an investment destination and also led to the evaluation of a destination at an investment level in relation to other destinations, always followed by the same attempt of developing an investment action. In the future and as an additional research on this topic, the proposal is to develop a more detailed study that will include more countries and more indicators based on the same and additional variables. This will help to draw an even more objective conclusion for Greece and other countries that aim to strengthen their economies by attracting investments from large companies, which from their side, are looking for investment destinations in order to strengthen and improve their position in the global market.

Moreover, in the future, the study could combine additional types of research such as quantitative and qualitative process of research, which will enhance the assessment by using the opinion of people who have specific and sufficient information on the subject.

This will result in developing an even more comprehensive guide with regards to the criteria and data that a company must take into account in order to proceed with a profitable and safe investment in one or more countries of its preference.

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