A Work Project, presented as part of the requirements for the Award of a Master's degree in Impact Entrepreneurship and Innovation from the Nova School of Business and Economics.

HARMONIZING IMPACT: INTRODUCTION TO EUROPEAN SOCIAL ECONOMY SATELLITE ACCOUNTS

TOMMASO VENEZIA

Work project carried out under the supervision of:

Lénia Mestrinho

Leid Zejnilovic

20/12/2023

Abstract

This thesis provides an in-depth exploration of Social Economy Satellite Accounts (SESA), emphasizing their importance in modern economic analysis. It discusses the methodologies, challenges, and future opportunities associated with SESA, focusing on case studies from Portugal, France, and Poland. The study explores the integration of data science, highlighting how technological advancements like AI and machine learning are transforming SESA, enhancing data analysis and policy development. It underscores the significance of SESA in capturing the economic contributions of non-traditional sectors, such as volunteer work, and their role in shaping inclusive and sustainable economic policies.

Keywords:

Social Economy Satellite Accounts (SESA) / Economic Analysis / Data Science Integration / Comparative Case Studies / Portugal, France, Poland / Methodology and Metrics / Policy Development / Technological Advancements / Artificial Intelligence / Machine Learning / Nontraditional Economic Contributions / Sustainable Development / Volunteer Work Valuation / Economic Resilience / Strategic Planning / Stakeholder Engagement

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

The study carried out exclusively by the author, Tommaso Venezia, only covers:
Introduction, Chapter 1, Chapter 2 and Chapter 3.
The remaining parts have been made in collaboration with other two colleagues.

TABLE OF CONTENTS

INTRODUCTION

This thesis delves into the exploration of Social Economy Satellite Accounts (SESA), an innovative and increasingly relevant approach in modern economic analysis. SESA provides a rich perspective on the economic contributions of sectors often unseen in traditional national accounts, such as non-profit organizations, cooperatives, and volunteer activities.

The European social economy provides over 13.6 million paid jobs in Europe, accounting for 6.3% of the total EU working population of the EU-28 (European Union). Despite its size, the social economy remains invisible in the national accounts and statistics around Europe, a hurdle that constitutes another major challenge, although efforts have been made during the last two decades. (CIRIEC 2016)

The primary aim of this study is to demonstrate how SESA can offer a more nuanced and comprehensive analysis of the social economy, thereby contributing to more effective strategic planning and policy formulation. In order to do so is needed an effective benchmarking of European SESAs, that allows an easy comparison between the different states of the 28 European Countries.

The study focuses on a comparative analysis of SESA (or related) practices in three distinct national contexts - Portugal, France, and Poland - highlighting their unique approaches and the insights that can be drawn from their diversities. The main objective is understanding to what extent the harmonization of methodologies in constructing social economy satellite accounts has improved data comparability among France, Portugal, and Poland over the past ten years. In order to do so, it's fundamental to analyse which specific indicators demonstrate significant convergence or divergence in methodological approaches.

Through this exploration, we aim to underscore the need for a growing importance of SESA in understanding the various facets of the social economy and their crucial role in shaping inclusive and sustainable economic policies. It emphasizes the need for close collaboration among various stakeholders - governments, academic institutions, social economy organizations, and civil society - in order to fully leverage the potential of SESA in crafting economic strategies that meet the current and future needs of societies.

Chapter 1: Satellite Accounts – An Overview

This chapter introduces the concept of satellite accounts, a key element in our exploration of economic phenomena, particularly within the realm of the social economy.

Satellite accounts, by their nature, extend and complement the data provided by the standard national accounts, enabling a more detailed and sector-specific economic analysis. They allow for a better comprehension of the economic contributions and potentials of sectors that are not primarily profit-driven, yet hold substantial importance in societal development and welfare. For this reason, they are extremely useful in scenarios where conventional economic metrics fail to encompass the full complexity of activities, particularly in fields that are more difficult to analyze such as the third sector.

1. Definition and Basic Principles of Satellite Accounts

Satellite accounts represent a specialized accounting framework, designed to supplement the traditional system of national accounts. Their primary purpose is to provide a detailed and comprehensive analysis of specific economic sectors or themes that are not typically dissected in depth within the standard national accounting framework (Eurostats 2023).

At its core, a satellite account is defined by its ability to expand upon the data and insights offered by national accounts. While national accounts offer a broad overview of an economy's performance, satellite accounts delve into specific areas, providing clarity and detail on aspects often overlooked or aggregated in general economic analyses. This detailed focus allows for a more nuanced understanding of certain sectors, such as the social economy, environmental economics, or the cultural sector, which are integral to a comprehensive understanding of a nation's overall economic health.

The design and implementation of satellite accounts are guided by several basic principles. Firstly, they maintain compatibility with the broader national accounts, ensuring that their findings and data can be integrated and compared with the national economic data (Ramos 2019). This compatibility is crucial for drawing meaningful and coherent conclusions.
Secondly, satellite accounts are characterized by their flexibility in methodology and scope (Unstats n.d.). They are tailored to suit the unique attributes of the sector or theme they are focused on, allowing for the incorporation of non-traditional economic indicators and valuation methods.

Additionally, satellite accounts are structured to provide clarity and insight into the interactions between the examined sector and the broader economy. This includes tracing the flow of economic value, assessing the impact of sectoral activities on employment, production, and consumption patterns, and understanding how these interactions contribute to the overall economic landscape.

In essence, satellite accounts serve as a bridge between the macroeconomic perspective provided by national accounts and the detailed, sector-specific insights needed for comprehensive economic analysis. This section lays the groundwork for understanding how these accounts function and their importance in shedding light on the complexities of the social economy, which will be further explored in the subsequent sections of this chapter and throughout the thesis.

2. Significance of Satellite Accounts in Economic Analysis

The true significance of satellite accounts emerges in their unique ability to enrich economic analysis, offering insights that transcend the boundaries of traditional economic metrics. In this section, we delve into the crucial role these accounts play in augmenting our understanding of

economic phenomena, especially in sectors that are not fully captured by standard economic indicators.

Satellite accounts are particularly vital in contexts where the economic activities are multifaceted and diverse, such as in the social economy. The social economy, encompassing a range of activities from non-profit organizations to cooperative enterprises, often operates on principles that differ significantly from those of the for-profit sector. Traditional economic indicators, while effective in measuring profit-driven activities, can fall short in capturing the full economic value and impact of such organizations. Satellite accounts bridge this gap by providing a framework that can encapsulate the unique economic contributions of these entities, including their social value, employment generation, and contribution to Gross Domestic Product (GDP).

The application of satellite accounts enables a more holistic understanding of the economy, highlighting sectors that contribute not only in monetary terms but also in terms of social welfare, environmental sustainability, and cultural enrichment (European Union 2021). This expanded perspective is crucial for policymakers, economists, and stakeholders who seek a comprehensive understanding of an economy's diverse components. For instance, in assessing the impact of the social economy, satellite accounts can reveal how these entities contribute to job creation, social inclusion, and local development (José Barea 2006), factors that are critical for informed policy-making and strategic planning.

Furthermore, satellite accounts facilitate better alignment of economic strategies with social objectives. Through meticulous collection of nuanced data in areas such as healthcare, education, and environmental management, these narratives foster the development of strategies that are not only economically astute but also socially benevolent. This congruence

has a fundamental significance in the contemporary era, in which fiscal choices are examined through the prism of their social and ecological repercussions.

3. Global Overview of Satellite Accounts

The adoption and utilization of satellite accounts have gained traction globally (The Tourism Satellite Account as an Ongoing Process: Past, Present and Future Developments 2001), demonstrating their versatility and value across various economic contexts. This section offers a panoramic view of how satellite accounts have been embraced and implemented around the world, highlighting their adaptability to different economic systems and needs.

Globally, the application of satellite accounts has varied significantly, reflecting the diverse economic priorities and analytical requirements of different countries. In developed economies, for instance, satellite accounts have often been used to examine sectors like culture, tourism, and the environment, providing insights into areas crucial for sustainable development and policy planning. In these contexts, satellite accounts have played a key role in quantifying the economic impact of non-traditional sectors, aiding in the formulation of strategies that balance economic growth with cultural preservation and environmental sustainability (Ven 2021).

In developing countries, on the other hand, satellite accounts have been instrumental in highlighting the contributions of sectors such as agriculture, informal economy, and social services. These accounts have provided crucial data necessary for understanding the broader economic landscape, especially in regions where a significant portion of economic activity occurs outside the traditional market framework. By capturing these aspects, satellite accounts have aided in developing policies that are more inclusive and representative of the actual economic activities in these countries.

The application of satellite accounts also reflects the influence of international guidelines and collaborations. Organizations like the United Nations and the World Bank have been instrumental in promoting the use of satellite accounts, offering frameworks and support for their implementation. This international cooperation has facilitated the standardization of methodologies, making it easier for cross-country comparisons and global economic analysis (United Nations New York 2018).

Despite their widespread adoption, the degree of sophistication and focus of satellite accounts varies globally. Some countries have developed highly detailed accounts for specific sectors, while others are still in the early stages of incorporating these tools into their economic analysis frameworks. This diversity reflects not only the differing economic structures and priorities but also the varying levels of resources and expertise available for economic analysis.

4. Data Recollection for SESA

The production of National Accounts consists, in simplistic terms, of integrating, reconciling and balancing different official sources of information, which have already undergone rigorous validation and quality analysis processes (Ramos 2019).

SESA is meticulously compiled using existing data sources, without the need for additional surveys tailored for this specific project—a distinctive feature and strength shared by satellite accounts in general. The primary data contributors for estimating both monetary and nonmonetary variables include Statistics Portugal (INE) and various other sources.

Statistics Portugal (INE) plays a pivotal role, utilizing several work files within the National Accounts. These files encompass estimates for key operations of the European System of

Accounts, such as Output, Intermediate Consumption, Compensation of employees, Gross Value Added (GVA), subsidies, and taxes. The General Register of Statistical Units (FUE) serves as a crucial instrument for coordinating and harmonizing information on enterprises, establishments, and various organizational typologies. This register integrates administrative records from external entities, contributing to a comprehensive dataset.

In order to make the SESA as much representative of the real context, then, many other data sources are needed. The Survey on employers' associations, unions, federations, and confederations (IAP) focuses on specific segments of associations and social economy entities, gathering information on physical indicators and Accounting Standards System (SNC) accounts. Similarly, the Survey of Mutual Associations (IASM) provides disaggregated information on financial and physical indicators related to Mutual Assistance Associations.

Other significant data sources include the Labour Force Survey (LFS) for labor market characterization, the Survey on Fire Brigade entities (IEDCB) for data on fire prevention and fighting activities, and the Survey on environmental non-governmental organizations (IONGA) for environmental statistics production.

Beyond INE, various additional sources contribute valuable data, such as detailed analytical balance sheets of central government entities, the Archeevo database of the General Secretariat of the Ministry of Internal Administration, and the General State Account (CGE). Financial statements of CASES-accredited cooperatives, Social Security data, IPSS Budget and Accounts (OCIP), and reports from different entities also play a crucial role.

The approach to compiling the satellite account emphasizes a close relationship with the System of National Accounts. Consistency is maintained across institutional sectors by using the same data sources, applying consistent methods, and conducting thorough comparisons to ensure the reliability and coherence of the final results.

5. Legislation governing satellite accounts in the social economy sector

Firstly, satellite accounts must comply with current international and national accounting standards. This ensures uniformity of accounting practices, making it easier to compare data between countries.

In addition to these standards, some countries have put in place specific regulations to guide the preparation of satellite accounts. These regulations may define the entities to be included, the classification criteria, and the data collection methodologies specific to the sector.

In the European context, European Union (EU) directives can play a crucial role. EU policies often aim to promote the social economy, and directives enable satellite accounts to be drawn up in line with the EU's economic and social objectives.

Satellite accounts are also governed by laws designed to ensure transparency and accountability. These laws may require the disclosure of financial and operational information to ensure the sound and responsible management of social economy entities.

Legislation must also address the issue of access to information and data confidentiality. It must strike a balance between the need to provide useful information to the public and the protection of sensitive information held by social economy entities.

Some countries may even require independent verification mechanisms for satellite accounts. This guarantees the reliability and integrity of the data presented, reinforcing the credibility of the collection and compilation process.

Chapter 2: Methodology for Benchmarking Satellite Accounts

1. Criteria for selecting reference countries

The choice of reference countries plays a crucial role in the benchmarking process, particularly when examining social economy satellite accounts. As previously mentioned, our main point of reference will be Portugal, and we will compare its approach to social economy satellite accounts with global practices. However, as it is difficult to compare with every country, our main focus will be a comparative analysis with France and Poland. The criteria for selecting these reference countries are based on several key considerations, all designed to ensure that the resulting comparisons are relevant, illuminating and promote understanding of the distinctive aspects of the social economy in Portugal, France and Poland.

Economic similarities and differences:

A key criterion is the assessment of economic structures and stages of development. Although Portugal, France and Poland are united under the banner of the European Union, each country has a distinct economic character. France is among Europe's largest economies, with a diversified industrial base, while Portugal and Poland, though smaller in comparison, have experienced significant economic growth and development in recent years (International Monetary Fund 2023). This variation offers a rich comparative perspective, enabling us to analyze the operation of satellite accounts in economies of different sizes and structures.

Structure and scope of the social economy:

The nature and extent of the social economy in these countries is also crucial. We know that in Europe, the social economy represents around 6.3% of the working population in the 28 member states (CIRIEC 2016, 23). Of course, each country has its own unique mix of social economy entities such as cooperatives, non-profit organizations and mutual societies. For example, France has a well-developed and diversified social economy sector (BRANDELEER 2013), reflecting its broader economic transition with a proportion of paid employment in the social economy to total volume of 9.1% (CIRIEC 2016, 25). Portugal, with its strong tradition in cooperative movements (Marie 2016), presents another distinct model with a proportion of paid employment in the social economy in relation to total volume of 5.0% (CIRIEC 2016, 25).

Finally, Poland still has room for improvement, with a proportion of paid employment in the social economy in relation to total volume of just 2.3%.

We can see that each country is at a different stage in the development of its social economy, despite its membership of the European Union. This is why it is interesting to compare these 3 countries.

Data availability and quality:

The availability of reliable, high-quality data is fundamental to any benchmarking exercise. It is essential to select countries where data on the social economy is readily available and meets certain standards of reliability and consistency. This ensures that the benchmarking exercise is based on a solid empirical foundation.

France, through its legislative advance with the law of July 31, 2014 (French government 2014) relating to the social and solidarity economy, allows for the creation of a social utility solidarity enterprise status. This ensures that information is constantly available via a sustainable and

solidarity development booklet on all companies (ESS France s.d.). This booklet will contain the following information: Company name, acronym if applicable; Legal form; Registered office; Common name of company; Company address; Company identity number (SIREN).

For Poland, the publication of the latest satellite account of the social economy dates from 2021 and concerns the year 2018 (GUS 2018) . We should also note that Poland has decided to place this publication in the "Experimental statistics" section.

And for Portugal, the latest publication of the social economy satellite account dates from 2020.

Socio-cultural contexts:

Socio-cultural factors also play a role in shaping the social economy. For example, historical, cultural and social factors in Poland, which underwent significant economic and political transformations after 1989, have shaped its social economy in unique ways.

Similarly, Portugal's history and culture have influenced its social economy sector, particularly in areas such as cooperative movements and mutual societies.

As for France, we know of its strong social past.

By applying these criteria, we ensure that the selected countries - Portugal, France and Poland - offer a comprehensive and comparative overview for the study of satellite accounts in the context of the social economy. This selection facilitates a nuanced understanding of how different economic, legal and socio-cultural environments impact the structuring and operation of satellite accounts.

2. A methodological framework for comparing satellite accounts

The effectiveness of satellite account benchmarking depends on a well-structured methodological framework, which we will now define.

Comparison parameters

The choice of variables and indicators is crucial for meaningful comparisons. We will therefore need to identify the key variables and indicators for each country we are studying. These could be gross value added (GVA), employment measures (such as full-time equivalents and types of employment) or sector-specific contributions (such as health, education and social services). These indicators will provide a clear picture of the impact of the social economy.

Data harmonization

To compare our data from different countries, it will be essential to have standardized definitions and measurement methods for all key indicators to ensure comparability. This means aligning classification systems for different types of social economy organizations, and ensuring consistency in the way economic activities are recorded.

Also, given that raw data from different countries show discrepancies due to different collection methods or economic contexts, techniques such as purchasing power parity (PPP) adjustments for economic indicators and statistical standardization methods may be applied to make data comparable (Esteban Ortiz-Ospina 2017).

Analytical methods

Alongside quantitative methods, qualitative analysis is crucial, particularly for understanding the context behind the figures. That's why we conducted a questionnaire that we sent to professionals in the social economy, satellite accounts or even both.

This methodological framework for comparing satellite accounts is designed to be realistic and feasible, given the availability of data and the practicalities of cross-country comparisons. It aims to provide a solid and comprehensive analysis of the social economy through satellite accounts in the selected reference countries.

3. Challenges and solutions in benchmarking satellite accounts

The calibration of satellite accounts, particularly in the context of the social economies of different countries, presents a number of challenges. Addressing these challenges is essential to ensure the accuracy and reliability of the calibration process.

Data consistency and quality:

Disparities in data quality and consistency between different countries are a major obstacle to benchmarking. Since satellite accounts are an extension of national accounts, their effectiveness depends on the quality of data collected at national level. Variations may arise due to the diversity of data collection methods, economic frameworks or the degree of technological progress in data processing. To remedy these discrepancies, it is essential to implement rigorous data quality assessments and standardize data collection methods. In addition, the use of sophisticated data processing technologies would enable data to be refined and synchronized, improving their applicability for comparative studies.

Methodological variations:

Although there is, as of 2018, a manual created by the United States that provides a methodological framework for the creation of a SESA (Ramos 2019, 3) , satellite accounts are not standardized worldwide and countries may use different methodologies for their construction. This variation can pose major problems for directly comparing satellite accounts from one country to another. One solution is to develop a common framework or set of guidelines for compiling satellite accounts, which can be adapted to the specific context of each country. This approach requires collaboration and agreement between the countries involved.

Interpretation and contextualization :

Interpreting satellite account data requires a thorough understanding of each country's socioeconomic context. Incorrect interpretation can lead to incorrect conclusions or policy recommendations. It is therefore essential to include experts from each country in the analysis process, to ensure that data are interpreted in the right context. This approach also facilitates a more nuanced understanding of the unique aspects of each country's social economy.

Technological obstacles:

Integrating advanced data science techniques into the benchmarking process can be hampered by technological limitations, such as lack of access to sophisticated analytical tools or data science expertise. To meet this challenge, it may be necessary to build stakeholder capacity by training staff in data science methodologies and investing in technological infrastructure.

Collaboration with academic institutions or private organizations specializing in data science can also provide valuable support.

Data confidentiality and security :

Handling large datasets, particularly those containing sensitive economic information, raises concerns about data confidentiality and security. Ensuring compliance with data protection regulations and implementing robust cybersecurity measures are essential. These include anonymizing data, securing data transmission channels and restricting access to sensitive information.

Addressing these challenges is essential to the successful benchmarking of satellite accounts. By addressing issues of data quality, methodological variations, interpretation, technological barriers and data confidentiality, the benchmarking process can produce more accurate, reliable and meaningful information on the social economies of different countries.

Chapter 3: The Portuguese Context

Portugal's social economy is rich in entities such as cooperatives, mutual associations, Holy Houses of Mercy, foundations, the community and self-management sub-sector, and altruistic associations (ACFA). This sector, rooted in the country's socio-economic fabric, has evolved to meet the changing demands of society and the economy.

In recent years, the contribution of the social economy to the Portuguese economy has been recognized. Its impact on social integration, job creation and gross value added (GVA) is notable. Reports from Statistics Portugal (INE) and the António Sérgio Cooperative for the

Social Economy (CASES) demonstrate its influence. In 2020, the social economy accounted for 3.2% of national gross value added, a slight increase on the previous year. It also accounted for 5.2% of total employment, underlining its role as a key employer (Instituto Nacional de Estatistica 2023).

This section looks at the history of the social economy in Portugal. It will prepare an in-depth examination of its current situation using satellite accounts. The resilience and counter-cyclical nature of this sector, particularly during periods such as the COVID-19 pandemic, will also be discussed.

1. Evolution of Satellite Accounts in Portugal

The concept of satellite accounts was introduced in Portugal as a means of extending the analytical capacity of traditional national accounts, by providing a more detailed and sectorspecific economic analysis. These accounts have made it possible to capture the economic contributions of non-traditional sectors, in particular the social economy. The evolution of satellite accounts in Portugal has been influenced by both national economic priorities and the integration of international accounting standards, resulting in a unique framework adapted to the Portuguese context (José Barea 2006).

The genesis and evolution of satellite accounts in Portugal are closely linked to a changing economic context and the gradual recognition of the importance of specific sectors in national development. Let's retrace the history of these accounts, highlighting the key stages and influences that have shaped their current framework.

The first steps towards the establishment of satellite accounts in Portugal can be attributed to the need to understand in greater detail the composition of the national economy. Over time, the

growing complexity of economic structures led to recognition of the need for more specialized tools to analyze specific sectors.

The adoption of these satellite accounts has been influenced by the current legislative and regulatory framework. We already know that all Portuguese satellite accounts are created with the concepts and methods of the National Accounts, as defined in the European system of national and regional accounts, as their primary reference.

Regulatory adaptations at national level were also essential to integrate these instruments into the specific Portuguese context. For example, the country had to add specific definitions for certain sectors, such as the social economy, to ensure a common understanding and appropriate classification in the satellite accounts.

2. Data sources for satellite accounts

The reliability and completeness of SESA in Portugal depends on the quality of the data sources used. Statistics Portugal (INE) and the António Sérgio Cooperative for the Social Economy (CASES) have been instrumental in collecting and analyzing the data that highlight the economic impact of the social economy. Data sources range from national economic surveys to administrative records and sector studies, providing a multifaceted view of the social economy's contributions to gross value added and employment at national level (Ramos 2019, 9,10).

The recent SESA reports for 2019 and 2020 testify to the effectiveness of these data sources in providing a detailed picture of the social economy. They not only reveal the sector's contribution to the national economy in terms of gross value added and employment, but also highlight its resilience during the COVID-19 pandemic (Instituto Nacional de Estatistica 2023).

The diversity of data sources used to build the Portuguese SESA is one of its strengths, giving it a comprehensive perspective on the country's social economy. We can also mention the sectoral approach, which is also very important for in-depth analysis of particular sectors within the social economy, with specific surveys, such as those on employers' associations, mutual societies, fire departments, environmental non-governmental organizations, etc.

Also, the use of data from the General State Account (CGE) and other government sources reinforces the credibility of the information by basing it on official data.

3. Methodology of the Portuguese satellite accounts

The methodology underlying the Social Economy Satellite Account (SESA) in Portugal, developed through collaboration between Statistics Portugal (INE) and the António Sérgio Cooperative for the Social Economy (CASES), is essential for an analytical assessment of the economic dimension of the social economy sector. The SESA, particularly in its fourth edition covering the years 2019 and 2020, is notable for being the first to contain data covering two years. This has made it possible to capture the first effects of the COVID-19 pandemic on the sector.

The methodology used in the SESA includes comprehensive data collection and analysis processes. This involves collecting data from various entities as seen above, categorizing them (cooperatives, mutual associations, foundations, etc.), then analyzing their contributions in terms of gross value added (GVA), employment and other economic indicators such as type of business unit, number of employees or employee remuneration (Instituto Nacional de Estatistica 2023, 10). The SESA methodology must also take into account the unique characteristics of these entities, which do not always follow profit-driven models.

In addition, the SESA methodology includes comparing these data points over several years to assess trends and impacts, such as the resilience of the social economy during economic downturns like pandemics. This approach highlights the counter-cyclical nature of the social economy, as demonstrated by its positive economic behavior relative to the national economy during the pandemic.

4. Analysis of indicators and metrics used

The complex process of creating satellite accounts for sectors such as the social economy involves a meticulous selection of metrics and indicators. These tools are essential to provide a nuanced picture of the sector's economic activities and contributions, which often remain underrepresented in traditional economic analyses.

Gross value added (GVA), a key indicator in this context, provides an overview of the economic importance of the social economy. By assessing the difference between the value of production and intermediate consumption, GVA paints a vivid picture of the sector's contribution to the overall economy. According to the Social Economy Satellite Account (SESA) for Portugal, the GVA of the social economy represented 3.2% of the GVA of the national economy in 2020, a slight increase on 2019, a trend that contrasts with the slowdown in the general economy during the pandemic (Instituto Nacional de Estatistica 2023).

Employment measures go beyond simple headcounts and provide insight into the types and qualities of jobs in the sector. These measures, including full-time equivalents and the nature of employment (part-time or full-time), are particularly instructive. SESA reports for Portugal indicate that employment in the social economy accounted for 5.2% of total employment, demonstrating the sector's role as a major employer, particularly in times of economic contraction.

Measures of production and intermediate consumption provide a better understanding of the sector's economic activities. Production measures the total value of goods and services produced, while intermediate consumption assesses the value of inputs used. These measures are essential for understanding resource use and production in the social economy.

Financial aspects such as employee compensation, operating surplus and mixed income are essential for assessing the sector's financial health and employee investment.

Capital formation is another essential measure, indicative of the sector's future growth potential. It encompasses investment in fixed assets and changes in inventories, revealing the direction of the sector's development and its capacity for future productivity.

Productivity indicators, such as gross value added per employee, highlight the sector's efficiency and effectiveness. These measures are essential for benchmarking performance and identifying areas for improvement or strategic investment.

Sector-specific indicators, tailored to the unique characteristics of the social economy, provide additional depth. For example, the health sector within the Portuguese social economy accounts for a substantial share of gross value added and employment, reflecting its importance within the sector. In 2020, health and social services were the most important activities, with health accounting for 25.5% of gross value added and 33.2% of employees in the social economy (Instituto Nacional de Estatistica 2023).

In addition, the sector's financial health is summarized by financial indicators such as revenues, expenses and sources of funding. These provide an overview of the sector's economic viability and resource allocation.

Finally, the longevity and maturity of organizations within the sector offer a perspective through which the stability and sustainability of the social economy can be assessed. This aspect helps to understand the resilience and adaptability of organizations in the sector over time.

Together, these measures and indicators form a comprehensive framework for understanding the multifaceted economic contributions of the social economy in Portugal. They offer valuable information to policymakers and stakeholders, guiding decisions that shape the sector's future trajectory.

5. Case studies and practical examples

In the field of Social Economy Satellite Accounts (SESA) in Portugal, several case studies and practical examples highlight the usefulness of accounts in understanding and shaping the social economy sector.

The transformation of historical entities such as the Holy Houses of Mercy from charitable organizations to significant economic contributors is an excellent example (Santa Casa da Misericordia de Macau n.d.). SESA data helped illustrate the evolution of these organizations over time, both in terms of diversifying their services and increasing their contributions to local economies (Instituto Nacional de Estatistica 2023). By tracking changes in employment and gross value added (GVA), SESA demonstrates the economic importance of these entities, which is vital for securing funding and informing targeted policies for their future development. This example illustrates SESA's role in monitoring the economic impact of entities with deep historical roots, reflecting their adaptation to contemporary societal needs.

Another significant aspect is the growth of cooperatives and associations, particularly in sectors such as agriculture since the 1970s (*Appendix, evolution of the creation date of social

solidarity cooperatives that have submitted information to the SESA accreditation portal*). Here, SESA's contribution lies in quantifying the economic impact of these cooperatives, highlighting their role in local economies and employment. This data is crucial to understanding their contribution to rural development, and to informing government support programs aimed at strengthening these cooperatives. They provide a clear picture of the economic footprint of these organizations, supporting their growth and sustainability.

The impact of legal frameworks on the growth of the social economy sector, particularly following the implementation of the framework law, is also a key area where SESA has proved invaluable. SESA data can be used to assess the growth and diversity of social economy entities following this legislative change, helping to evaluate the effectiveness of legal frameworks in promoting the sector's growth and guiding future legislative amendments.

In terms of government strategies and program implementation, the effectiveness of initiatives such as the Portugal 2030 strategy in promoting employment within the social economy is a relevant example (Portugal 2030 n.d.). SESA data enable a comprehensive analysis of employment trends within the social economy before and after the implementation of such strategies. This makes it possible to assess the direct impact of government strategies and adjust them to better support job creation and economic growth in the sector.

Finally, the role of consultative and representative bodies such as the National Council for the Social Economy in policy formulation and sector development is another area where SESA is proving crucial. By providing comprehensive economic data, SESA makes it possible to assess the effectiveness of these bodies in advocating the sector's needs and shaping policy. The data can be used to track changes in investment patterns, employment trends and the overall economic contributions of the social economy in response to policy recommendations or interventions.

These examples collectively demonstrate how Portugal's social economy satellite accounts provide essential empirical evidence of the economic importance and impact of various entities and initiatives within the social economy. This data is invaluable for understanding the dynamics of the sector, informing policy and strategic decisions, and championing the sector's needs and potential. By offering a detailed and quantified economic perspective, SESA becomes an essential tool for stakeholders aiming to promote a robust and prosperous social economy in Portugal.

6 Implications for political and economic decision-making

Data from Portugal's Social Economy Satellite Account (SESA) have a considerable influence on political and economic decision-making, beyond simply quantifying the contributions of the social economy. The information provided by SESA has a profound impact on various aspects of policy formulation and strategic planning.

When formulating and modifying policies, SESA data guides the development of labor policies, social protection programs and economic development strategies. The comprehensive view of employment trends and economic contributions within the social economy enables policymakers to tailor job creation and skills development initiatives to the needs of the sector. This alignment ensures that the policies implemented are tailored and effective to meet the real dynamics and potential of the social economy (Ferreira 2019).

Resource allocation and funding decisions are also strongly influenced by SESA data. Understanding which sectors or entities in the social economy contribute most to employment or gross value added guides investment and subsidy decisions. This targeted approach to resource distribution ensures optimal use of public funds, supporting those sectors of the social economy that have the greatest impact, thereby promoting sustainable growth and development.

Furthermore, the resilience of the social economy, as illustrated by the SESA data, plays a crucial role in the development of broader economic resilience strategies. By identifying the characteristics that contribute to this resilience, such as service diversification and strong community engagement, policymakers are able to integrate these elements into broader economic planning. This involves supporting sectors that demonstrate stability during economic downturns, or encouraging practices that build resilience across the economy as a whole.

SESA data also has a significant impact on the structuring and prioritization of social protection programs. By highlighting the specific areas in which the social economy excels or requires support, particularly in essential services such as healthcare and social services, government can tailor its interventions to ensure effective and equitable service delivery. This ensures that social protection initiatives effectively fill gaps and capitalize on the strengths of the social economy.

Collaborative efforts between government, social economy entities and other stakeholders are also guided by the SESA findings. A clear description of the sector's contributions and needs fosters effective collaboration, leading to joint initiatives that tackle social issues, economic development projects or public-private partnerships, as we have seen with the arrival of new financial products such as social-impact bonds. These instruments for investing in the social economy have been pushed by the Portuguese government since 2018, which allows participating companies to include 130% of the amount invested as expenditure for business tax effects (Ferreira 2019, 78).

Finally, the benchmarking provided by SESA facilitates international benchmarking and learning. Understanding Portugal's position in the global context of the social economy informs international cooperation strategies, promotes the adoption of best practice and encourages

participation in global initiatives. This enables informed decisions to be taken on international trade, foreign investment and involvement in global social economy networks.

The implications of SESA data for political and economic decision-making in Portugal are wide-ranging and multifaceted. They ensure that economic and social policies are not only datadriven, but also closely aligned with the realities and potential of the social economy sector.

7. Future prospects and development potential

The Satellite Account of the Social Economy (SESA) in Portugal provides essential data that feed into a comprehensive set of strategies and recommendations aimed at improving and supporting the social economy sector. These strategies are characterized by their multidimensional approach, encompassing government initiatives, policy development, sector representation and youth engagement.

The Portuguese government's current program reflects a profound recognition of the importance of the social economy. It is committed to adopting a collaborative approach with the various entities of the social economy, with the aim of building on long-standing partnerships. This commitment is not just declarative; it is backed up by tangible measures designed to support and strengthen the sector. These measures are essential to ensure that the social economy continues to thrive and contribute effectively to the wider national economy.

Portugal's 2030 strategy, which is aligned with the European Commission's partnership agreement, is another cornerstone of this comprehensive approach. This strategy sets out key objectives for the period 2021-2027, with a focus on improving employment opportunities, including self-employment within the social economy. It also emphasizes capacity building for social economy agents and operators, reflecting a clear recognition of the need for continued

development and empowerment within the sector. In particular, this approach is in line with global objectives for sustainable development. The emphasis placed on green transition reflects Portugal's commitment to sustainable, forward-looking economic growth (Portugal 2030 n.d.).

In political terms, the roles of the Ministry of Employment, Solidarity and Social Security and the Ministry of the Economy are essential. These government agencies are responsible for developing and implementing policies relating to the social economy.

The National Council for the Social Economy plays a central role as a consultative and assessment body. It monitors strategies and policy proposals relating to the promotion and growth of the social economy, acting as a crucial link between policy formulation and the realities on the ground in the social economy sector.

Representation and advocacy are supported by organizations such as the Portuguese Confederation of the Social Economy and the António Sérgio Cooperative for the Social Economy. These entities bring together the various families of the social economy, defending their interests and participating in the definition of public policies and strategic orientations. Their role is crucial in ensuring that the voices and concerns of the various social economy entities are heard and taken into account at the political level.

Youth engagement and leadership development are also key elements of the strategic approach. Organizations such as CASES and initiatives such as the Ubuntu Leaders' Academy are committed to training the next generation of leaders within the social economy. By targeting young people, particularly those from challenging backgrounds, these programs aim to instill leadership skills and a commitment to community service, ensuring the sustainability and continued rejuvenation of the social economy sector (Academia de Líderes Ubuntu s.d.) (CASES s.d.).

In summary, SESA data in Portugal play a key role in the development of a global strategy for the social economy. They inform government initiatives, policy formulation, sector representation and youth programs. This approach not only recognizes the sector's current contributions, but also prepares it for future expansion and progress. It demonstrates a thorough understanding of the sector's requirements and opportunities, paving the way for betterinformed, more effective and more strategic decision-making.

Chapter 4: Comparative Analysis

This chapter contains a comparative analysis of the satellite accounts of Portugal, Poland and the figures of the Institut National de la Statistique et des Études Économiques (INSEE) on the Social Economy in France, each representing a unique approach to the quantification and representation of the social economy. This analysis will build on the in-depth examination of Portugal's satellite accounts covered in Chapter 3, extending the scope to include a comparative perspective with France and Poland.

Portugal's framework for satellite accounts, as detailed in Chapter 3, reflects its unique socioeconomic landscape, where cooperative movements and mutual societies play a pivotal role. This background informs the structure and focus of Portugal's satellite accounts, shaping the way the country quantifies and represents its social economy.

In France, INSEE reports on the social economy are expected to showcase the complexity and diversity of its social economy. As one of the largest economies in the European Union,

France’s approach to satellite accounting likely encapsulates a broader spectrum of social economy activities. These range from extensive non-profit sectors to smaller, communitydriven initiatives. France’s robust legal and policy framework surrounding the social economy might also reflect in its satellite accounts, offering insights into a sophisticated model of capturing and analyzing social economy data.

Turning to Poland, its approach to satellite accounts is informed by its transitional economic landscape. Polish satellite accounts emphasize capturing the economic impact of non-profit organizations and volunteer work, which form a significant part of its social economy. Nonprofit organizations and volunteer activities contribute considerably to Poland’s social economy, with volunteer work being treated as a productive activity of notable economic value.

Challenges in data collection, particularly concerning volunteer work, highlight the evolving nature of Poland's social economy and its representation in national accounts. Systematic surveys of non-profit organizations since 2008 and ongoing efforts to refine the data collection process are key steps Poland has taken towards developing a comprehensive understanding of its social economy through satellite accounts.

This comparative analysis aims to not only juxtapose the different methodologies, indicators, and metrics used by Portugal, France, and Poland but also to understand how these approaches reflect the unique characteristics of each country's social economy. By examining these diverse systems, we can extract valuable lessons and best practices that could enhance the development and application of satellite accounts in the social economy sector.

1. Overview of Selection Criteria for Comparative Analysis

The selection criteria hinge on several key factors: the economic structures of each country, the nature and scale of their social economies, and the specific goals and challenges of their satellite accounting systems. These criteria ensure that the comparisons made are relevant, insightful, and capable of highlighting the unique aspects of each country's approach to satellite accounting.

The methodologies, indicators, and metrics chosen for comparison reflect these criteria and are intended to provide a clear picture of how each country's social economy is quantified and represented. This comparison aims to unravel the intricacies of each system, offering a comprehensive view of the satellite accounts in the context of the diverse economic landscapes of Portugal, France, and Poland.

By understanding the rationale behind the selection process, we can appreciate the nuances in each country's approach and the resulting implications of their satellite account methodologies.

This overview sets the stage for a deeper dive into the specific aspects of the satellite accounts that will be compared in the subsequent sections.

2. Comparative Analysis of Methodologies

The methodologies employed in the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy, when closely examined, showcase distinct approaches, each reflective of the specific nuances of their social economies. Building upon the in-depth analysis of Portugal's methodology in Chapter 3, this section now contrasts it with the distinct approaches adopted by France and Poland, incorporating examples where possible to illustrate these differences.

In Portugal, the methodology focuses on capturing the overall economic impact, especially through Gross Added Value (GVA) and employment metrics. This approach, as explored earlier, offers a macroeconomic view of the social economy's contribution, particularly evident in how it managed to encapsulate the sector's resilience during the COVID-19 pandemic. For example, despite the general downturn, the social economy in Portugal showed a slight increase in its GVA contribution in 2020, underscoring its counter-cyclical nature (Instituto Nacional de Estatistica 2023).

Contrastingly, France's approach to satellite accounts delves into the detailed representation of various entities within the social economy. The French methodology aims to bring visibility to cooperatives, mutual societies, associations, and foundations within the national accounts. This approach is intricate, requiring new data sources and methodologies to fully capture the

economic activities of these diverse entities. For instance, the French methodology involves tracking the financial flows and value-added contributions of large non-profit organizations, a task requiring comprehensive data collection and analysis (INSEE 2014).

Poland's methodology presents a unique angle, particularly in its emphasis on non-market activities such as volunteer work. The inclusion and economic valuation of volunteer work in Poland’s social economy satellite accounts illustrate an innovative approach to capturing the sector's broader contributions. This method involves estimating the economic value of volunteer work, which, although not a standard practice in traditional economic measures, is crucial in acknowledging the diverse nature of contributions in Poland's social economy. An example of this is the monetary valuation of volunteer activities in community-based programs, providing a clearer picture of the social economy's impact beyond traditional financial parameters.

The comparison of these methodologies demonstrates the versatility and adaptability of satellite accounts as tools for economic analysis. While Portugal’s aggregated view focuses on the overall economic impact, France’s detailed approach targets a comprehensive analysis of diverse social economy entities, and Poland’s innovative method recognizes the importance of non-traditional contributions. Each methodology reflects the socio-economic priorities and challenges of the respective countries, offering valuable insights into the diverse applications of satellite accounts in understanding and analyzing the social economy sector in different national contexts.

3. Comparison of Indicators and Metrics

In the comparative analysis of satellite accounts for Portugal, Poland and France’s INSEE reports on the social economy, a crucial aspect to consider is the specific indicators and metrics

used by each country. These indicators and metrics not only reflect the economic contributions of the social economy but also illustrate how each country's unique social and economic context influences its approach to satellite accounting.

Indicators	France	Poland	Portugal
Output	Yes	Yes	Yes
SE GVA	Yes	Yes	Yes
National GVA	Yes	Yes	Yes
Imputed value of employees	Yes	Yes	Yes
Imputed value of volunteers (replacement cost)	-	Yes	-
Value of direct volunteer work	-	Yes	-
Gross Capital Formation	-	-	Yes
Subsidies	-	Yes	-
Working time and type of contract by families	Yes	-	-
Distribution of salaried employees by gender per family sectors of activity in SE	Yes	-	-
Weight of gross remuneration of employees in the social economy overall of the economy, by social economy family and by sector of activity	Yes	-	-

Portugal's Indicators and Metrics: (Instituto Nacional de Estatistica 2023)

Portugal's satellite accounts primarily focus on traditional economic indicators like Gross Added Value (GVA) and employment metrics. These indicators are crucial for understanding the overall economic impact of the social economy, particularly in terms of its contribution to the national economy. For example, the increase in the social economy's share of national GVA during the pandemic highlights its resilience and counter-cyclical nature.

GVA serves as a pivotal indicator in assessing the economic contribution of the social economy in Portugal. The increase in the social economy's share of national GVA, particularly during the challenging times of the pandemic, highlights its resilience and counter-cyclical nature. This insight suggests that the social economy plays a stabilizing role, demonstrating its ability to withstand economic shocks.

Compensation of employees is another key metric that provides insights into the financial remuneration within the social economy sector. Analyzing this indicator allows for a deeper

understanding of the distribution of financial resources and the impact on the workforce. Higher compensation levels may indicate the sector's ability to provide fair and sustainable remuneration to its employees.

Employment metrics, including the number of Full-Time Equivalent (FTE) employees, offer insights into the sector's role in job creation and maintenance. The social economy's contribution to employment, especially during challenging economic periods, underscores its significance in providing stable and sustainable employment opportunities.

The analysis of the social economy by sector composition, categorized into 12 different groups represented by letters, provides a nuanced understanding of the diversity within the sector. This approach allows for a detailed examination of the unique contributions and characteristics of each sector. The sector composition analysis is a shared characteristic with the Polish Social Economy Satellite Account, enabling comparative assessments between the two countries.

Analysing Portuguese’s different sectors we can estrapolate some curious insights:

Associations with altruistic goals, for example, emerge as a predominant group within the social economy, contributing significantly to GVA, employment, and compensation of employees. This dominance signifies the sector's commitment to altruistic objectives and its substantial impact on the national economy and labor market.

Cooperatives, as the second-largest group, demonstrate their relevance in terms of the number of units, GVA, and compensation of employees. This highlights the diverse nature of the social economy, with cooperatives playing a significant role in economic activities.

Holy Houses of Mercy emerge as a notable group, particularly in terms of employment. This insight sheds light on the sector's involvement in social care and support services.

Mutual Associations, encompassing financial corporations, exhibit distinctive features such as a high GVA/FTE ratio and above-average compensation of employees. This signals the financial sustainability and attractive employment conditions within this subgroup.

France's Diverse and Detailed Metrics: (INSEE 2023)

The French Social Economy Satellite Accounts employ a diverse range of indicators, reflecting a comprehensive approach to capturing the multifaceted activities within the social economy. This methodology, which incorporates financial flows, employment data, and value-added contributions from various social economy entities, provides a detailed and nuanced view of the sector's contributions. Several unconventional indicators used in the French project offer unique insights into the dynamics and impact of the social economy.

The distribution of salaried employees by gender per family sectors of activity, for instance, reflects the commitment to gender equality within the social economy. By analyzing the distribution of salaried employees by gender across family sectors of activity, the French Social Economy Satellite Accounts provide insights into the sector's inclusivity and efforts toward gender diversity. This information is crucial for understanding the social economy's role in promoting equitable employment opportunities.

The weight of gross remuneration of employees in the social economy, compared to the overall economy, offers insights into the financial aspects of employment within the sector. Understanding how the remuneration in the social economy compares to the broader economy provides valuable information about the economic well-being of those engaged in social economy activities.

The weight of Salaried Workforce in the Social Economy, examining the salaried workforce in the social economy as a proportion of the entire economy, sheds light on the sector's significance in terms of employment. By breaking down this information by social economy family and sector of activity, it becomes possible to identify areas where the social economy has a particularly strong influence on employment patterns.

Employee Workforce in the Social Economy by Family and Sector of Activity is a detailed breakdown of the employee workforce within the social economy that offers a granular understanding of the distribution of labor across different families and sectors. It allows for the identification of areas of specialization or concentration, contributing to a more nuanced appreciation of the social economy's diverse activities.

The use of unconventional indicators in the French Social Economy Satellite Accounts, such as those focusing on gender distribution, remuneration, and workforce composition, provides insights beyond traditional economic metrics. These indicators allow for a more comprehensive understanding of the social and cultural dimensions of the sector, contributing to a richer analysis of its contributions to society.

Poland's Innovative Approach: (GUS 2018)

Poland’s methodology is distinct in its inclusion of non-market contributions, particularly volunteer work. The metrics used in Poland’s satellite accounts therefore extend beyond traditional economic measures, incorporating the valuation of volunteer work. This approach necessitates innovative metrics that can capture the economic value of non-traditional activities, providing a more comprehensive understanding of the social economy’s broader contributions.

A notable feature of the Polish Social Economy Satellite Account is the inclusion of non-market contributions, with a specific focus on volunteer work. This approach recognizes the economic value of activities that extend beyond traditional market transactions, offering a more holistic view of the social economy's impact.

Volunteer work is a central component of the Polish social economy, constituting more than one-third of its output, equivalent to EUR 4.9 billion. The valuation of direct volunteer work provides an insightful perspective on the economic contributions of non-traditional activities. Importantly, this recognition sheds light on the invisible yet significant role of volunteer work, which is not reflected in conventional macroeconomic indicators.

If the value of direct volunteer work output were compared to the size of GDP, it would necessitate an increase of 1.0%. This underscores the importance of non-market activities, particularly those related to directly helping others, both within the social economy and the national economy. The recognition of such contributions challenges the conventional understanding of economic value and highlights the social economy's multifaceted impact.

The main approach employed in estimating basic macroeconomic indicators in the Polish Social Economy Satellite Account is the production approach. This approach is presented in two distinct ways: one that distinguishes subsectors within the social economy (non-profit organizations, cooperatives and mutuals, and direct volunteer work), and another that delineates transactions and balancing items for social economy and voluntary sector entities by institutional sector according to the European System of Accounts (ESA).

The structure of the shares of each group of entities in output generation provides valuable insights. Non-profit organizations emerge with overwhelming importance and potential within the social economy, signifying their significant role in economic activities. Simultaneously, the

productive potential of direct volunteer work is emphasized, highlighting its substantial contribution to the total output of the social economy.

Non-profit organizations and direct volunteer work collectively contribute more than 92.8% of the total output of the social economy. This underscores the combined strength and impact of these entities, emphasizing their pivotal role in shaping the social and economic landscape of Poland.

The costs associated with wages and salaries, commonly referred to as payroll costs, encompass the gross remuneration of personnel based on employment contracts, excluding employerrelated expenses. Additionally, these costs incorporate the gross remuneration attributable to non-personnel engagements, such as those governed by civil law contracts, within social economy entities. It's important to note that labor costs are a broader concept, encompassing wages and salaries costs along with the assessed value of volunteer work.

In the year 2018, the wages and salaries costs for social economy entities in Poland aggregated to approximately EUR 2.6 billion. Upon inclusion of the assessed value of volunteer work, this total soared to over three times its initial value, reaching EUR 9.0 billion. When considering the entire national economy, the collective wages, salaries, and volunteer (both institutional and direct) costs represented 5.5%. Furthermore, the exclusive wages and salaries costs of social economy entities alone constituted 1.6% of the total national economy's wages and salaries costs for the same period.

Comparative Insights:

When comparing these indicators and metrics, it becomes clear that each country's approach is influenced by its specific socio-economic conditions and priorities. Portugal's focus on

traditional economic indicators offers a macroeconomic perspective, while France's detailed metrics provide a granular view of the diverse entities within its social economy. Poland's innovative metrics, on the other hand, highlight the importance of non-traditional economic contributions, reflecting its unique socio-economic landscape.

This comparison reveals the varying degrees of complexity and focus in each country's satellite accounts. Understanding these differences is key to appreciating how satellite accounts can be tailored to suit the specific needs and characteristics of different social economies.

The indicators and metrics used in the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy thus provide distinct lenses through which the economic contributions of the social economy can be viewed and analyzed. These variations underscore the flexibility of satellite accounts as tools for economic analysis, adaptable to the diverse requirements and perspectives of different nations.

4. Analysis of Results from Satellite Accounts

Analyzing the results from the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy provides valuable insights into the economic contributions and dynamics of their respective social economies.

As detailed in Chapter 3, Portugal's Social Economy Satellite Account (SESA) for the years 2019 and 2020 highlighted the resilience of its social economy during the COVID-19 pandemic. The sector contributed 3.2% to the national Gross Added Value (GVA) in 2020, highlighting its major role in the economy. This performance emphasizes the resilience of Portugal's social economy. Despite a broader economic downturn, it maintained and even marginally boosted its economic input (Instituto Nacional de Estatistica 2023).

The French approach to satellite accounts for its social economy, focusing on non-profit institutions, aims to bring visibility to a broad range of entities including cooperatives, mutual societies, associations, and foundations. While specific results from recent years are not readily available, it's understood that the French methodology is designed to capture the economic activities of these diverse entities, which are often underrepresented in traditional national accounts. The results from such an approach would provide a comprehensive view of the economic impact and contributions of France's social economy.

Poland's methodology, particularly in valuing non-market activities such as volunteer work, presents unique results that expand the understanding of the social economy's economic contributions. For example, the inclusion of volunteer work in the social economy satellite accounts acknowledges the broader economic value of these activities. The specific results, such as the monetary value of volunteer work and its impact on the social economy, would offer a more complete picture of Poland's social economy, highlighting the contributions beyond traditional financial parameters.

Comparing the results from these three countries illustrates the varying impact and roles of the social economy within national economies. Portugal's results highlight the sector's stability and importance, especially in challenging economic times. France's approach likely reveals a detailed breakdown of the social economy's diverse activities and their economic impact.
Poland's results, meanwhile, shed light on the broader contributions of the social economy, including non-market activities like volunteer work.

These differing results reflect each country's unique socio-economic context and the priorities of their social economies. Understanding these variations is crucial for comprehensively analyzing the social economy sector and its role in national economies.

The analysis of results from the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy thus provides a nuanced view of the social economy's contributions and dynamics in each country. This comparative analysis underscores the value of tailored satellite account methodologies that reflect the unique characteristics of each nation's social economy.

5. Implications for Policy and Strategic Planning

The comparative analysis of satellite accounts in Portugal, Poland and France's INSEE reports on the social economy offers rich insights for policy and strategic planning in each country's social economy:

The emphasis on GVA and employment in Portugal's satellite accounts can inform policies focused on enhancing economic stability and job creation in the social economy. These insights could be instrumental in developing initiatives that bolster sectors showing resilience, especially during economic downturns, and in identifying areas where targeted support can spur growth and stability.

The detailed analysis of various entities within the French social economy provides a nuanced understanding of the sector's dynamics. This depth of analysis can guide policies and programs specifically designed to support different types of social economy organizations, ensuring that interventions are well-targeted and effective. For instance, policies could be tailored to address the unique needs of cooperatives, mutual societies, and non-profit organizations, each contributing differently to the economy.

Poland's innovative approach in recognizing non-market contributions like volunteer work can shape policies that acknowledge and support these vital aspects of the social economy. This

perspective is essential for developing strategies that value community-based activities and volunteerism, recognizing their contribution to social cohesion and economic sustainability. Policies could be designed to encourage volunteer initiatives and ensure they are supported and valued as key components of the social economy.

These implications underscore the importance of adapting policy and strategic planning to the specific characteristics and strengths of each country's social economy, as revealed through their satellite accounts. This tailored approach is key to fostering a robust and dynamic social economy that aligns with each country's unique socio-economic landscape.

Chapter 5: Stakeholder Analysis

1. Identification of Stakeholders

In the field of SESAs, it is essential to understand the complex network of stakeholder influence. SESAs operate within a global economic framework, involving a wide variety of stakeholders, from international organisations to grassroots communities. Each group has a distinct influence on the evolution, trajectory and practical application of these accounts. Let's look at the roles and impacts of these stakeholders on SESA.

Key SESA stakeholders

The landscape of SESA's key stakeholders is diverse, encompassing entities that directly contribute to and shape the social economy. These include international governments and regulatory bodies such as the United Nations, the World Bank and the International Labour Organisation (ILO), whose global programmes, financial support and labour policies significantly influence the parameters and operations of the social economy. Global social enterprises and cooperatives are crucial sources of data, presenting innovative models and influencing global policies. Non-governmental organisations and global NGOs provide on-theground perspectives and impact assessments, shaping the focus and priorities within SESA, particularly in relation to solving global social problems.

Global financial institutions, including international banks and impact investment funds, provide financial strength and direction, shaping the financing framework for the social economy. Global trade unions, defending workers' rights, shape the labour data in SESA. Academic and theoretical contributions come from global teaching and research institutions,

driving the research and academic discourse that underpins social economy analysis. Global trade associations advocate for business practices and policies that affect the social economy sector. The experiences and feedback of global communities directly influence the direction and outcomes of SESA, ensuring alignment with real-world needs and community perspectives. Consumer behaviour and market trends, driven by global consumers, dictate the economic performance and sustainability aspects of SESA. Finally, global philanthropic foundations fund and support social economy initiatives, influencing the scope and scale of activities included in the SESA.

SESA secondary stakeholders

Secondary stakeholders, although not directly involved, play an important role in shaping the social economy landscape through the SESA. National policy makers use SESA data to formulate policies that align local strategies with global trends in the social economy. Regional researchers and academics use SESA results for regional studies, broadening the understanding and dissemination of knowledge on the social economy. SESA data helps regional investors make informed decisions, impacting capital flows into global social and sustainable initiatives.

Regional media disseminate information on global social economy trends highlighted in SESA, influencing public perception and awareness. Regional suppliers' interactions and transactions with social enterprises provide practical insight into the supply chain dynamics described in SESA. Regional competitors, indirectly influenced by SESA, shape the competitive environment for global social economy entities. Environmental sustainability practices within the social economy, advocated by global environmental organisations, are reflected in SESA. International educational institutions are influenced by SESA findings in the development of educational resources and curricula, training the future leaders of the social economy. Global

technology providers have an impact on operational efficiency and innovation in the social economy, influencing the parameters of SESA. Finally, the global public, as the ultimate beneficiaries, indirectly influence the direction and outcomes of SESA through their evolving needs and perceptions (Sébastien Mariaux 2018).

2. Stakeholder Mapping

We will now carry out a stakeholder mapping in the context of the SESAs. The first objective is to identify and understand the different entities involved in the social economy ecosystem and their respective roles.

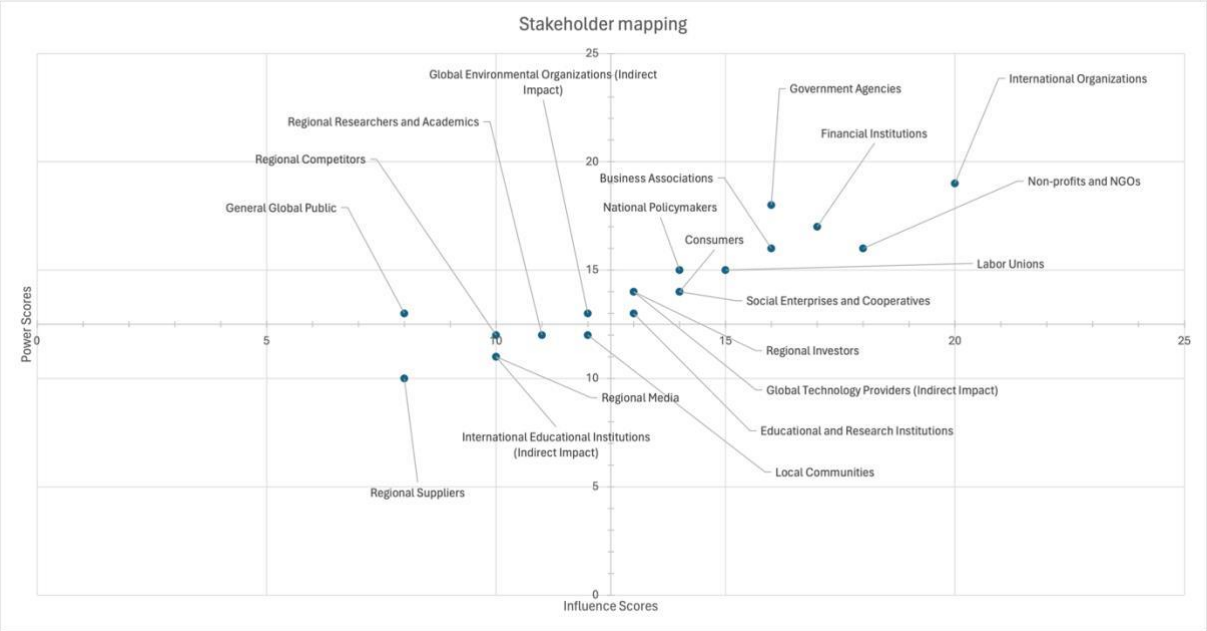
Strategic planning and policy formulation: Understanding who the key stakeholders are, and their levels of power and influence, is essential for effective strategic planning and policy formulation. This helps identify who needs to be involved and how to approach them for successful implementation of policies and initiatives.

Stakeholders play a central role, each bringing unique influences and dynamics. The criteria of "power" and "influence" were chosen for the stakeholder mapping.

Power reflects a stakeholder's ability to exert control or impose action, often linked to authority, resources or position. It is a crucial measure for understanding which stakeholders can have a direct impact on the social economy landscape.

Influence, on the other hand, refers to the ability to influence or change opinions, behaviours and outcomes, even without direct control. It encompasses aspects such as advocacy, public opinion and advisory roles.

By assessing stakeholders on the basis of these two criteria (scored out of 20), we can obtain an overview of the social economy ecosystem, identifying those who can guide or shape the discourse and direction of the social economy.



**Explanation of this mapping in Appendix "Stakeholder mapping"*

3. Stakeholder Engagement

Government Agencies

Government agencies play a key role in the SESA landscape. Their involvement is driven by the need to develop evidence-based policies and regulations that effectively support and nurture the social economy sector. These agencies use SESA to better understand the contributions of the social economy to the wider economy, including its role in job creation, social well-being and innovation.

The influence of SESA research on government agencies extends to several areas. Firstly, it contributes to policy development, helping to shape initiatives that foster an environment

conducive to the growth of the social economy. This includes creating favourable regulatory frameworks, identifying areas for financial investment and developing programmes that strengthen the capacity and sustainability of the sector.

Social Enterprises and Cooperatives

Social enterprises and cooperatives are at the heart of the social economy, embodying models that reconcile economic success with social objectives. They are very interested in how SESA can provide recognition and understanding of their roles and challenges. They expect SESA to provide them with a clearer picture of their economic impact, including their contribution to local and national economies and their effectiveness in solving social problems.

These stakeholders face distinct challenges, such as securing sustainable funding, navigating market dynamics and complying with regulatory requirements. They expect SESA research to shed light on these challenges, offering insights that can lead to more favourable policies and practices. In addition, social enterprises and cooperatives expect research findings to help them attract support and partnerships, improve their credibility and visibility, and provide benchmarks against which to measure their performance and impact.

Non-profits and NGOs

Non-profit organizations and NGOs are an integral part of the fabric of the social economy, often at the heart of social change and community development. Their impact in SESA is driven by a desire to quantify and demonstrate their social impact. These organizations rely on SESA results to validate their contributions to the well-being of society, to secure funding and to guide

their strategic and operational decisions, much in the manner of Social Enterprises and Cooperatives.

Non-profit organizations and NGOs are particularly interested in how SESA research aligns with their missions and strategic objectives. They seek data that can inform the development of their programs, ensuring that their activities are both effective and meet community needs. Organizations use SESA findings to engage more effectively with other stakeholders, including government agencies, donors and the communities they serve, strengthening their ability to bring about positive social change.

4. Community and General Public

The academic and research community plays an essential role in the understanding and development of SESA. The involvement of researchers and academics in SESA is essential to advance the academic discourse on the social economy. Their interest in SESA research stems from its potential to offer new perspectives on the dynamics of the social economy, challenging existing theories and contributing to the development of new ones.

The data and knowledge provided by SESA research are invaluable for the development of university curricula. It ensures that the next generation of economists, policy-makers and social entrepreneurs has a deep and comprehensive understanding of the social economy. This is particularly important at a time when the intersection of economic viability and social impact is increasingly recognised as crucial to sustainable development.

The collaborative nature of SSE research opens up many opportunities for partnerships across disciplines and sectors. These collaborations are essential to ensure that research findings are not only theoretically sound, but also practically relevant. Academics and researchers often

work alongside government agencies, NGOs and economists to translate research findings into effective policies, strategies and programmes. This collaborative approach ensures that the unique perspectives and needs of different stakeholders are taken into account, leading to more effective outcomes.

Knowledge dissemination is another key aspect of the academic community's involvement in SESA. Academics and researchers are responsible for translating the results of complex research into formats that are accessible to a wider audience. By publishing in academic journals, presenting at conferences and engaging in public education, they ensure that the knowledge generated by SESA research reaches beyond academic circles, influencing policy decisions, guiding practitioners and raising public awareness of the social economy.

The engagement of the academic and research community in SESA research is multifaceted and integral to the development of the field. Their contributions to academic discourse, innovative methodologies, collaborative initiatives and knowledge dissemination play a crucial role in improving our understanding of the social economy and shaping its future direction. Through their work, academics and researchers ensure that the social economy is recognised as an essential component of the wider economic landscape, deserving of attention, support and investment.

Chapter 6: Data Science Integration in Satellite Accounts

In the ever-changing landscape of economic analysis, data science has emerged as a central element, transforming traditional methodologies with its unique blend of statistical techniques, machine learning and massive data analysis (Farragher 2018). This evolution has seen data science evolve from a supporting tool to an integral component of modern economic evaluations. The evolution of data science in economics reflects a significant shift from

conventional models to sophisticated approaches that exploit large datasets and complex algorithms to obtain ever deeper and more accurate information.

The role of data science in improving economic analysis is manifold. It goes beyond simply processing data. It is now possible for economists to extract significant patterns and trends from large, unstructured data sets. Practical applications of these techniques can be seen in various fields, such as the prediction of market trends, the analysis of consumer behaviour and the evaluation of economic policies (Chkoniya 2021). These applications highlight the practical benefits of data science for discovering and predicting complex economic phenomena. A crucial aspect of this development is the integration of data science into SESA methodology. Data science methodologies provide a more accurate and comprehensive measure for SESA, using advanced data modelling, machine learning for pattern recognition, and big data tools for managing large datasets. This increased accuracy and depth of analysis is invaluable in the field of economic measurement.

1. Data Science Techniques for Advanced Economic Insights

We begin by introducing various data science techniques that hold relevance in economic analysis. This includes an exploration of machine learning, big data analytics, and predictive modeling, and how these methodologies can be applied to economic data to extract deeper insights. The section will detail the fundamentals of these techniques and their applicative potential in the realm of satellite accounts (Chkoniya 2021).

Machine Learning:

Machine learning algorithms are capable of identifying complex patterns and trends in economic data, which might not be apparent through traditional analytical methods. This

capability is particularly advantageous in analyzing the intricate dynamics of social economies, as seen in countries like Portugal, France, and Poland.

Predictive analytics:

Predictive models play an essential role in anticipating future economic scenarios, enabling policy-makers and economists to make informed decisions on the basis of predicted trends. The usefulness of these models in the dynamic domain can be very practical, for example to simulate several solutions in order to aid decision-making.

Big data analytics:

The ability of big data tools to process and analyse large and complex data sets is crucial to the creation of satellite accounts. These accounts offer a global perspective on economic activities, which means handling a huge amount of data. Annalysis of Big Data analysis ensures that all relevant economic elements are included, providing a better understanding of the economic terrain.

To illustrate the practical application of these methods, we will look at several case studies where data science techniques have been successfully employed in satellite accounts. These concrete examples will demonstrate the tangible benefits and impact of integrating advanced data science techniques into economic analysis.

1. **Case Study: Machine Learning in Agricultural Sector Analysis - Portugal** (Cláudia M. Viana 2021)

    - **Background**: Analysis of Portugal's agricultural sector using machine learning.

- **Methodology**: Application of regression algorithms and neural networks.
- **Outcome**: Prediction of crop yields with high accuracy.
- **Impact**: Informed government policy on agricultural subsidies and investment.

2. **Case Study: Predictive Analytics in Labor Market Trends - France** (CEDEFOP 2023)

- **Background**: France's use of predictive analytics for labor market trends.
- **Methodology**: Time-series analysis and trend forecasting models.
- **Outcome**: Identification of future skill shortages and areas of labor surplus.
- **Impact**: Shaped educational policies and labor regulations.

3. **Case Study: Big Data Analytics in Healthcare Expenditure - Poland** (Kornelia Batko 2022).

- **Background**: Analysis of healthcare spending patterns in Poland.
- **Methodology**: Data mining techniques on extensive healthcare datasets.
- **Outcome**: Insights into cost drivers and inefficiencies.
- **Impact**: Reformed healthcare policies, leading to improved patient outcomes.

These case studies illustrate the application of data science to economic analysis, revealing the depth and breadth of knowledge that these technologies can offer. They demonstrate the effectiveness of data science in improving understanding of complex economic sectors. Indeed, it can guide strategic decisions and policy development.

2. Framework for Incorporating Data Science in Satellite Account Development

We will now focus on establishing a comprehensive framework for integrating data science into the development of satellite accounts. As we have seen, this framework is essential for improving the accuracy and depth of economic analysis in the social economy.

Identifying Key Economic Indicators for Data Science Analysis:

This step involves a meticulous analysis of the economic landscape in order to identify the crucial indicators for a comprehensive economic analysis. In the context of satellite accounts, these may include indicators such as gross domestic product (GDP), employment rates, sectoral contributions and indicators of financial health. These indicators are carefully selected for their potential to be improved using data science methodologies, to ensure that they provide the most meaningful information when analysed.

Integration of Data Science Tools in Current Satellite Account Methodologies:

This part of the framework focuses on how data science tools can be integrated into existing satellite account methodologies. This involves selecting and using tools such as advanced machine learning algorithms, big data analysis platforms and predictive modelling techniques. The aim is to improve existing methodologies, ensuring that they can adapt and benefit from the depth and breadth of analysis that data science offers.

Step-by-Step Guide to Implementing Data Science Techniques in Satellite Accounts:

The final aspect of the framework is to provide a detailed guide to implementing data science techniques in satellite accounts. This guide would cover everything from the initial stages of data preparation and cleaning through to the application of specific data science methods. It would also include how to interpret and integrate the results of these analyses into the broader

economic narratives of the satellite accounts, ensuring that the information gathered is both accurate and applicable to economic decision-making.

By following this framework, satellite accounts can harness the full potential of data science to provide more accurate, comprehensive and insightful economic analysis.

3. Overcoming Challenges in Data Science Integration

Integrating data science into satellite account methodologies brings its own set of challenges. We will look at what these challenges are, focusing on practical strategies and solutions to manage and overcome them effectively.

Economic data is often voluminous, diverse and sometimes unstructured, requiring advanced processing techniques. To simplify this complexity, the application of robust data processing tools and close collaboration between data scientists and economists are essential in order to understand how data should be sorted and processed.

Data quality and integrity are the foundations of reliable data science integration. Poor data quality can lead to flawed analysis, which can distort the economic outlook. Regular data audits, rigorous validation and the use of quality management tools are crucial steps in maintaining data integrity. It is essential to use the same process with the same rigour over the years, so that results can be compared year after year.

Another major challenge is bridging the skills gap. The specialised nature of data science requires a certain level of expertise, which is not necessarily inherent in traditional economic analysis teams. It is essential to fill this gap through comprehensive training programmes, recruiting qualified staff and fostering collaborations with academic entities.

Interpreting the results of analyses, particularly using complex models, is often not straightforward. It is essential to make these results understandable and relevant. The use of visualisation tools and narrative techniques can help to translate technical results into economic information that can be used by both professionals and people who do not have the knowledge to interpret the results.

When it comes to data confidentiality and ethics, maintaining the highest standards is nonnegotiable. Compliance with ethical guidelines and data protection laws, as well as the implementation of rigorous cybersecurity measures, are essential to preserve the integrity and confidentiality of business data.

Finally, it is essential to keep up with the rapidly evolving field of data science. Keeping abreast of the latest technological advances and methodologies helps to guarantee the relevance and effectiveness of satellite accounts, which must be constantly evolving to ensure that they are as accurate and complete as possible.

4. The Future of Satellite Accounts with Data Science

Exploring the trajectory of satellite accounts in the context of data science, it becomes clear that the integration of these two fields is not static, but rather an ever-evolving landscape.

Evolving Role of Data Scientists:

The role of data scientists, which is essential for adding value to data, is evolving as a result of technological innovation and market development. This evolution is influencing the way satellite accounts will be developed and analysed, with greater attention being paid to the advanced machine learning and predictive analysis models we saw earlier.

Technological Advancements and Automation:

Technological advances in data science, such as the development of platforms that automate data preparation tasks, are redefining the role of data scientists. These advances point to a future where the focus will shift from manual data manipulation to more strategic analytical tasks, impacting the methodology and efficiency of satellite account development.

Emergence of New Tools and Techniques:

The introduction of visual pipeline tools and the growing importance of expert analysts in this area indicate a move towards more specialized and targeted analysis of satellite accounts. In addition, the application of graphical cognition and the use of mathematical graphs for inferential analysis are becoming an integral part of data science, which could influence satellite account methodologies and enable a maximum number of people to analyze these data without any particular skills.

Quantum Computing in Data Science:

The emergence of quantum computing presents a new frontier for data scientists, including those working on satellite accounts. Quantum computing offers novel ways to process and analyze economic data, which could lead to groundbreaking methodologies in satellite account development. There is therefore a great need for technological monitoring in this area.

Chapter 7: Recommendations and Framework Development

In this chapter we begin by summarising the main findings from the analysis of the SESA and INSEE reports on the social economy in various national contexts. Building on the methodological foundations and diverse applications of SESA discussed in previous chapters, this chapter aims to synthesise these ideas into a series of concrete recommendations and a development framework tailored to the specific needs of the social economy.

This chapter provides an overview of current practices, challenges and successes in the field of SESA. It seeks not only to learn from past experience, but also to anticipate and influence future trends in SSE. This forward-looking approach is essential to maintain the relevance and effectiveness of SESA in understanding and supporting the social economy.

From this point of view, the chapter serves as a link between theoretical concepts and practical implementation. It presents a way of applying the knowledge acquired in the course of this research. The aim is to offer guidance to policy makers, practitioners and researchers. This guidance will help to better understand, develop and use SESA. In this way, they will be able to support the social economy more effectively in its various dimensions, while adapting as best they can to national contexts.

1. Establishing a Global Framework for Social Economy Satellite Accounts

In this section, we consider the possibility of creating a global framework for SESAs. The framework proposed here is designed not only to provide a harmonised methodological basis, but also to encompass the unique facets of the various social economies around the world.

This idea is particularly useful as it aims to standardise and harmonise the way in which the social economy is measured and evaluated internationally. The usefulness of this framework

lies in its ability to provide a consistent and comparative understanding of the social economy across different countries and regions, which is crucial for different stakeholders. Such a framework would allow a better comparison of data and a more accurate assessment of the impact of the social economy on overall development and sustainability. Comparing the social economy between different countries is currently difficult due to the lack of a standardised methodology. Each country has its own definitions and systems for measuring the social economy, creating a major obstacle to reliable, global comparative analysis.

Faced with this challenge, the proposal to create a global framework for CSES is a crucial initiative. This framework would aim to harmonise methods of measuring and evaluating the social economy while respecting the unique specificities of each national context. (European Union 2021) / (International Labour Organization 2023)

Principles and Standards for a Harmonized Methodological Framework

A primary objective of this global framework is to establish a set of core principles and standards that can guide the development and implementation of SESA in any national context. These principles include:

- **Universality and Adaptability:** The framework should be universally applicable, providing a consistent methodological base, yet adaptable enough to cater to the specific needs and peculiarities of different social economies.
- **Comprehensive and Inclusive Data Representation:** A commitment to inclusivity in data collection and representation, ensuring that all forms of social economy activities, even those not traditionally captured in economic measurements, are recognized and valued.

- **Transparency and Consistency:** Ensuring that the methodologies and data sources used are transparent and consistent across different contexts, enabling comparability and reliability.

Incorporating Socio-Economic Diversity into the Methodology of Satellite Accounts

Recognizing the vast socio-economic diversity across nations, the framework must be flexible enough to accommodate various forms of social economies. This involves:

- **Contextual Methodological Adjustments:** Tailoring methodologies to account for unique socio-economic conditions, such as varying levels of formalization and digitalization in different economies.
- **Cultural Sensitivity:** Incorporating culturally-specific forms of social economy activities, recognizing and valuing the diversity in how social economies operate across different cultural contexts.
- **Sector-Specific Considerations:** Adapting the framework to capture the nuances of different sectors within the social economy, like healthcare, education, or cooperative movements.

Collaboration with international organisations, governments, academic experts and social economy practitioners is essential to the development of this global methodology. Their views and experiences will be instrumental in developing a framework that is both comprehensive and nuanced, effectively bridging the gap between global standards and local specificities.

2. Specific Recommendations for Portugal

This section focuses on tailoring the global framework of SESA to the specific context of Portugal's social economy. The aim is to provide targeted recommendations that enhance the effectiveness and relevance of SESA in capturing and supporting the unique characteristics of Portugal's social economy landscape.

Adapting the Global Framework to the Specifics of the Portuguese Social Economy

- **Customizing Methodologies:** Adapting the global SESA framework to align with the unique aspects of Portugal's social economy. This involves recognizing the role of traditional sectors like cooperatives and mutual societies, as well as emerging areas such as social entrepreneurship and digital platforms in the social economy.
- **Integration of Local Economic Indicators:** Incorporating local economic indicators that are particularly relevant to Portugal's social economy, such as metrics related to rural and community-based economies, and sectors where Portugal shows distinct activity, like tourism and cultural industries.
- **Leveraging Historical and Cultural Contexts:** Recognizing the historical and cultural influences on Portugal's social economy and reflecting these in the SESA methodology to ensure a comprehensive understanding of its impact and dynamics.

Proposals for Improving Data Collection and Analysis

- **Enhanced Data Collection Mechanisms:** Developing and implementing advanced data collection methods to capture a wide range of social economy activities, including

those in informal sectors or community-based initiatives that are significant in the Portuguese context.

- **Collaboration with National Statistical Bodies:** Working closely with national statistical offices and other relevant government bodies to ensure data completeness, accuracy, and consistency. This collaboration could also facilitate the integration of SESA data into national economic planning and policy-making processes.
- **Utilization of Technology in Data Collection and Analysis:** Leveraging technology, including digital data collection tools and platforms, to gather real-time and granular data from various segments of the social economy, enhancing the robustness and timeliness of the SESA.

By incorporating these recommendations, Portugal can significantly improve the accuracy and depth of its economic analysis of the social economy sector. This would enable a finer assessment of the contribution of this sector to the national economy, particularly in terms of job creation, social innovation and sustainable development.

3. Strategic Use of Satellite Accounts in Decision Making

This chapter describes the essential role of SESAs in policy development and strategic decisionmaking. This section is designed to guide policy makers and stakeholders in using SESA data to effectively inform and improve their policy decisions.

We will look at several examples of the application of SESA in various scenarios. By illustrating through case studies how SESA data has been used in different countries we will demonstrate the practical usefulness of SESA in policy development. The use of SESA for scenario analysis

and planning is also discussed. Policy makers can use the data to model the potential impacts of policy changes on the social economy sector, which can help them make informed decisions.

Case Study: Portugal's Social Economy During the COVID-19 Pandemic

A critical example comes from Portugal, where the Statistics Portugal (INE) and the Cooperative António Sérgio for Social Economy (CASES) conducted the fourth edition of the Social Economy Satellite Account (SESA) for 2019 and 2020. This edition was pivotal as it captured the initial effects of the COVID-19 pandemic on the social economy sector. Key findings from this study include:

- In 2020, the Gross Added Value (GVA) of the Social Economy sector constituted 3.2% of the national economy's GVA, slightly increasing from 2019. This data was contrary to the national economy, which saw a decrease due to the pandemic's adverse effects.
- Employment in the Social Economy sector also showed resilience, slightly increasing and contrasting with the national decrease in employment.
- Human health and social services were identified as the most relevant activities in terms of GVA and employment within the Social Economy.

The SESA data revealed the exceptional capacity of Portugal's social economy to withstand and even thrive in times of crisis, as demonstrated by its growth during the COVID-19 pandemic. This discovery was a turning point for policymakers, highlighting the crucial role of the social economy in the overall stabilisation of the Portuguese economy in times of crisis. This case study illustrates the usefulness of the SESA as an analytical tool for strategic decision-making.

These accounts provide a detailed and quantifiable overview of the economic impact of the social economy, which would be difficult to capture using traditional methods. By adopting a similar approach, other countries could benefit from a deeper understanding of their own social economy sectors, enabling them to respond in a more targeted and effective way not only in times of crisis but also in their long-term economic planning.

4. Integration of Data Science and Artificial Intelligence

We believe that the integration of data science and artificial intelligence (AI) into SESAs could have an impact in enriching these accounts with advanced analytical capabilities. We will look at how advanced data analysis tools and artificial intelligence technologies can be used to improve the depth, accuracy and predictive power of SESAs.

Utilizing Advanced Data Analysis Tools to Enrich Satellite Accounts

Data science offers a wealth of techniques that can substantially boost SESA's analytical power. Implementing machine learning algorithms, big data analytics, and predictive modeling uncovers new perspectives on intricate economic patterns and trends in the social economy. These methods facilitate extracting deeper insights from extensive datasets, enabling a richer comprehension of the social economy's impacts and identifying potential growth and development areas.

Examples of Predictive Modeling and Trend Analysis

The practical application of AI in SESA includes the use of predictive models to forecast future trends within the social economy. This predictive capability is invaluable for policymakers and stakeholders, as it allows them to anticipate changes and challenges, thereby enabling proactive and well-informed decision-making. Additionally, trend analysis using AI can uncover emerging patterns and opportunities within the social economy, which in many cases is not immediately apparent through traditional analytical methods.

The integration of these advanced data science techniques in SESA is not without its challenges. It requires a blend of economic expertise and technical know-how in data science. However, the potential benefits in terms of enhanced analytical depth, improved accuracy, and the ability to handle complex and large datasets make this integration a pivotal step forward in the evolution of satellite accounts.

By harnessing the power of data science and AI, SESA can transcend traditional analysis and become a more dynamic and predictive tool, offering invaluable insights for the strategic development and support of the social economy.

5. Capacity Building and Training

The successful implementation and use of SESAs is highly dependent on the availability of skilled professionals, adept at both economic analysis and the advanced data science techniques that increasingly underpin these accounts. Indeed, we have noted that although SESAs are highquality tools, their use and recognition remain limited. Increasing awareness of these tools could prove extremely beneficial, allowing a better understanding and wider use of these valuable resources for economic analysis and strategic decision-making.

Training Programs for Economists and Data Analysts

Developing and implementing extensive training programs is key for providing economists and data analysts with the skills needed to proficiently manage and utilize the complexities of SESA. These programs should address a wide array of topics, from the basics of social economy satellite accounting to sophisticated data analysis methods, and their real-world application in policy assessment and decision-making. A significant focus should be on integrating traditional economic analysis with contemporary data science techniques, making sure professionals are adept in both areas.

Collaboration Between Universities, Government, and Private Sector

Building robust partnerships among academic institutions, government bodies, and the private sector is crucial for creating a fertile environment for education and innovation in SESA. Universities are instrumental in devising advanced curricula and research initiatives centered on social economy satellite accounting. Meanwhile, collaborations with government and industry can offer practical insights and opportunities for applying these skills in real-world scenarios. These alliances also promote the sharing of ideas, resources, and best practices, thereby improving the effectiveness and applicability of training programs.

To maximise the effectiveness and relevance of SESA, it is essential to focus on training qualified staff and improving communication around these tools. By investing in in-depth training programmes, social economy stakeholders can develop a solid base of skilled professionals who can manage and interpret SESA data effectively. At the same time, by

stepping up communication efforts, we can raise awareness of the potential of SESA and increase its recognition and use in economic analysis and strategic decision-making. This dual approach, combining training and communication, is essential if we are to exploit the full potential of SESAs and make them more accessible and relevant in a dynamic and changing economic environment.

6. Promoting Data Transparency and Accessibility

We believe that a fundamental aspect of the development and effectiveness of SESAs is data transparency and accessibility. This is vital not only to strengthen user confidence in these tools, but also to broaden their scope and applicability. By ensuring transparent and easy access to SESA data, we can stimulate richer and more varied analysis, and encourage wider and more diverse use of this valuable information by a multitude of stakeholders. This openness of data is a crucial step towards a better informed, more integrated and more dynamic social economy, where decision-making is based on clear information that is accessible to all.

Mechanisms to Ensure Transparency and Accessibility of Satellite Account Data

For achieving transparency, it's vital to set up systems that guarantee the openness and accessibility of data collection, processing, and reporting for all stakeholders.

This involves:

- **Clear Documentation:** Offering comprehensive documentation of the methodologies, data sources, and analytical methods used in SESA's creation is essential. This documentation should be easily accessible to the public.

- **Open Data Initiatives:** Adopting open data policies where data from SESA are made available to researchers, policymakers, and the public in an accessible, userfriendly format. This approach encourages broader scrutiny, analysis, and application of the data.

Proposals for Data Sharing Platforms and Interactive Reporting

Developing platforms for data sharing and interactive reporting can significantly enhance the utility and reach of SESA data. Such platforms could include:

- **Online Portals:** Creating online portals where SESA data can be accessed, analyzed, and downloaded by users. These portals can feature tools for custom data visualization and analysis, catering to diverse user needs.
- **Interactive Dashboards:** Creating interactive dashboards that offer real-time insights and visual representations of critical indicators from the social economy is important. These dashboards are key in making data more comprehensible and practical for users without expert knowledge.

7. Monitoring and Evaluation Measures

We now turn to the need for comprehensive monitoring and evaluation measures to assess the effectiveness and impact of the SESAs. This section is devoted to the establishment of robust performance indicators and methodologies for regular review and updating, ensuring the continued relevance and accuracy of the SESAs.

Performance Indicators to Assess the Effectiveness of Satellite Accounts

Developing and implementing a set of performance indicators is essential for gauging the effectiveness of SESA. These indicators should be carefully selected to reflect the key objectives of SESA, such as accuracy in economic representation, influence on policy-making, and effectiveness in reflecting the dynamics of the social economy. Key performance indicators could include:

- **Data Accuracy and Completeness:** Measuring the degree to which SESA captures the breadth and depth of social economy activities.
- **Policy Impact:** Evaluating how effectively SESA data have been utilized in shaping and guiding economic and social policies.
- **User Engagement:** Assessing the extent of use and engagement with SESA data by various stakeholders, including policymakers, academics, and social economy practitioners.

Planning for Regular Audits and Methodological Updates

To ensure that SESA remains up-to-date and relevant, it is crucial to establish a regular schedule for audits and methodological reviews. These reviews should examine both the data and the methodologies used to ensure they align with the latest economic realities and technological advancements. Areas for potential revision could include:

- **Methodological Refinement:** Continuously refining and updating the methodologies used in SESA to incorporate new data sources, analytical tools, and economic developments.

- **Data Quality Improvement:** Regularly assessing and improving the quality of data collection, processing, and reporting mechanisms.
- **Adaptation to Economic Changes:** Adjusting the SESA framework to reflect changes in the social economy sector, including emerging trends and shifts in economic activities.

The implementation of these provisions, including the development of specific performance indicators for the Social Economy Satellite Accounts (SESA), would represent a significant step forward in their development. The introduction of these measures would considerably increase the value and effectiveness of the SESAs by providing clear and reliable assessment tools.

This would ensure that SESAs are better aligned with the real needs and objectives of stakeholders, improving their relevance and impact in policy formulation and understanding of the social economy. In addition, by measuring data accuracy, policy impact and user engagement, these arrangements would facilitate continuous improvement of the SESAs, ensuring that they remain up to date, accurate and responsive to developments in the social economy.

8. Stakeholder Engagement and Knowledge Dissemination

The insights from the survey responses underscore the importance of engaging a wide range of stakeholders in the development and application of Social Economy Satellite Accounts. This engagement is crucial to ensure that SESA reflects the diverse needs and perspectives of those involved in or affected by the social economy. Stakeholders, ranging from government officials

and social economy practitioners to academic researchers and private sector representatives, offer unique insights that can significantly enhance the relevance and effectiveness of SESA.

Strategies for Effective Stakeholder Involvement

The development of SESA can benefit greatly from strategies aimed at fostering active participation and collaboration among various stakeholders. This can be achieved through:

- **Inclusive Workshops and Consultations:** Organizing forums where stakeholders can share their experiences, challenges, and best practices in the social economy. Such interactions can provide valuable feedback for refining SESA methodologies.
- **Regular Communication Channels:** Establishing regular communication channels, such as newsletters or online platforms, to keep stakeholders informed about developments in SESA and to gather ongoing feedback.

Leveraging Insights from Stakeholder Feedback

The survey responses highlight several perceived limitations of SESA, such as its cost and limited scope in capturing certain aspects of the social economy. Addressing these concerns requires:

- **Cost-Effective Strategies:** Exploring ways to reduce the costs associated with implementing and maintaining SESA, possibly through shared resources or international collaboration.
- **Broadening Scope:** Expanding the scope of SESA to include a wider range of social economy activities, ensuring a more comprehensive representation of this sector.

Knowledge Dissemination and Public Awareness

Raising public awareness about the significance and benefits of SESA is key to its wider acceptance and utilization. This can be facilitated through:

- **Educational Campaigns and Seminars:** Conducting campaigns and seminars to educate stakeholders about the importance and utility of SESA.
- **Publishing Findings and Case Studies:** Regularly publishing findings from SESA, along with case studies demonstrating their practical application, to illustrate the real-world impact of these accounts.

As mentioned above, active stakeholder engagement, combined with effective knowledge dissemination strategies, is essential to the success and sustainability of social economy satellite accounts. By integrating diverse perspectives and continually evolving to meet the changing needs of the social economy, SESAs can become an indispensable tool for economic analysis and policy making.

9. Future Considerations and Evolution Perspectives

As we look toward the future of Social Economy Satellite Accounts (SESA), it is essential to anticipate the evolving trends and potential innovations that may shape this field. This section of the chapter explores the opportunities and challenges that lie ahead, offering recommendations for adapting SESA to future economic and technological changes.

Anticipating Future Trends in Social Economy

The landscape of the social economy is continuously evolving, influenced by global economic trends, technological advancements, and changing societal needs. It's crucial for SESA to remain adaptable and responsive to these changes. Future considerations might include:

- **Digital Transformation:** As digital technologies continue to permeate all sectors, SESA must incorporate these advancements to accurately capture digital-based social economy activities.

- **Sustainable Development Goals (SDGs):** Aligning SESA with the SDGs can provide valuable insights into the social economy's contributions to achieving these global objectives, especially in areas like poverty reduction, quality education, and climate action. The alignment of SESA with the Sustainable Development Goals (SDGs) is of major strategic utility, as both tools serve a common purpose: to promote sustainable and inclusive economic and social development. By providing detailed data on the contributions of the social economy, SESAs offer valuable insight into how economic activities can support the SDGs. For example, SESAs can highlight the impact of cooperatives, non-profit organisations and other social economy entities in key areas such as poverty reduction, quality education, gender equality, decent work, and the fight against climate change. Linking the SESAs with the SDGs provides a better understanding of how local economic initiatives contribute to global sustainable development goals. This helps decision-makers to align their policies and strategies with the SDGs while taking advantage of the unique strengths of the social economy. It also paves the way for a better allocation of resources, by targeting investment towards sectors that maximise positive social and environmental impact. Integrating the SESAs into the SDG framework enriches the understanding of the role of the social economy in achieving a sustainable and equitable future. This encourages a more holistic approach to development, where

economic, social and environmental objectives are pursued in a coherent and integrated manner.

Innovations in Data Science and Technology

The rapid advancements in data science and technology offer new opportunities for enhancing SESA. Future developments might involve:

- **Artificial Intelligence and Machine Learning:** as discussed above, taking advantage of AI and machine learning to analyse complex datasets more efficiently, providing deeper insights into the dynamics of the social economy can be very useful and powerful.
- **Blockchain and Data Security:** Explore the use of blockchain technology to ensure data integrity and security within SESA, enhancing trust and reliability. The use of blockchain technology within SESA offers significant potential for strengthening data integrity and security. Thanks to its decentralised and immutable infrastructure, blockchain guarantees the transparency and traceability of information. By integrating this technology, SESA data becomes more reliable and traceable, boosting the confidence of users and stakeholders.

10. Conclusion

This chapter has used the research we have carried out during our thesis to define a strategic framework for the development, implementation and future evolution of SESAs, highlighting their essential role in the social economy sector.

We began by establishing a global framework for SESA, setting out principles and standards to ensure their relevance and adaptability across diverse socio-economic contexts. This was followed by specific recommendations tailored for Portugal, demonstrating how the global framework can be localized to meet the unique needs of national social economies.

The strategic use of SESA in policy-making was then explored, emphasizing their value in providing nuanced economic insights that can inform and shape effective policy decisions. The integration of data science and AI was discussed as a key enabler for enhancing the analytical power of SESA, making them more robust and forward-looking.

Capacity building and training emerged as crucial elements, ensuring that professionals are well-equipped to handle the complexities of SESA. We then delved into the importance of promoting data transparency and accessibility, which is fundamental for the credibility and utility of SESA.

The significance of stakeholder engagement and knowledge dissemination was highlighted, emphasizing the need for collaborative efforts and public awareness to maximize the impact of SESA. The chapter also looked ahead, considering future trends and technological innovations that could influence the evolution of SESA.

In summary, this chapter has not only provided a roadmap for the effective implementation and utilization of SESA but has also envisioned a future where these tools play a central role in enhancing our understanding and support of the social economy. The insights and recommendations presented here pave the way for SESA to become integral components in shaping economic policies and strategies, aligning with the broader goals of sustainable and inclusive growth.

As we move forward, sustaining and nurturing the development and application of SESA will be pivotal in realizing their full potential in illuminating the multifaceted nature of the social economy, both within Portugal and on a global scale.

Chapter 8: Conclusions

Our research journey through the intricacies of Social Economy Satellite Accounts (SESA) or equivalent has led us to a profound understanding of their pivotal role in modern economic analysis. The comparative study across Portugal, France, and Poland has illuminated the diverse methodologies and applications of SESA, revealing their versatility in capturing the economic dynamics of various sectors of the social economy. The integration of data science, particularly the use of artificial intelligence and machine learning, stands out as a transformative advancement, enhancing the depth and accuracy of SESA.

Interviews with experts in the field, such as Rafael Chaves and Edith Archambault, have been instrumental in identifying both challenges and solutions in the implementation and development of SESA. Key challenges include the limitation in capturing the full spectrum of social economy activities and the costs associated with SESA implementation. However, innovative solutions such as expanding methodologies to include non-market contributions, like volunteer work, and leveraging technological advancements for cost-effective data analysis, offer promising pathways forward. The implications of our findings are significant and broad. SESA, as a tool, is not static; it constantly evolves, adjusting to technological advancements and the ever-changing economic landscapes. This adaptability is crucial for its relevance in future economic analysis and policy formulation. Looking ahead, the potential integration of environmental and sustainability metrics in SESA presents an exciting avenue for exploration, aligning economic analysis with global sustainability goals.

The journey through the world of SESA reaffirms their indispensable role in providing a comprehensive economic narrative. The future of SESA lies in its ability to embrace technological innovations, expand its methodological scope, and maintain collaborative networks across different sectors. This approach will not only enhance the understanding of the

social economy but also contribute to shaping policies that are reflective of the diverse economic realities and challenges of our time. As we continue to navigate a rapidly changing economic landscape, SESA stands as a beacon, guiding the way towards more inclusive, sustainable, and informed economic planning and policy-making.

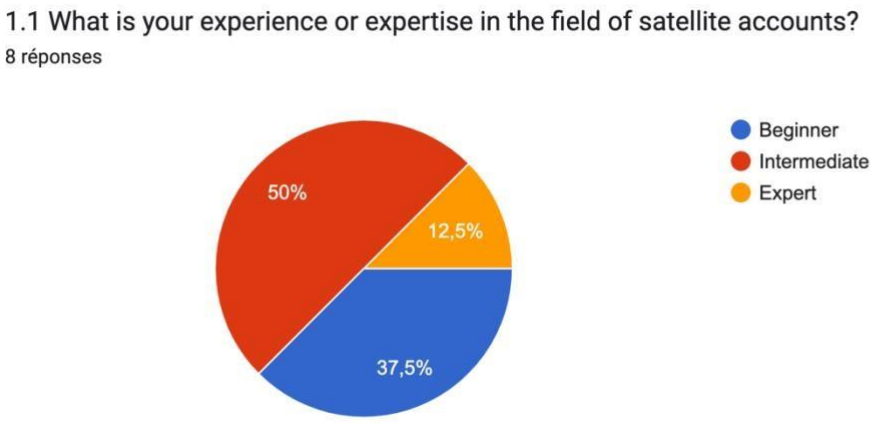
Appendices

Sources description

Source	Description	Quantity
Primary Data		
Questionnaire	Survey designed and conducted with Social economy / Satellite account specialist	8 valid answers
Social Economy Satellite Account report	Report specially designed to address social economy	6
Scientific review	About social economy, about satellites account, about data collection, about optimization of data transformation	17
Secondary Data		
Document analysis	Relative to social economy	Around 20
Community Post	Review of relevant posts from community	Around 80

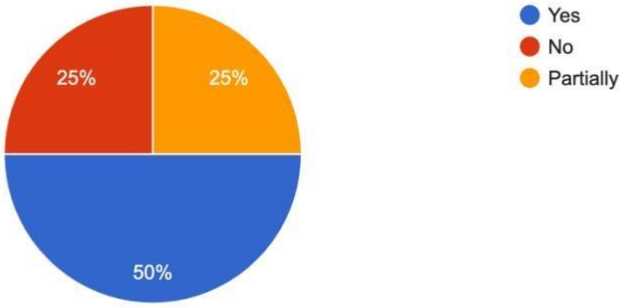
Results of the Social Economy Satellite Accounts Questionnaire

Full Name:	Position/Title:	Organization/Institution:
Gabriel Salathé-Beaulieu	Conseiller en transfert	TIESS
Rafael Chaves	professor	University of Valencia
Edith Archambault	Emerita Professor	Université Paris1 Panthéon-Sorbonne
Helena Sadzot	Researcher	Center for Social Economy - ULiège
Prouteau	Emeritus professor of economics	Nantes University
Marie J. Bouchard	/	/
Peter Kellermann Brandorff	Head consultant	Kooperationen
Danijel Baturina	assistant professor	Faculty of Law Zagreb



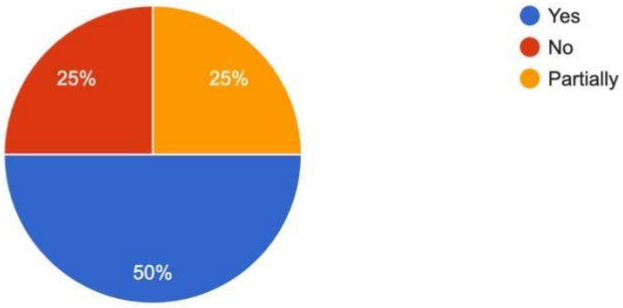
1.2 Do you have specific knowledge of Social Economy Satellite Accounts (SESA)?

8 réponses



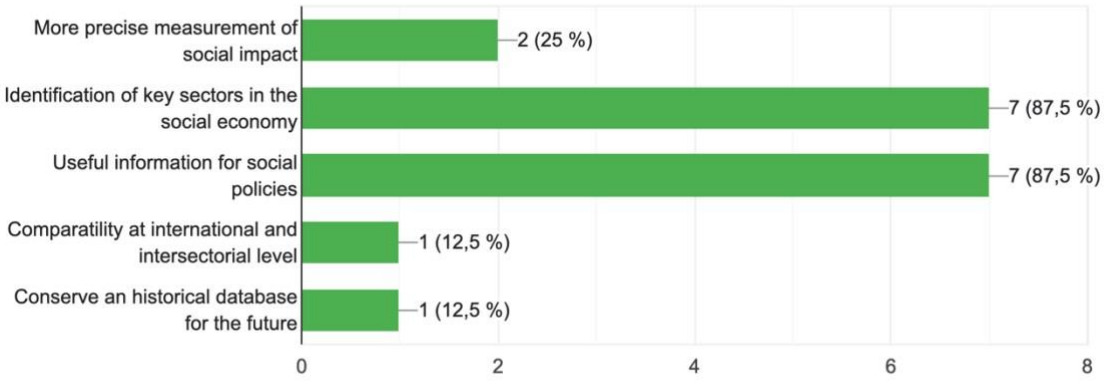
1.2 Do you have specific knowledge of Social Economy Satellite Accounts (SESA)?

8 réponses



2.1 In your opinion, why is it important for a country to develop Social Economy Satellite Accounts (SESA)?

8 réponses



2.2 What, in your view, is the most significant advantage of SESA compared to traditional satellite accounts?
SESA are not "better" than other satellite accounts
ns
It is not a field but a set of organizations
Because social economy can't be considered as a whole
It can free itself from the constraints inherent
It helps targeting some indicators
To measure the impact of the social economy
They are specific and put focus on SE

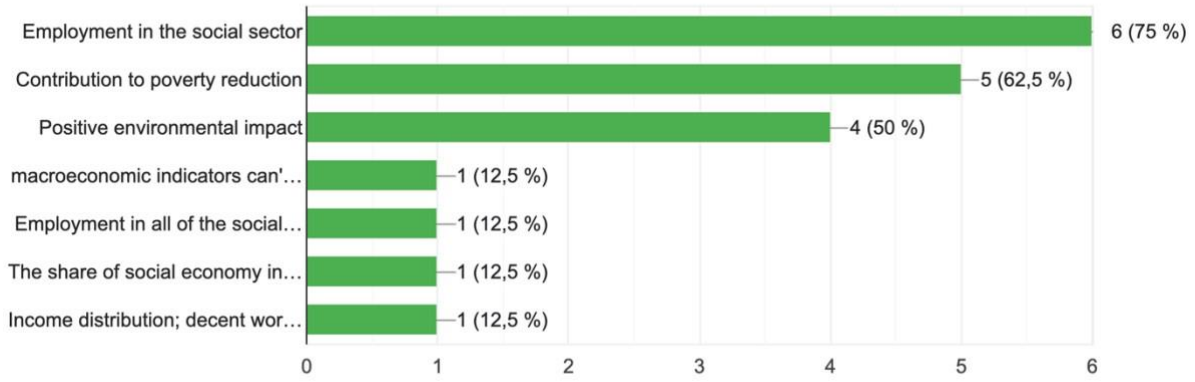
2.3 What are, in your opinion, the target stakeholders of the SESA?
representatives ot the SE sector, researchers and policymakers

statisticians
Mainly people belonging to SE organizations and statisticiansnd
Not clear if you talk about the organisations that should organise the SESA or the organisation that should be included in the accounts?
Public authorities
Public policy and SE umbrella organizations
Policy makers and local authorities
Government, SE sector, wider public

2.4 What should be changed in order to have an impact on the target stakeholders?
Having a satellite account in the first place would be agood start as there isn't such a thing in Canada
ISFL, must include SE
more awareness of public powers at local, national and international levell
?
Timely and targeted diffusion of SESA results
Political and administration will to implement them

3.1 What metrics or indicators do you think are most important for assessing the performance of the social economy in a country?

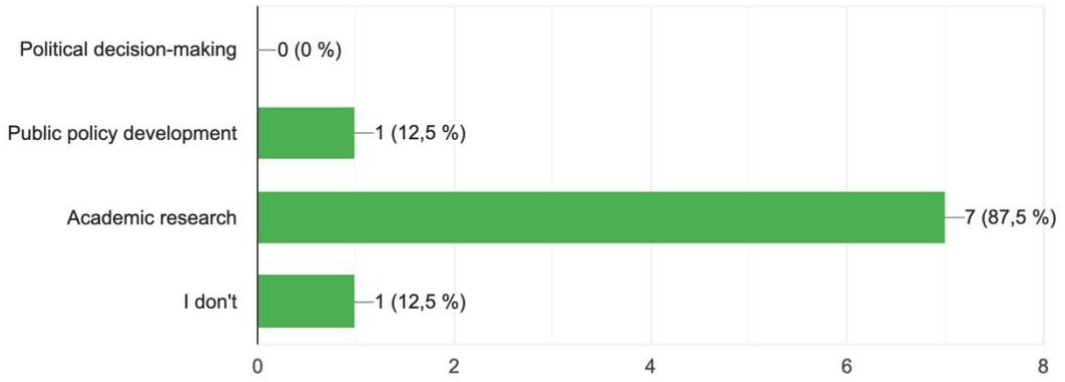
8 réponses



3.2 How can these metrics or indicators be used to inform public policies and economic decisions?
Statistics are useful to understand the weight of the social economy, target key sectors for its development, support its workforce and many more uses. But it cannot really inform us on the performance of the sector. That question requires a more "micro" perspective.
ns
More dissemination of the results of SESA if any
To show the weight and the social role of social economy
Indicator of economic diversity, social cohesion, resilience to crisis
To compare the impact of the social economy compared to public sector and for profit actors
More precise info about the size and impacts of the SE sector

4.1 How do you currently utilize information from SESA in your professional activities or area of expertise?

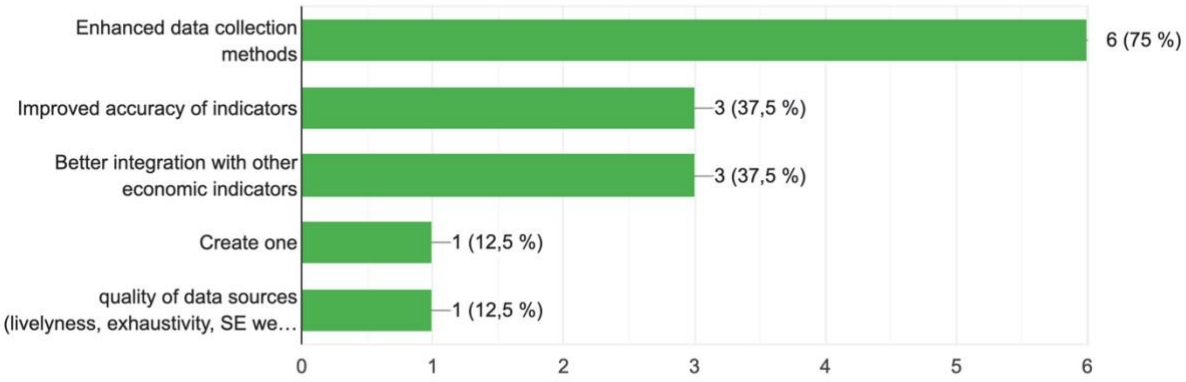
8 réponses



4.2 In your opinion, what are the main challenges or obstacles to the effective use of information from SESA?
No SESA in Canada.
ns
Too few political support and too few knowledge of SE by public powers
Agregate comparable data in all regions / countries
Lack of knowledge about (and interest for) the SE; lack of knowledge about what is a SESA and what purposes can it serve
We don't have them in Croatia so establishment

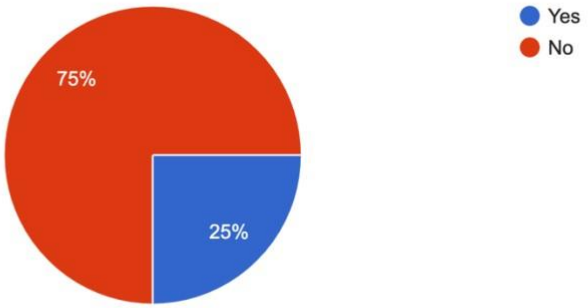
5.1 In your opinion, how could the current Social Economy Satellite Accounts (SESA) system be improved?

8 réponses



5.2 Do you have any recommendations for incorporating advanced technologies or methodologies to enhance the effectiveness of SESA?

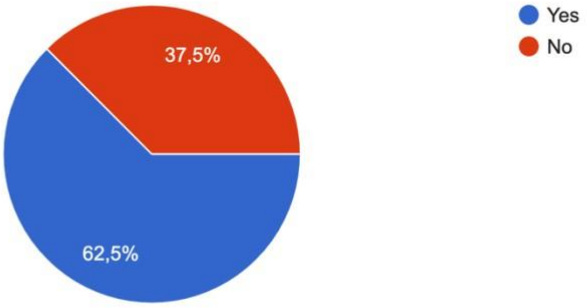
8 réponses



Could you please provide those specific recommendations?
ns
Diversify indicator metrics and avoid reducing measurement to monetary instruments alone

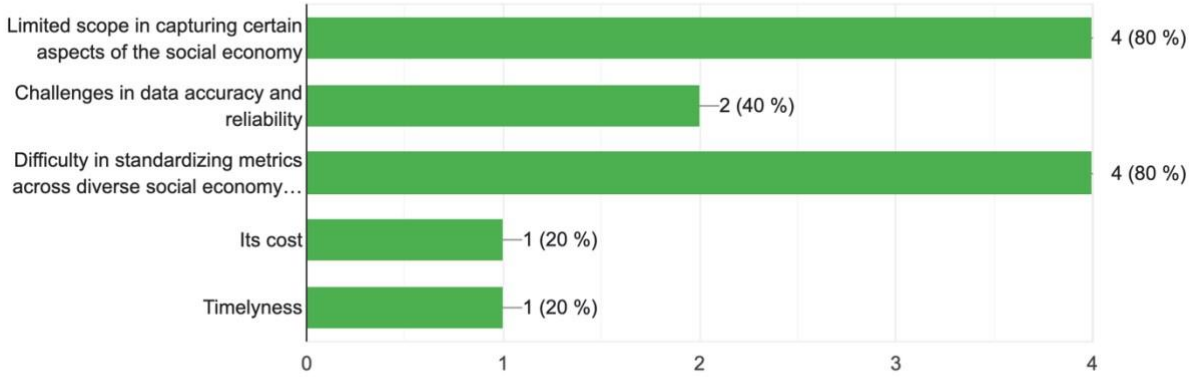
6.1 In your experience or knowledge, are there any perceived drawbacks or limitations of Social Economy Satellite Accounts (SESA)?

8 réponses



6.2 Please elaborate on the perceived drawbacks or limitations of SESA:

5 réponses



6.3 How do you think these drawbacks could be mitigated or addressed to enhance the overall effectiveness of SESA?
Sharing information between countries about how to design it so statistical agencies with limited resources can still do it.
Yes
Develop alternative and complementary periodic censuses and surveys

Evolution of the date of establishment of the Social Solidarity Cooperatives that submitted information in CASEs Accreditation Portal, 2018

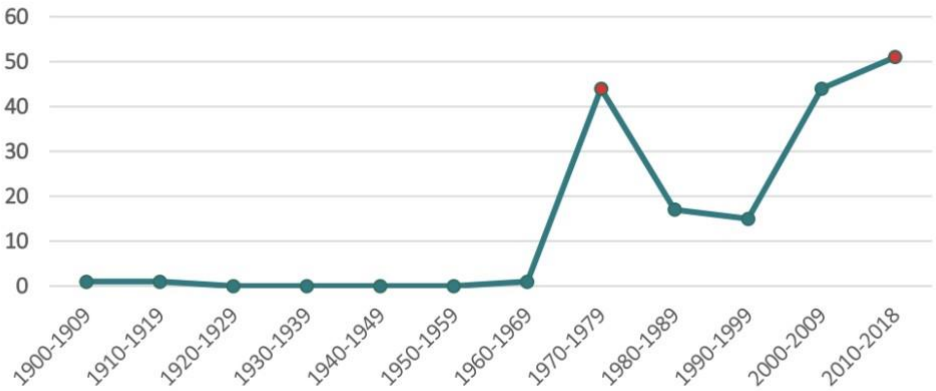


Figure 7 – Evolution of the date of establishment of the Social Solidarity Cooperatives that submitted information in CASEs Accreditation Portal, 2018

Stakeholder mapping

Power Scores (1 to 20):

1. **Government Agencies:**
   - Power Score: 18
   - Justification: High regulatory power and control over policies impacting the social economy.
2. **Social Enterprises and Cooperatives:**
   - Power Score: 14
   - Justification: Significant influence in their respective sectors, but power may vary based on size and resources.
3. **Non-profits and NGOs:**
   - Power Score: 16
   - Justification: Power derived from their social impact and advocacy for important causes.
4. **Financial Institutions:**
   - Power Score: 17
   - Justification: Substantial financial influence and ability to shape funding directions.
5. **Labor Unions:**
   - Power Score: 15

- Justification: Influence in advocating for fair labor practices but may vary based on membership size.

6. **Educational and Research Institutions:**
   - Power Score: 13
   - Justification: Influence in shaping academic discourse but may have less direct impact on policy.
7. **Business Associations:**
   - Power Score: 16
   - Justification: Power in representing industry interests and shaping businessrelated policies.
8. **Local Communities:**
   - Power Score: 12
   - Justification: Influential at a local level but may have limited power at higher administrative levels.
9. **Consumers:**
   - Power Score: 14
   - Justification: Collective power through purchasing decisions but may be dispersed.
10. **International Organizations:**
    - Power Score: 19 - Justification: High influence in setting global agendas and policies.
11. **National Policymakers:**
    - Power Score: 15
    - Justification: Substantial power at a national level but influenced by global trends.
12. **Regional Researchers and Academics:**
    - Power Score: 12
    - Justification: Moderate power with influence at a regional or national academic level.
13. **Regional Investors:**
    - Power Score: 14
    - Justification: Substantial power at a regional financial level, influenced by global initiatives.
14. **Regional Media:**
    - Power Score: 11 - Justification: Moderate power with the ability to shape regional perceptions.
15. **Regional Suppliers:**
    - Power Score: 10 - Justification: Limited power but may have influence in regional supply chains.
16. **Regional Competitors:**
    - Power Score: 12 - Justification: Moderate power regionally, influenced by global changes.
17. **Global Environmental Organizations (Indirect Impact):**
    - Power Score: 13
    - Justification: Moderate power globally, particularly in influencing environmental policies.

-
18. **International Educational Institutions (Indirect Impact):**
    - Power Score: 11 - Justification: Moderate power at an international academic level.
19. **Global Technology Providers (Indirect Impact):**
    - Power Score: 14 - Justification: Substantial power globally, especially in technological advancements.
20. **General Global Public:**
    - Power Score: 10
    - Justification: Limited power individually but collective influence in shaping global trends.

Influence Scores (1 to 20):

1. **Government Agencies:**
    - Influence Score: 16
    - Justification: High influence due to their role in shaping policies and regulations.
2. **Social Enterprises and Cooperatives:**
    - Influence Score: 14 - Justification: Influence in their respective sectors but may vary based on size.
3. **Non-profits and NGOs:**
    - Influence Score: 18 - Justification: High influence due to their social impact and advocacy work.
4. **Financial Institutions:**
    - Influence Score: 17
    - Justification: Substantial influence due to their financial contributions and direction-setting.
5. **Labor Unions:**
    - Influence Score: 15
    - Justification: Influence in advocating for fair labor practices but may vary based on membership size.
6. **Educational and Research Institutions:**
    - Influence Score: 13
    - Justification: Influence in shaping academic discourse but may have less direct impact on policy.
7. **Business Associations:**
    - Influence Score: 16
    - Justification: Influence in representing industry interests and shaping businessrelated policies.
8. **Local Communities:**
    - Influence Score: 12
    - Justification: Influential at a local level but may have limited influence at higher administrative levels.

-

9. **Consumers:**
    - Influence Score: 14
    - Justification: Collective influence through purchasing decisions but may be dispersed.
10. **International Organizations:**
    - Influence Score: 20

      Justification: Highest influence due to their role in setting global agendas and policies.
11. **National Policymakers:**
    - Influence Score: 14
    - Justification: High influence in shaping national policies, influenced by global trends.
12. **Regional Researchers and Academics:**
    - Influence Score: 11 ○ Justification: Moderate influence at a regional or national academic level.
13. **Regional Investors:**
    - Influence Score: 13
    - Justification: Substantial influence at a regional financial level, influenced by global initiatives.
14. **Regional Media:**
    - Influence Score: 10 ○ Justification: Moderate influence in shaping regional perceptions.
15. **Regional Suppliers:**
    - Influence Score: 8 ○ Justification: Limited influence but may impact regional supply chains.
16. **Regional Competitors:**
    - Influence Score: 10 ○ Justification: Moderate influence regionally, influenced by global changes.
17. **Global Environmental Organizations (Indirect Impact):**
    - Influence Score: 12
    - Justification: Moderate influence globally, particularly in shaping environmental policies.
18. **International Educational Institutions (Indirect Impact):**
    - Influence Score: 10 ○ Justification: Moderate influence at an international academic level.
19. **Global Technology Providers (Indirect Impact):**
    - Influence Score: 13
    - Justification: Substantial influence globally, especially in technological advancements.
20. **General Global Public:**
    - Influence Score: 8
    - Justification: Limited individual influence but collective impact in shaping global trends.

Acronyms list

SESA: Social Economy Satellite Account

SEE: Social Economy Europe

GDP: Gross Domestic Product

INE: Instituto Nacional de Estatistica

FUE: General Register of Statistical Units

IAP: Survey on employers' associations, unions, federations and confederations

IASM: Survey of Mutual Associations

LFS: Labour Force Survey

INSEE: Institut National de la Statistique et des Études Économiques

FTE: Full-Time Equivalent

GVA: Grodd Added Value

PPP: Purchasing Power Parity

CASES: Cooperativa António Sérgio para a Economia Social

CGE: Conta Geral do Estado

TSE: Third/Social Economy sector

ILO: International Labour Organisation

NGO: Non-governmental organisation

EESS: Emploi et économie sociale et solidaire

CSE: Social and Economic Committee

SSE: Social and Solidarity Economy

SDGs: Sustainable Development Goals

Bibliography

Academia de Líderes Ubuntu. s.d. *Academia de Líderes Ubuntu.* Accès le 11 25, 2023. https://www.academialideresubuntu.org/en/.

BRANDELEER, Céline. 2013. *Social Economy in Poland.* 07. Accessed 09 1, 2023. https://www.ess-europe.eu/sites/default/files/read-more.pdf.

CASES. s.d. *Oferta Formativa.* Accès le 12 5, 2023. https://cases.pt/programas/formacao/oferta-formativa/.

CEDEFOP. 2023. *2023 skills forecast - France.* Accessed 11 3, 2023. https://www.cedefop.europa.eu/files/skills_forecast_2023_france.pdf.

Chkoniya, Valentina. 2021. *Challenges in Decoding Consumer Behavior with Data Science.* 06. Accessed 11 20, 2023. https://revistia.com/files/articles/ejes_v7_i1s_21/Chkoniya.pdf.

CIRIEC. 2016. *Recent Evolutions of Social Economy - Study .* 12. Accès le 10 2023. https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/recentevolutions-social-economy-study#downloads.

Cláudia M. Viana, Maurício Santos, Dulce Freire, Patrícia Abrantes, Jorge Rocha. 2021. *Evaluation of the factors explaining the use of agricultural land: A machine learning and model-agnostic approach.* Accessed 11 17, 2023. https://repositorio.ul.pt/bitstream/10451/49691/1/Viana_Santos_Freire_Abrantes_Rocha_2021.pdf.

Edith Archambault, Philippe Kaminski. 2009. *La longue marche vers un compte satellite de l'économie sociale: un bilan à partir de l'expérience française.* 1 06. Accès le 09 15, 2023. https://core.ac.uk/download/47878859.pdf.

ESS France. s.d. *La liste des entreprises de l'ESS* . Accès le 12 11, 2023. https://www.essfrance.org/fr/la-liste-des-entreprises-de-less.

Esteban Ortiz-Ospina, Marco Molteni. 2017. *What are PPP adjustments and why do we need them?* 03 16. Accessed 11 28, 2023. https://ourworldindata.org/what-are-ppps.

European Commission. n.d. *Social Economy Gateway - France.* Accessed 09 11, 2023. https://social-economy-gateway.ec.europa.eu/my-country/france_en.

—. n.d. *Social Economy Gateway - Portugal.* Accessed 08 2023. https://social-economygateway.ec.europa.eu/mycountry/portugal_en#:~:text=Holy%20Houses%20of%20Mercy%20,established%20th rough%20a%20collaboration%20protocol.

European Union. 2021. "Eurostat." *ec.europa.* Accessed 09 5, 2023. https://ec.europa.eu/eurostat/esa2010/chapter/view/22/.

Eurostats. 2023. *Glossary:Satellite account* . 09 08. Accès le 11 30, 2023. https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Glossary%3ASatellite_account.

Farragher, Mark. 2018. *Why Economists Should Embrace Data Science.* Accessed 09 29, 2023. https://www.cambridgespark.com/info/why-economists-should-embrace-datascience.

Ferreira, Sílvia. 2019. *SOCIAL ENTERPRISES AND THEIR ECOSYSTEMS IN EUROPE.* 04. Accessed 10 12, 2023. https://ec.europa.eu/social/BlobServlet?docId=21136&langId=en.

French government. 2014. *LOI n° 2014-856 du 31 juillet 2014 relative à l'économie sociale et solidaire.* Accès le 12 8, 2023. https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000029313296/.

GUS. 2018. *Social Economy Satellite Account for Poland 2018.* Accessed 11 23, 2023. https://stat.gov.pl/download/gfx/portalinformacyjny/en/defaultaktualnosci/3681/5/1/1/social_economy_satellite_account_for_poland_2018.pdf.

INSEE. 2023. *L'économie sociale en 2020 .* Accès le 12 16, 2023. https://www.insee.fr/fr/statistiques/7636546?sommaire=7636553.

—. 2014. *L'économie sociale, des principes communs et beaucoup de diversité.* 11 21. Accessed 10 1, 2023. https://www.insee.fr/fr/statistiques/1281365.

Instituto Nacional de Estatistica. 2023. *SOCIAL ECONOMY SATELLITE ACCOUNT.* 07 31. Accessed 08 30, 2023. https://www.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=621748627&att_displ a y=n&att_download=y.

International Labour Organization. 2023. *Measuring the social and solidarity economy (SSE): A roadmap towards Guidelines concerning statistics of the SSE.* 10. Accès le 12 10, 2023. https://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/meetingdocument/wcms_894547.pdf.

International Monetary Fund. 2023. *GDP current prices.* Accessed 10 18, 2023. https://www.imf.org/external/datamapper/NGDPD@WEO/FRA/POL/PRT.

José Barea, José Luis Monzón. 2006. *MANUAL FOR DRAWING UP THE SATELLITE ACCOUNTS OF COMPANIES IN THE SOCIAL ECONOMY: CO-OPERATIVES AND MUTUAL SOCIETIES.* Accessed 09 11, 2023. https://www.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=150386007&att_displa y=n&att_download=y.

Joseph Stiglitz, Amartya K. Sen, Jean-Paul Fitoussi. 2009. *The measurement of economic performance and social progress revisited: Reflections and Overview.* Accessed 08 26, 2023. https://sciencespo.hal.science/hal-01069384/document.

Kornelia Batko, Andrzej Ślęzak. 2022. *The use of Big Data Analytics in healthcare.* Accessed 11 15, 2023. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8733917/.

Marie, Pierre. 2016. *Les entreprises autogérées au Portugal, de la révolution des Œillets à l'économie sociale.* 04. Accessed 08 28, 2023. https://www.cairn.info/revue-recma2016-4-page-86.htm.

Portugal 2030. n.d. *What it is Portugal 2030.* Accessed 10 25, 2023. https://portugal2030.pt/en/portugal-2030/o-que-e-o-portugal-2030/.

Ramos, Cristina. 2019. "knowledgehub." *knowledgehub.unsse.* 12. Accessed 08 23, 2023. https://knowledgehub.unsse.org/wp-content/uploads/2019/12/Ramos_2019_SocialEconomy-Satellite-Account-in-Portugal.pdf.

Rzeczpospolita Polska. s.d. *Ekonomia społeczna* . Accès le 08 29, 2023. https://www.gov.pl/web/rodzina/ekonomia-spoleczna-i-solidarna.

n.d. *Santa Casa da Misericordia de Macau.* Accessed 08 21, 2023. http://www.scmm.mo/frontend/main/index.php?hl=en.

Science Direct. 2021. "sciencedirect." *sciencedirect.* Accessed 08 11, 2023. https://www.sciencedirect.com/topics/economics-econometrics-and-finance/satelliteaccount.

Sébastien Mariaux, Emmanuelle Reynaud. 2018. *The social and solidary economy and its stakeholders: a discourse analysis* . Accès le 12 15, 2023. https://journals.openedition.org/fcs/2551.

2001. *The Tourism Satellite Account as an Ongoing Process: Past, Present and Future Developments.* Accessed 09 23, 2023. https://www.eunwto.org/doi/book/10.18111/9789284404247#:~:text=The%20Tourism%20Satellite %20Accounts%20Project,the%20steps%20still%20to%20go.

UNESCO. 2015. *Culture Satellite Account: An Examination of Current Methodologies and Country Experiences.* 10. Accessed 10 2, 2023. https://unstats.un.org/unsd/nationalaccount/workshops/2015/Montreal/MontrealBK2.PDF.

United Nations New York. 2018. *Satellite Account on Non-profit and Related Institutions and Volunteer Work.* Accessed 08 28, 2023. https://unstats.un.org/unsd/nationalaccount/docs/UN_TSE_HB_FNL_web.pdf.

Unstats. n.d. "unstats." *unstats.un.* Accessed 09 2, 2023. https://unstats.un.org/unsd/sna1993/drafts/chapter29dv2.pdf.

Ven, Peter van der. 2021. «Developing thematic satellite accounts: The example of a thematic satellite account for transport.» *OECD iLabrary.* 20 08. Accès le 12 13, 2023. https://www.oecd-ilibrary.org/docserver/b833cbfaen.pdf?expires=1702825059&id=id&accname=guest&checksum=136B680052951074 7DF1B69E11C2EEFC.

INTRODUCTION

This thesis delves into the exploration of Social Economy Satellite Accounts (SESA), an innovative and increasingly relevant approach in modern economic analysis. SESA provides a rich perspective on the economic contributions of sectors often unseen in traditional national accounts, such as non-profit organizations, cooperatives, and volunteer activities.

The European social economy provides over 13.6 million paid jobs in Europe, accounting for 6.3% of the total EU working population of the EU-28 (European Union). Despite its size, the social economy remains invisible in the national accounts and statistics around Europe, a hurdle that constitutes another major challenge, although efforts have been made during the last two decades. (CIRIEC 2016)

The primary aim of this study is to demonstrate how SESA can offer a more nuanced and comprehensive analysis of the social economy, thereby contributing to more effective strategic planning and policy formulation. In order to do so is needed an effective benchmarking of European SESAs, that allows an easy comparison between the different states of the 28 European Countries.

The study focuses on a comparative analysis of SESA (or related) practices in three distinct national contexts - Portugal, France, and Poland - highlighting their unique approaches and the insights that can be drawn from their diversities. The main objective is understanding to what extent the harmonization of methodologies in constructing social economy satellite accounts has improved data comparability among France, Portugal, and Poland over the past ten years. In order to do so, it's fundamental to analyse which specific indicators demonstrate significant convergence or divergence in methodological approaches.

Through this exploration, we aim to underscore the need for a growing importance of SESA in understanding the various facets of the social economy and their crucial role in shaping inclusive and sustainable economic policies. It emphasizes the need for close collaboration among various stakeholders - governments, academic institutions, social economy organizations, and civil society - in order to fully leverage the potential of SESA in crafting economic strategies that meet the current and future needs of societies.

Chapter 1: Satellite Accounts – An Overview

This chapter introduces the concept of satellite accounts, a key element in our exploration of economic phenomena, particularly within the realm of the social economy.

Satellite accounts, by their nature, extend and complement the data provided by the standard national accounts, enabling a more detailed and sector-specific economic analysis. They allow for a better comprehension of the economic contributions and potentials of sectors that are not primarily profit-driven, yet hold substantial importance in societal development and welfare. For this reason, they are extremely useful in scenarios where conventional economic metrics fail to encompass the full complexity of activities, particularly in fields that are more difficult to analyze such as the third sector.

1. Definition and Basic Principles of Satellite Accounts

Satellite accounts represent a specialized accounting framework, designed to supplement the traditional system of national accounts. Their primary purpose is to provide a detailed and comprehensive analysis of specific economic sectors or themes that are not typically dissected in depth within the standard national accounting framework (Eurostats 2023).

At its core, a satellite account is defined by its ability to expand upon the data and insights offered by national accounts. While national accounts offer a broad overview of an economy's performance, satellite accounts delve into specific areas, providing clarity and detail on aspects often overlooked or aggregated in general economic analyses. This detailed focus allows for a more nuanced understanding of certain sectors, such as the social economy, environmental economics, or the cultural sector, which are integral to a comprehensive understanding of a nation's overall economic health.

The design and implementation of satellite accounts are guided by several basic principles. Firstly, they maintain compatibility with the broader national accounts, ensuring that their findings and data can be integrated and compared with the national economic data (Ramos 2019). This compatibility is crucial for drawing meaningful and coherent conclusions.
Secondly, satellite accounts are characterized by their flexibility in methodology and scope (Unstats n.d.). They are tailored to suit the unique attributes of the sector or theme they are focused on, allowing for the incorporation of non-traditional economic indicators and valuation methods.

Additionally, satellite accounts are structured to provide clarity and insight into the interactions between the examined sector and the broader economy. This includes tracing the flow of economic value, assessing the impact of sectoral activities on employment, production, and consumption patterns, and understanding how these interactions contribute to the overall economic landscape.

In essence, satellite accounts serve as a bridge between the macroeconomic perspective provided by national accounts and the detailed, sector-specific insights needed for comprehensive economic analysis. This section lays the groundwork for understanding how these accounts function and their importance in shedding light on the complexities of the social economy, which will be further explored in the subsequent sections of this chapter and throughout the thesis.

2. Significance of Satellite Accounts in Economic Analysis

The true significance of satellite accounts emerges in their unique ability to enrich economic analysis, offering insights that transcend the boundaries of traditional economic metrics. In this section, we delve into the crucial role these accounts play in augmenting our understanding of

economic phenomena, especially in sectors that are not fully captured by standard economic indicators.

Satellite accounts are particularly vital in contexts where the economic activities are multifaceted and diverse, such as in the social economy. The social economy, encompassing a range of activities from non-profit organizations to cooperative enterprises, often operates on principles that differ significantly from those of the for-profit sector. Traditional economic indicators, while effective in measuring profit-driven activities, can fall short in capturing the full economic value and impact of such organizations. Satellite accounts bridge this gap by providing a framework that can encapsulate the unique economic contributions of these entities, including their social value, employment generation, and contribution to Gross Domestic Product (GDP).

The application of satellite accounts enables a more holistic understanding of the economy, highlighting sectors that contribute not only in monetary terms but also in terms of social welfare, environmental sustainability, and cultural enrichment (European Union 2021). This expanded perspective is crucial for policymakers, economists, and stakeholders who seek a comprehensive understanding of an economy's diverse components. For instance, in assessing the impact of the social economy, satellite accounts can reveal how these entities contribute to job creation, social inclusion, and local development (José Barea 2006), factors that are critical for informed policy-making and strategic planning.

Furthermore, satellite accounts facilitate better alignment of economic strategies with social objectives. Through meticulous collection of nuanced data in areas such as healthcare, education, and environmental management, these narratives foster the development of strategies that are not only economically astute but also socially benevolent. This congruence

has a fundamental significance in the contemporary era, in which fiscal choices are examined through the prism of their social and ecological repercussions.

3. Global Overview of Satellite Accounts

The adoption and utilization of satellite accounts have gained traction globally (The Tourism Satellite Account as an Ongoing Process: Past, Present and Future Developments 2001), demonstrating their versatility and value across various economic contexts. This section offers a panoramic view of how satellite accounts have been embraced and implemented around the world, highlighting their adaptability to different economic systems and needs.

Globally, the application of satellite accounts has varied significantly, reflecting the diverse economic priorities and analytical requirements of different countries. In developed economies, for instance, satellite accounts have often been used to examine sectors like culture, tourism, and the environment, providing insights into areas crucial for sustainable development and policy planning. In these contexts, satellite accounts have played a key role in quantifying the economic impact of non-traditional sectors, aiding in the formulation of strategies that balance economic growth with cultural preservation and environmental sustainability (Ven 2021).

In developing countries, on the other hand, satellite accounts have been instrumental in highlighting the contributions of sectors such as agriculture, informal economy, and social services. These accounts have provided crucial data necessary for understanding the broader economic landscape, especially in regions where a significant portion of economic activity occurs outside the traditional market framework. By capturing these aspects, satellite accounts have aided in developing policies that are more inclusive and representative of the actual economic activities in these countries.

The application of satellite accounts also reflects the influence of international guidelines and collaborations. Organizations like the United Nations and the World Bank have been instrumental in promoting the use of satellite accounts, offering frameworks and support for their implementation. This international cooperation has facilitated the standardization of methodologies, making it easier for cross-country comparisons and global economic analysis (United Nations New York 2018).

Despite their widespread adoption, the degree of sophistication and focus of satellite accounts varies globally. Some countries have developed highly detailed accounts for specific sectors, while others are still in the early stages of incorporating these tools into their economic analysis frameworks. This diversity reflects not only the differing economic structures and priorities but also the varying levels of resources and expertise available for economic analysis.

4. Data Recollection for SESA

The production of National Accounts consists, in simplistic terms, of integrating, reconciling and balancing different official sources of information, which have already undergone rigorous validation and quality analysis processes (Ramos 2019).

SESA is meticulously compiled using existing data sources, without the need for additional surveys tailored for this specific project—a distinctive feature and strength shared by satellite accounts in general. The primary data contributors for estimating both monetary and nonmonetary variables include Statistics Portugal (INE) and various other sources.

Statistics Portugal (INE) plays a pivotal role, utilizing several work files within the National Accounts. These files encompass estimates for key operations of the European System of

Accounts, such as Output, Intermediate Consumption, Compensation of employees, Gross Value Added (GVA), subsidies, and taxes. The General Register of Statistical Units (FUE) serves as a crucial instrument for coordinating and harmonizing information on enterprises, establishments, and various organizational typologies. This register integrates administrative records from external entities, contributing to a comprehensive dataset.

In order to make the SESA as much representative of the real context, then, many other data sources are needed. The Survey on employers' associations, unions, federations, and confederations (IAP) focuses on specific segments of associations and social economy entities, gathering information on physical indicators and Accounting Standards System (SNC) accounts. Similarly, the Survey of Mutual Associations (IASM) provides disaggregated information on financial and physical indicators related to Mutual Assistance Associations.

Other significant data sources include the Labour Force Survey (LFS) for labor market characterization, the Survey on Fire Brigade entities (IEDCB) for data on fire prevention and fighting activities, and the Survey on environmental non-governmental organizations (IONGA) for environmental statistics production.

Beyond INE, various additional sources contribute valuable data, such as detailed analytical balance sheets of central government entities, the Archeevo database of the General Secretariat of the Ministry of Internal Administration, and the General State Account (CGE). Financial statements of CASES-accredited cooperatives, Social Security data, IPSS Budget and Accounts (OCIP), and reports from different entities also play a crucial role.

The approach to compiling the satellite account emphasizes a close relationship with the System of National Accounts. Consistency is maintained across institutional sectors by using the same data sources, applying consistent methods, and conducting thorough comparisons to ensure the reliability and coherence of the final results.

5. Legislation governing satellite accounts in the social economy sector

Firstly, satellite accounts must comply with current international and national accounting standards. This ensures uniformity of accounting practices, making it easier to compare data between countries.

In addition to these standards, some countries have put in place specific regulations to guide the preparation of satellite accounts. These regulations may define the entities to be included, the classification criteria, and the data collection methodologies specific to the sector.

In the European context, European Union (EU) directives can play a crucial role. EU policies often aim to promote the social economy, and directives enable satellite accounts to be drawn up in line with the EU's economic and social objectives.

Satellite accounts are also governed by laws designed to ensure transparency and accountability. These laws may require the disclosure of financial and operational information to ensure the sound and responsible management of social economy entities.

Legislation must also address the issue of access to information and data confidentiality. It must strike a balance between the need to provide useful information to the public and the protection of sensitive information held by social economy entities.

Some countries may even require independent verification mechanisms for satellite accounts. This guarantees the reliability and integrity of the data presented, reinforcing the credibility of the collection and compilation process.

Chapter 2: Methodology for Benchmarking Satellite Accounts

1. Criteria for selecting reference countries

The choice of reference countries plays a crucial role in the benchmarking process, particularly when examining social economy satellite accounts. As previously mentioned, our main point of reference will be Portugal, and we will compare its approach to social economy satellite accounts with global practices. However, as it is difficult to compare with every country, our main focus will be a comparative analysis with France and Poland. The criteria for selecting these reference countries are based on several key considerations, all designed to ensure that the resulting comparisons are relevant, illuminating and promote understanding of the distinctive aspects of the social economy in Portugal, France and Poland.

Economic similarities and differences:

A key criterion is the assessment of economic structures and stages of development. Although Portugal, France and Poland are united under the banner of the European Union, each country has a distinct economic character. France is among Europe's largest economies, with a diversified industrial base, while Portugal and Poland, though smaller in comparison, have experienced significant economic growth and development in recent years (International Monetary Fund 2023). This variation offers a rich comparative perspective, enabling us to analyze the operation of satellite accounts in economies of different sizes and structures.

Structure and scope of the social economy:

The nature and extent of the social economy in these countries is also crucial. We know that in Europe, the social economy represents around 6.3% of the working population in the 28 member states (CIRIEC 2016, 23). Of course, each country has its own unique mix of social economy entities such as cooperatives, non-profit organizations and mutual societies. For example, France has a well-developed and diversified social economy sector (BRANDELEER 2013), reflecting its broader economic transition with a proportion of paid employment in the social economy to total volume of 9.1% (CIRIEC 2016, 25). Portugal, with its strong tradition in cooperative movements (Marie 2016), presents another distinct model with a proportion of paid employment in the social economy in relation to total volume of 5.0% (CIRIEC 2016, 25).

Finally, Poland still has room for improvement, with a proportion of paid employment in the social economy in relation to total volume of just 2.3%.

We can see that each country is at a different stage in the development of its social economy, despite its membership of the European Union. This is why it is interesting to compare these 3 countries.

Data availability and quality:

The availability of reliable, high-quality data is fundamental to any benchmarking exercise. It is essential to select countries where data on the social economy is readily available and meets certain standards of reliability and consistency. This ensures that the benchmarking exercise is based on a solid empirical foundation.

France, through its legislative advance with the law of July 31, 2014 (French government 2014) relating to the social and solidarity economy, allows for the creation of a social utility solidarity enterprise status. This ensures that information is constantly available via a sustainable and

solidarity development booklet on all companies (ESS France s.d.). This booklet will contain the following information: Company name, acronym if applicable; Legal form; Registered office; Common name of company; Company address; Company identity number (SIREN).

For Poland, the publication of the latest satellite account of the social economy dates from 2021 and concerns the year 2018 (GUS 2018) . We should also note that Poland has decided to place this publication in the "Experimental statistics" section.

And for Portugal, the latest publication of the social economy satellite account dates from 2020.

Socio-cultural contexts:

Socio-cultural factors also play a role in shaping the social economy. For example, historical, cultural and social factors in Poland, which underwent significant economic and political transformations after 1989, have shaped its social economy in unique ways.

Similarly, Portugal's history and culture have influenced its social economy sector, particularly in areas such as cooperative movements and mutual societies.

As for France, we know of its strong social past.

By applying these criteria, we ensure that the selected countries - Portugal, France and Poland - offer a comprehensive and comparative overview for the study of satellite accounts in the context of the social economy. This selection facilitates a nuanced understanding of how different economic, legal and socio-cultural environments impact the structuring and operation of satellite accounts.

2. A methodological framework for comparing satellite accounts

The effectiveness of satellite account benchmarking depends on a well-structured methodological framework, which we will now define.

Comparison parameters

The choice of variables and indicators is crucial for meaningful comparisons. We will therefore need to identify the key variables and indicators for each country we are studying. These could be gross value added (GVA), employment measures (such as full-time equivalents and types of employment) or sector-specific contributions (such as health, education and social services). These indicators will provide a clear picture of the impact of the social economy.

Data harmonization

To compare our data from different countries, it will be essential to have standardized definitions and measurement methods for all key indicators to ensure comparability. This means aligning classification systems for different types of social economy organizations, and ensuring consistency in the way economic activities are recorded.

Also, given that raw data from different countries show discrepancies due to different collection methods or economic contexts, techniques such as purchasing power parity (PPP) adjustments for economic indicators and statistical standardization methods may be applied to make data comparable (Esteban Ortiz-Ospina 2017).

Analytical methods

Alongside quantitative methods, qualitative analysis is crucial, particularly for understanding the context behind the figures. That's why we conducted a questionnaire that we sent to professionals in the social economy, satellite accounts or even both.

This methodological framework for comparing satellite accounts is designed to be realistic and feasible, given the availability of data and the practicalities of cross-country comparisons. It aims to provide a solid and comprehensive analysis of the social economy through satellite accounts in the selected reference countries.

3. Challenges and solutions in benchmarking satellite accounts

The calibration of satellite accounts, particularly in the context of the social economies of different countries, presents a number of challenges. Addressing these challenges is essential to ensure the accuracy and reliability of the calibration process.

Data consistency and quality:

Disparities in data quality and consistency between different countries are a major obstacle to benchmarking. Since satellite accounts are an extension of national accounts, their effectiveness depends on the quality of data collected at national level. Variations may arise due to the diversity of data collection methods, economic frameworks or the degree of technological progress in data processing. To remedy these discrepancies, it is essential to implement rigorous data quality assessments and standardize data collection methods. In addition, the use of sophisticated data processing technologies would enable data to be refined and synchronized, improving their applicability for comparative studies.

Methodological variations:

Although there is, as of 2018, a manual created by the United States that provides a methodological framework for the creation of a SESA (Ramos 2019, 3) , satellite accounts are not standardized worldwide and countries may use different methodologies for their construction. This variation can pose major problems for directly comparing satellite accounts from one country to another. One solution is to develop a common framework or set of guidelines for compiling satellite accounts, which can be adapted to the specific context of each country. This approach requires collaboration and agreement between the countries involved.

Interpretation and contextualization :

Interpreting satellite account data requires a thorough understanding of each country's socioeconomic context. Incorrect interpretation can lead to incorrect conclusions or policy recommendations. It is therefore essential to include experts from each country in the analysis process, to ensure that data are interpreted in the right context. This approach also facilitates a more nuanced understanding of the unique aspects of each country's social economy.

Technological obstacles:

Integrating advanced data science techniques into the benchmarking process can be hampered by technological limitations, such as lack of access to sophisticated analytical tools or data science expertise. To meet this challenge, it may be necessary to build stakeholder capacity by training staff in data science methodologies and investing in technological infrastructure.

Collaboration with academic institutions or private organizations specializing in data science can also provide valuable support.

Data confidentiality and security :

Handling large datasets, particularly those containing sensitive economic information, raises concerns about data confidentiality and security. Ensuring compliance with data protection regulations and implementing robust cybersecurity measures are essential. These include anonymizing data, securing data transmission channels and restricting access to sensitive information.

Addressing these challenges is essential to the successful benchmarking of satellite accounts. By addressing issues of data quality, methodological variations, interpretation, technological barriers and data confidentiality, the benchmarking process can produce more accurate, reliable and meaningful information on the social economies of different countries.

Chapter 3: The Portuguese Context

Portugal's social economy is rich in entities such as cooperatives, mutual associations, Holy Houses of Mercy, foundations, the community and self-management sub-sector, and altruistic associations (ACFA). This sector, rooted in the country's socio-economic fabric, has evolved to meet the changing demands of society and the economy.

In recent years, the contribution of the social economy to the Portuguese economy has been recognized. Its impact on social integration, job creation and gross value added (GVA) is notable. Reports from Statistics Portugal (INE) and the António Sérgio Cooperative for the

Social Economy (CASES) demonstrate its influence. In 2020, the social economy accounted for 3.2% of national gross value added, a slight increase on the previous year. It also accounted for 5.2% of total employment, underlining its role as a key employer (Instituto Nacional de Estatistica 2023).

This section looks at the history of the social economy in Portugal. It will prepare an in-depth examination of its current situation using satellite accounts. The resilience and counter-cyclical nature of this sector, particularly during periods such as the COVID-19 pandemic, will also be discussed.

1. Evolution of Satellite Accounts in Portugal

The concept of satellite accounts was introduced in Portugal as a means of extending the analytical capacity of traditional national accounts, by providing a more detailed and sectorspecific economic analysis. These accounts have made it possible to capture the economic contributions of non-traditional sectors, in particular the social economy. The evolution of satellite accounts in Portugal has been influenced by both national economic priorities and the integration of international accounting standards, resulting in a unique framework adapted to the Portuguese context (José Barea 2006).

The genesis and evolution of satellite accounts in Portugal are closely linked to a changing economic context and the gradual recognition of the importance of specific sectors in national development. Let's retrace the history of these accounts, highlighting the key stages and influences that have shaped their current framework.

The first steps towards the establishment of satellite accounts in Portugal can be attributed to the need to understand in greater detail the composition of the national economy. Over time, the

growing complexity of economic structures led to recognition of the need for more specialized tools to analyze specific sectors.

The adoption of these satellite accounts has been influenced by the current legislative and regulatory framework. We already know that all Portuguese satellite accounts are created with the concepts and methods of the National Accounts, as defined in the European system of national and regional accounts, as their primary reference.

Regulatory adaptations at national level were also essential to integrate these instruments into the specific Portuguese context. For example, the country had to add specific definitions for certain sectors, such as the social economy, to ensure a common understanding and appropriate classification in the satellite accounts.

2. Data sources for satellite accounts

The reliability and completeness of SESA in Portugal depends on the quality of the data sources used. Statistics Portugal (INE) and the António Sérgio Cooperative for the Social Economy (CASES) have been instrumental in collecting and analyzing the data that highlight the economic impact of the social economy. Data sources range from national economic surveys to administrative records and sector studies, providing a multifaceted view of the social economy's contributions to gross value added and employment at national level (Ramos 2019, 9,10).

The recent SESA reports for 2019 and 2020 testify to the effectiveness of these data sources in providing a detailed picture of the social economy. They not only reveal the sector's contribution to the national economy in terms of gross value added and employment, but also highlight its resilience during the COVID-19 pandemic (Instituto Nacional de Estatistica 2023).

The diversity of data sources used to build the Portuguese SESA is one of its strengths, giving it a comprehensive perspective on the country's social economy. We can also mention the sectoral approach, which is also very important for in-depth analysis of particular sectors within the social economy, with specific surveys, such as those on employers' associations, mutual societies, fire departments, environmental non-governmental organizations, etc.

Also, the use of data from the General State Account (CGE) and other government sources reinforces the credibility of the information by basing it on official data.

3. Methodology of the Portuguese satellite accounts

The methodology underlying the Social Economy Satellite Account (SESA) in Portugal, developed through collaboration between Statistics Portugal (INE) and the António Sérgio Cooperative for the Social Economy (CASES), is essential for an analytical assessment of the economic dimension of the social economy sector. The SESA, particularly in its fourth edition covering the years 2019 and 2020, is notable for being the first to contain data covering two years. This has made it possible to capture the first effects of the COVID-19 pandemic on the sector.

The methodology used in the SESA includes comprehensive data collection and analysis processes. This involves collecting data from various entities as seen above, categorizing them (cooperatives, mutual associations, foundations, etc.), then analyzing their contributions in terms of gross value added (GVA), employment and other economic indicators such as type of business unit, number of employees or employee remuneration (Instituto Nacional de Estatistica 2023, 10). The SESA methodology must also take into account the unique characteristics of these entities, which do not always follow profit-driven models.

In addition, the SESA methodology includes comparing these data points over several years to assess trends and impacts, such as the resilience of the social economy during economic downturns like pandemics. This approach highlights the counter-cyclical nature of the social economy, as demonstrated by its positive economic behavior relative to the national economy during the pandemic.

4. Analysis of indicators and metrics used

The complex process of creating satellite accounts for sectors such as the social economy involves a meticulous selection of metrics and indicators. These tools are essential to provide a nuanced picture of the sector's economic activities and contributions, which often remain underrepresented in traditional economic analyses.

Gross value added (GVA), a key indicator in this context, provides an overview of the economic importance of the social economy. By assessing the difference between the value of production and intermediate consumption, GVA paints a vivid picture of the sector's contribution to the overall economy. According to the Social Economy Satellite Account (SESA) for Portugal, the GVA of the social economy represented 3.2% of the GVA of the national economy in 2020, a slight increase on 2019, a trend that contrasts with the slowdown in the general economy during the pandemic (Instituto Nacional de Estatistica 2023).

Employment measures go beyond simple headcounts and provide insight into the types and qualities of jobs in the sector. These measures, including full-time equivalents and the nature of employment (part-time or full-time), are particularly instructive. SESA reports for Portugal indicate that employment in the social economy accounted for 5.2% of total employment, demonstrating the sector's role as a major employer, particularly in times of economic contraction.

Measures of production and intermediate consumption provide a better understanding of the sector's economic activities. Production measures the total value of goods and services produced, while intermediate consumption assesses the value of inputs used. These measures are essential for understanding resource use and production in the social economy.

Financial aspects such as employee compensation, operating surplus and mixed income are essential for assessing the sector's financial health and employee investment.

Capital formation is another essential measure, indicative of the sector's future growth potential. It encompasses investment in fixed assets and changes in inventories, revealing the direction of the sector's development and its capacity for future productivity.

Productivity indicators, such as gross value added per employee, highlight the sector's efficiency and effectiveness. These measures are essential for benchmarking performance and identifying areas for improvement or strategic investment.

Sector-specific indicators, tailored to the unique characteristics of the social economy, provide additional depth. For example, the health sector within the Portuguese social economy accounts for a substantial share of gross value added and employment, reflecting its importance within the sector. In 2020, health and social services were the most important activities, with health accounting for 25.5% of gross value added and 33.2% of employees in the social economy (Instituto Nacional de Estatistica 2023).

In addition, the sector's financial health is summarized by financial indicators such as revenues, expenses and sources of funding. These provide an overview of the sector's economic viability and resource allocation.

Finally, the longevity and maturity of organizations within the sector offer a perspective through which the stability and sustainability of the social economy can be assessed. This aspect helps to understand the resilience and adaptability of organizations in the sector over time.

Together, these measures and indicators form a comprehensive framework for understanding the multifaceted economic contributions of the social economy in Portugal. They offer valuable information to policymakers and stakeholders, guiding decisions that shape the sector's future trajectory.

5. Case studies and practical examples

In the field of Social Economy Satellite Accounts (SESA) in Portugal, several case studies and practical examples highlight the usefulness of accounts in understanding and shaping the social economy sector.

The transformation of historical entities such as the Holy Houses of Mercy from charitable organizations to significant economic contributors is an excellent example (Santa Casa da Misericordia de Macau n.d.). SESA data helped illustrate the evolution of these organizations over time, both in terms of diversifying their services and increasing their contributions to local economies (Instituto Nacional de Estatistica 2023). By tracking changes in employment and gross value added (GVA), SESA demonstrates the economic importance of these entities, which is vital for securing funding and informing targeted policies for their future development. This example illustrates SESA's role in monitoring the economic impact of entities with deep historical roots, reflecting their adaptation to contemporary societal needs.

Another significant aspect is the growth of cooperatives and associations, particularly in sectors such as agriculture since the 1970s (*Appendix, evolution of the creation date of social

solidarity cooperatives that have submitted information to the SESA accreditation portal*). Here, SESA's contribution lies in quantifying the economic impact of these cooperatives, highlighting their role in local economies and employment. This data is crucial to understanding their contribution to rural development, and to informing government support programs aimed at strengthening these cooperatives. They provide a clear picture of the economic footprint of these organizations, supporting their growth and sustainability.

The impact of legal frameworks on the growth of the social economy sector, particularly following the implementation of the framework law, is also a key area where SESA has proved invaluable. SESA data can be used to assess the growth and diversity of social economy entities following this legislative change, helping to evaluate the effectiveness of legal frameworks in promoting the sector's growth and guiding future legislative amendments.

In terms of government strategies and program implementation, the effectiveness of initiatives such as the Portugal 2030 strategy in promoting employment within the social economy is a relevant example (Portugal 2030 n.d.). SESA data enable a comprehensive analysis of employment trends within the social economy before and after the implementation of such strategies. This makes it possible to assess the direct impact of government strategies and adjust them to better support job creation and economic growth in the sector.

Finally, the role of consultative and representative bodies such as the National Council for the Social Economy in policy formulation and sector development is another area where SESA is proving crucial. By providing comprehensive economic data, SESA makes it possible to assess the effectiveness of these bodies in advocating the sector's needs and shaping policy. The data can be used to track changes in investment patterns, employment trends and the overall economic contributions of the social economy in response to policy recommendations or interventions.

These examples collectively demonstrate how Portugal's social economy satellite accounts provide essential empirical evidence of the economic importance and impact of various entities and initiatives within the social economy. This data is invaluable for understanding the dynamics of the sector, informing policy and strategic decisions, and championing the sector's needs and potential. By offering a detailed and quantified economic perspective, SESA becomes an essential tool for stakeholders aiming to promote a robust and prosperous social economy in Portugal.

6 Implications for political and economic decision-making

Data from Portugal's Social Economy Satellite Account (SESA) have a considerable influence on political and economic decision-making, beyond simply quantifying the contributions of the social economy. The information provided by SESA has a profound impact on various aspects of policy formulation and strategic planning.

When formulating and modifying policies, SESA data guides the development of labor policies, social protection programs and economic development strategies. The comprehensive view of employment trends and economic contributions within the social economy enables policymakers to tailor job creation and skills development initiatives to the needs of the sector. This alignment ensures that the policies implemented are tailored and effective to meet the real dynamics and potential of the social economy (Ferreira 2019).

Resource allocation and funding decisions are also strongly influenced by SESA data. Understanding which sectors or entities in the social economy contribute most to employment or gross value added guides investment and subsidy decisions. This targeted approach to resource distribution ensures optimal use of public funds, supporting those sectors of the social economy that have the greatest impact, thereby promoting sustainable growth and development.

Furthermore, the resilience of the social economy, as illustrated by the SESA data, plays a crucial role in the development of broader economic resilience strategies. By identifying the characteristics that contribute to this resilience, such as service diversification and strong community engagement, policymakers are able to integrate these elements into broader economic planning. This involves supporting sectors that demonstrate stability during economic downturns, or encouraging practices that build resilience across the economy as a whole.

SESA data also has a significant impact on the structuring and prioritization of social protection programs. By highlighting the specific areas in which the social economy excels or requires support, particularly in essential services such as healthcare and social services, government can tailor its interventions to ensure effective and equitable service delivery. This ensures that social protection initiatives effectively fill gaps and capitalize on the strengths of the social economy.

Collaborative efforts between government, social economy entities and other stakeholders are also guided by the SESA findings. A clear description of the sector's contributions and needs fosters effective collaboration, leading to joint initiatives that tackle social issues, economic development projects or public-private partnerships, as we have seen with the arrival of new financial products such as social-impact bonds. These instruments for investing in the social economy have been pushed by the Portuguese government since 2018, which allows participating companies to include 130% of the amount invested as expenditure for business tax effects (Ferreira 2019, 78).

Finally, the benchmarking provided by SESA facilitates international benchmarking and learning. Understanding Portugal's position in the global context of the social economy informs international cooperation strategies, promotes the adoption of best practice and encourages

participation in global initiatives. This enables informed decisions to be taken on international trade, foreign investment and involvement in global social economy networks.

The implications of SESA data for political and economic decision-making in Portugal are wide-ranging and multifaceted. They ensure that economic and social policies are not only datadriven, but also closely aligned with the realities and potential of the social economy sector.

7. Future prospects and development potential

The Satellite Account of the Social Economy (SESA) in Portugal provides essential data that feed into a comprehensive set of strategies and recommendations aimed at improving and supporting the social economy sector. These strategies are characterized by their multidimensional approach, encompassing government initiatives, policy development, sector representation and youth engagement.

The Portuguese government's current program reflects a profound recognition of the importance of the social economy. It is committed to adopting a collaborative approach with the various entities of the social economy, with the aim of building on long-standing partnerships. This commitment is not just declarative; it is backed up by tangible measures designed to support and strengthen the sector. These measures are essential to ensure that the social economy continues to thrive and contribute effectively to the wider national economy.

Portugal's 2030 strategy, which is aligned with the European Commission's partnership agreement, is another cornerstone of this comprehensive approach. This strategy sets out key objectives for the period 2021-2027, with a focus on improving employment opportunities, including self-employment within the social economy. It also emphasizes capacity building for social economy agents and operators, reflecting a clear recognition of the need for continued

development and empowerment within the sector. In particular, this approach is in line with global objectives for sustainable development. The emphasis placed on green transition reflects Portugal's commitment to sustainable, forward-looking economic growth (Portugal 2030 n.d.).

In political terms, the roles of the Ministry of Employment, Solidarity and Social Security and the Ministry of the Economy are essential. These government agencies are responsible for developing and implementing policies relating to the social economy.

The National Council for the Social Economy plays a central role as a consultative and assessment body. It monitors strategies and policy proposals relating to the promotion and growth of the social economy, acting as a crucial link between policy formulation and the realities on the ground in the social economy sector.

Representation and advocacy are supported by organizations such as the Portuguese Confederation of the Social Economy and the António Sérgio Cooperative for the Social Economy. These entities bring together the various families of the social economy, defending their interests and participating in the definition of public policies and strategic orientations. Their role is crucial in ensuring that the voices and concerns of the various social economy entities are heard and taken into account at the political level.

Youth engagement and leadership development are also key elements of the strategic approach. Organizations such as CASES and initiatives such as the Ubuntu Leaders' Academy are committed to training the next generation of leaders within the social economy. By targeting young people, particularly those from challenging backgrounds, these programs aim to instill leadership skills and a commitment to community service, ensuring the sustainability and continued rejuvenation of the social economy sector (Academia de Líderes Ubuntu s.d.) (CASES s.d.).

In summary, SESA data in Portugal play a key role in the development of a global strategy for the social economy. They inform government initiatives, policy formulation, sector representation and youth programs. This approach not only recognizes the sector's current contributions, but also prepares it for future expansion and progress. It demonstrates a thorough understanding of the sector's requirements and opportunities, paving the way for betterinformed, more effective and more strategic decision-making.

Chapter 4: Comparative Analysis

This chapter contains a comparative analysis of the satellite accounts of Portugal, Poland and the figures of the Institut National de la Statistique et des Études Économiques (INSEE) on the Social Economy in France, each representing a unique approach to the quantification and representation of the social economy. This analysis will build on the in-depth examination of Portugal's satellite accounts covered in Chapter 3, extending the scope to include a comparative perspective with France and Poland.

Portugal's framework for satellite accounts, as detailed in Chapter 3, reflects its unique socioeconomic landscape, where cooperative movements and mutual societies play a pivotal role. This background informs the structure and focus of Portugal's satellite accounts, shaping the way the country quantifies and represents its social economy.

In France, INSEE reports on the social economy are expected to showcase the complexity and diversity of its social economy. As one of the largest economies in the European Union,

France’s approach to satellite accounting likely encapsulates a broader spectrum of social economy activities. These range from extensive non-profit sectors to smaller, communitydriven initiatives. France’s robust legal and policy framework surrounding the social economy might also reflect in its satellite accounts, offering insights into a sophisticated model of capturing and analyzing social economy data.

Turning to Poland, its approach to satellite accounts is informed by its transitional economic landscape. Polish satellite accounts emphasize capturing the economic impact of non-profit organizations and volunteer work, which form a significant part of its social economy. Nonprofit organizations and volunteer activities contribute considerably to Poland’s social economy, with volunteer work being treated as a productive activity of notable economic value.

Challenges in data collection, particularly concerning volunteer work, highlight the evolving nature of Poland's social economy and its representation in national accounts. Systematic surveys of non-profit organizations since 2008 and ongoing efforts to refine the data collection process are key steps Poland has taken towards developing a comprehensive understanding of its social economy through satellite accounts.

This comparative analysis aims to not only juxtapose the different methodologies, indicators, and metrics used by Portugal, France, and Poland but also to understand how these approaches reflect the unique characteristics of each country's social economy. By examining these diverse systems, we can extract valuable lessons and best practices that could enhance the development and application of satellite accounts in the social economy sector.

1. Overview of Selection Criteria for Comparative Analysis

The selection criteria hinge on several key factors: the economic structures of each country, the nature and scale of their social economies, and the specific goals and challenges of their satellite accounting systems. These criteria ensure that the comparisons made are relevant, insightful, and capable of highlighting the unique aspects of each country's approach to satellite accounting.

The methodologies, indicators, and metrics chosen for comparison reflect these criteria and are intended to provide a clear picture of how each country's social economy is quantified and represented. This comparison aims to unravel the intricacies of each system, offering a comprehensive view of the satellite accounts in the context of the diverse economic landscapes of Portugal, France, and Poland.

By understanding the rationale behind the selection process, we can appreciate the nuances in each country's approach and the resulting implications of their satellite account methodologies.

This overview sets the stage for a deeper dive into the specific aspects of the satellite accounts that will be compared in the subsequent sections.

2. Comparative Analysis of Methodologies

The methodologies employed in the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy, when closely examined, showcase distinct approaches, each reflective of the specific nuances of their social economies. Building upon the in-depth analysis of Portugal's methodology in Chapter 3, this section now contrasts it with the distinct approaches adopted by France and Poland, incorporating examples where possible to illustrate these differences.

In Portugal, the methodology focuses on capturing the overall economic impact, especially through Gross Added Value (GVA) and employment metrics. This approach, as explored earlier, offers a macroeconomic view of the social economy's contribution, particularly evident in how it managed to encapsulate the sector's resilience during the COVID-19 pandemic. For example, despite the general downturn, the social economy in Portugal showed a slight increase in its GVA contribution in 2020, underscoring its counter-cyclical nature (Instituto Nacional de Estatistica 2023).

Contrastingly, France's approach to satellite accounts delves into the detailed representation of various entities within the social economy. The French methodology aims to bring visibility to cooperatives, mutual societies, associations, and foundations within the national accounts. This approach is intricate, requiring new data sources and methodologies to fully capture the

economic activities of these diverse entities. For instance, the French methodology involves tracking the financial flows and value-added contributions of large non-profit organizations, a task requiring comprehensive data collection and analysis (INSEE 2014).

Poland's methodology presents a unique angle, particularly in its emphasis on non-market activities such as volunteer work. The inclusion and economic valuation of volunteer work in Poland’s social economy satellite accounts illustrate an innovative approach to capturing the sector's broader contributions. This method involves estimating the economic value of volunteer work, which, although not a standard practice in traditional economic measures, is crucial in acknowledging the diverse nature of contributions in Poland's social economy. An example of this is the monetary valuation of volunteer activities in community-based programs, providing a clearer picture of the social economy's impact beyond traditional financial parameters.

The comparison of these methodologies demonstrates the versatility and adaptability of satellite accounts as tools for economic analysis. While Portugal’s aggregated view focuses on the overall economic impact, France’s detailed approach targets a comprehensive analysis of diverse social economy entities, and Poland’s innovative method recognizes the importance of non-traditional contributions. Each methodology reflects the socio-economic priorities and challenges of the respective countries, offering valuable insights into the diverse applications of satellite accounts in understanding and analyzing the social economy sector in different national contexts.

3. Comparison of Indicators and Metrics

In the comparative analysis of satellite accounts for Portugal, Poland and France’s INSEE reports on the social economy, a crucial aspect to consider is the specific indicators and metrics

used by each country. These indicators and metrics not only reflect the economic contributions of the social economy but also illustrate how each country's unique social and economic context influences its approach to satellite accounting.

Indicators	France	Poland	Portugal
Output	Yes	Yes	Yes
SE GVA	Yes	Yes	Yes
National GVA	Yes	Yes	Yes
Imputed value of employees	Yes	Yes	Yes
Imputed value of volunteers (replacement cost)	-	Yes	-
Value of direct volunteer work	-	Yes	-
Gross Capital Formation	-	-	Yes
Subsidies	-	Yes	-
Working time and type of contract by families	Yes	-	-
Distribution of salaried employees by gender per family sectors of activity in SE	Yes	-	-
Weight of gross remuneration of employees in the social economy overall of the economy, by social economy family and by sector of activity	Yes	-	-

Portugal's Indicators and Metrics: (Instituto Nacional de Estatistica 2023)

Portugal's satellite accounts primarily focus on traditional economic indicators like Gross Added Value (GVA) and employment metrics. These indicators are crucial for understanding the overall economic impact of the social economy, particularly in terms of its contribution to the national economy. For example, the increase in the social economy's share of national GVA during the pandemic highlights its resilience and counter-cyclical nature.

GVA serves as a pivotal indicator in assessing the economic contribution of the social economy in Portugal. The increase in the social economy's share of national GVA, particularly during the challenging times of the pandemic, highlights its resilience and counter-cyclical nature. This insight suggests that the social economy plays a stabilizing role, demonstrating its ability to withstand economic shocks.

Compensation of employees is another key metric that provides insights into the financial remuneration within the social economy sector. Analyzing this indicator allows for a deeper

understanding of the distribution of financial resources and the impact on the workforce. Higher compensation levels may indicate the sector's ability to provide fair and sustainable remuneration to its employees.

Employment metrics, including the number of Full-Time Equivalent (FTE) employees, offer insights into the sector's role in job creation and maintenance. The social economy's contribution to employment, especially during challenging economic periods, underscores its significance in providing stable and sustainable employment opportunities.

The analysis of the social economy by sector composition, categorized into 12 different groups represented by letters, provides a nuanced understanding of the diversity within the sector. This approach allows for a detailed examination of the unique contributions and characteristics of each sector. The sector composition analysis is a shared characteristic with the Polish Social Economy Satellite Account, enabling comparative assessments between the two countries.

Analysing Portuguese’s different sectors we can estrapolate some curious insights:

Associations with altruistic goals, for example, emerge as a predominant group within the social economy, contributing significantly to GVA, employment, and compensation of employees. This dominance signifies the sector's commitment to altruistic objectives and its substantial impact on the national economy and labor market.

Cooperatives, as the second-largest group, demonstrate their relevance in terms of the number of units, GVA, and compensation of employees. This highlights the diverse nature of the social economy, with cooperatives playing a significant role in economic activities.

Holy Houses of Mercy emerge as a notable group, particularly in terms of employment. This insight sheds light on the sector's involvement in social care and support services.

Mutual Associations, encompassing financial corporations, exhibit distinctive features such as a high GVA/FTE ratio and above-average compensation of employees. This signals the financial sustainability and attractive employment conditions within this subgroup.

France's Diverse and Detailed Metrics: (INSEE 2023)

The French Social Economy Satellite Accounts employ a diverse range of indicators, reflecting a comprehensive approach to capturing the multifaceted activities within the social economy. This methodology, which incorporates financial flows, employment data, and value-added contributions from various social economy entities, provides a detailed and nuanced view of the sector's contributions. Several unconventional indicators used in the French project offer unique insights into the dynamics and impact of the social economy.

The distribution of salaried employees by gender per family sectors of activity, for instance, reflects the commitment to gender equality within the social economy. By analyzing the distribution of salaried employees by gender across family sectors of activity, the French Social Economy Satellite Accounts provide insights into the sector's inclusivity and efforts toward gender diversity. This information is crucial for understanding the social economy's role in promoting equitable employment opportunities.

The weight of gross remuneration of employees in the social economy, compared to the overall economy, offers insights into the financial aspects of employment within the sector. Understanding how the remuneration in the social economy compares to the broader economy provides valuable information about the economic well-being of those engaged in social economy activities.

The weight of Salaried Workforce in the Social Economy, examining the salaried workforce in the social economy as a proportion of the entire economy, sheds light on the sector's significance in terms of employment. By breaking down this information by social economy family and sector of activity, it becomes possible to identify areas where the social economy has a particularly strong influence on employment patterns.

Employee Workforce in the Social Economy by Family and Sector of Activity is a detailed breakdown of the employee workforce within the social economy that offers a granular understanding of the distribution of labor across different families and sectors. It allows for the identification of areas of specialization or concentration, contributing to a more nuanced appreciation of the social economy's diverse activities.

The use of unconventional indicators in the French Social Economy Satellite Accounts, such as those focusing on gender distribution, remuneration, and workforce composition, provides insights beyond traditional economic metrics. These indicators allow for a more comprehensive understanding of the social and cultural dimensions of the sector, contributing to a richer analysis of its contributions to society.

Poland's Innovative Approach: (GUS 2018)

Poland’s methodology is distinct in its inclusion of non-market contributions, particularly volunteer work. The metrics used in Poland’s satellite accounts therefore extend beyond traditional economic measures, incorporating the valuation of volunteer work. This approach necessitates innovative metrics that can capture the economic value of non-traditional activities, providing a more comprehensive understanding of the social economy’s broader contributions.

A notable feature of the Polish Social Economy Satellite Account is the inclusion of non-market contributions, with a specific focus on volunteer work. This approach recognizes the economic value of activities that extend beyond traditional market transactions, offering a more holistic view of the social economy's impact.

Volunteer work is a central component of the Polish social economy, constituting more than one-third of its output, equivalent to EUR 4.9 billion. The valuation of direct volunteer work provides an insightful perspective on the economic contributions of non-traditional activities. Importantly, this recognition sheds light on the invisible yet significant role of volunteer work, which is not reflected in conventional macroeconomic indicators.

If the value of direct volunteer work output were compared to the size of GDP, it would necessitate an increase of 1.0%. This underscores the importance of non-market activities, particularly those related to directly helping others, both within the social economy and the national economy. The recognition of such contributions challenges the conventional understanding of economic value and highlights the social economy's multifaceted impact.

The main approach employed in estimating basic macroeconomic indicators in the Polish Social Economy Satellite Account is the production approach. This approach is presented in two distinct ways: one that distinguishes subsectors within the social economy (non-profit organizations, cooperatives and mutuals, and direct volunteer work), and another that delineates transactions and balancing items for social economy and voluntary sector entities by institutional sector according to the European System of Accounts (ESA).

The structure of the shares of each group of entities in output generation provides valuable insights. Non-profit organizations emerge with overwhelming importance and potential within the social economy, signifying their significant role in economic activities. Simultaneously, the

productive potential of direct volunteer work is emphasized, highlighting its substantial contribution to the total output of the social economy.

Non-profit organizations and direct volunteer work collectively contribute more than 92.8% of the total output of the social economy. This underscores the combined strength and impact of these entities, emphasizing their pivotal role in shaping the social and economic landscape of Poland.

The costs associated with wages and salaries, commonly referred to as payroll costs, encompass the gross remuneration of personnel based on employment contracts, excluding employerrelated expenses. Additionally, these costs incorporate the gross remuneration attributable to non-personnel engagements, such as those governed by civil law contracts, within social economy entities. It's important to note that labor costs are a broader concept, encompassing wages and salaries costs along with the assessed value of volunteer work.

In the year 2018, the wages and salaries costs for social economy entities in Poland aggregated to approximately EUR 2.6 billion. Upon inclusion of the assessed value of volunteer work, this total soared to over three times its initial value, reaching EUR 9.0 billion. When considering the entire national economy, the collective wages, salaries, and volunteer (both institutional and direct) costs represented 5.5%. Furthermore, the exclusive wages and salaries costs of social economy entities alone constituted 1.6% of the total national economy's wages and salaries costs for the same period.

Comparative Insights:

When comparing these indicators and metrics, it becomes clear that each country's approach is influenced by its specific socio-economic conditions and priorities. Portugal's focus on

traditional economic indicators offers a macroeconomic perspective, while France's detailed metrics provide a granular view of the diverse entities within its social economy. Poland's innovative metrics, on the other hand, highlight the importance of non-traditional economic contributions, reflecting its unique socio-economic landscape.

This comparison reveals the varying degrees of complexity and focus in each country's satellite accounts. Understanding these differences is key to appreciating how satellite accounts can be tailored to suit the specific needs and characteristics of different social economies.

The indicators and metrics used in the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy thus provide distinct lenses through which the economic contributions of the social economy can be viewed and analyzed. These variations underscore the flexibility of satellite accounts as tools for economic analysis, adaptable to the diverse requirements and perspectives of different nations.

4. Analysis of Results from Satellite Accounts

Analyzing the results from the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy provides valuable insights into the economic contributions and dynamics of their respective social economies.

As detailed in Chapter 3, Portugal's Social Economy Satellite Account (SESA) for the years 2019 and 2020 highlighted the resilience of its social economy during the COVID-19 pandemic. The sector contributed 3.2% to the national Gross Added Value (GVA) in 2020, highlighting its major role in the economy. This performance emphasizes the resilience of Portugal's social economy. Despite a broader economic downturn, it maintained and even marginally boosted its economic input (Instituto Nacional de Estatistica 2023).

The French approach to satellite accounts for its social economy, focusing on non-profit institutions, aims to bring visibility to a broad range of entities including cooperatives, mutual societies, associations, and foundations. While specific results from recent years are not readily available, it's understood that the French methodology is designed to capture the economic activities of these diverse entities, which are often underrepresented in traditional national accounts. The results from such an approach would provide a comprehensive view of the economic impact and contributions of France's social economy.

Poland's methodology, particularly in valuing non-market activities such as volunteer work, presents unique results that expand the understanding of the social economy's economic contributions. For example, the inclusion of volunteer work in the social economy satellite accounts acknowledges the broader economic value of these activities. The specific results, such as the monetary value of volunteer work and its impact on the social economy, would offer a more complete picture of Poland's social economy, highlighting the contributions beyond traditional financial parameters.

Comparing the results from these three countries illustrates the varying impact and roles of the social economy within national economies. Portugal's results highlight the sector's stability and importance, especially in challenging economic times. France's approach likely reveals a detailed breakdown of the social economy's diverse activities and their economic impact.
Poland's results, meanwhile, shed light on the broader contributions of the social economy, including non-market activities like volunteer work.

These differing results reflect each country's unique socio-economic context and the priorities of their social economies. Understanding these variations is crucial for comprehensively analyzing the social economy sector and its role in national economies.

The analysis of results from the satellite accounts of Portugal, Poland and France's INSEE reports on the social economy thus provides a nuanced view of the social economy's contributions and dynamics in each country. This comparative analysis underscores the value of tailored satellite account methodologies that reflect the unique characteristics of each nation's social economy.

5. Implications for Policy and Strategic Planning

The comparative analysis of satellite accounts in Portugal, Poland and France's INSEE reports on the social economy offers rich insights for policy and strategic planning in each country's social economy:

The emphasis on GVA and employment in Portugal's satellite accounts can inform policies focused on enhancing economic stability and job creation in the social economy. These insights could be instrumental in developing initiatives that bolster sectors showing resilience, especially during economic downturns, and in identifying areas where targeted support can spur growth and stability.

The detailed analysis of various entities within the French social economy provides a nuanced understanding of the sector's dynamics. This depth of analysis can guide policies and programs specifically designed to support different types of social economy organizations, ensuring that interventions are well-targeted and effective. For instance, policies could be tailored to address the unique needs of cooperatives, mutual societies, and non-profit organizations, each contributing differently to the economy.

Poland's innovative approach in recognizing non-market contributions like volunteer work can shape policies that acknowledge and support these vital aspects of the social economy. This

perspective is essential for developing strategies that value community-based activities and volunteerism, recognizing their contribution to social cohesion and economic sustainability. Policies could be designed to encourage volunteer initiatives and ensure they are supported and valued as key components of the social economy.

These implications underscore the importance of adapting policy and strategic planning to the specific characteristics and strengths of each country's social economy, as revealed through their satellite accounts. This tailored approach is key to fostering a robust and dynamic social economy that aligns with each country's unique socio-economic landscape.

Chapter 5: Stakeholder Analysis

1. Identification of Stakeholders

In the field of SESAs, it is essential to understand the complex network of stakeholder influence. SESAs operate within a global economic framework, involving a wide variety of stakeholders, from international organisations to grassroots communities. Each group has a distinct influence on the evolution, trajectory and practical application of these accounts. Let's look at the roles and impacts of these stakeholders on SESA.

Key SESA stakeholders

The landscape of SESA's key stakeholders is diverse, encompassing entities that directly contribute to and shape the social economy. These include international governments and regulatory bodies such as the United Nations, the World Bank and the International Labour Organisation (ILO), whose global programmes, financial support and labour policies significantly influence the parameters and operations of the social economy. Global social enterprises and cooperatives are crucial sources of data, presenting innovative models and influencing global policies. Non-governmental organisations and global NGOs provide on-theground perspectives and impact assessments, shaping the focus and priorities within SESA, particularly in relation to solving global social problems.

Global financial institutions, including international banks and impact investment funds, provide financial strength and direction, shaping the financing framework for the social economy. Global trade unions, defending workers' rights, shape the labour data in SESA. Academic and theoretical contributions come from global teaching and research institutions,

driving the research and academic discourse that underpins social economy analysis. Global trade associations advocate for business practices and policies that affect the social economy sector. The experiences and feedback of global communities directly influence the direction and outcomes of SESA, ensuring alignment with real-world needs and community perspectives. Consumer behaviour and market trends, driven by global consumers, dictate the economic performance and sustainability aspects of SESA. Finally, global philanthropic foundations fund and support social economy initiatives, influencing the scope and scale of activities included in the SESA.

SESA secondary stakeholders

Secondary stakeholders, although not directly involved, play an important role in shaping the social economy landscape through the SESA. National policy makers use SESA data to formulate policies that align local strategies with global trends in the social economy. Regional researchers and academics use SESA results for regional studies, broadening the understanding and dissemination of knowledge on the social economy. SESA data helps regional investors make informed decisions, impacting capital flows into global social and sustainable initiatives.

Regional media disseminate information on global social economy trends highlighted in SESA, influencing public perception and awareness. Regional suppliers' interactions and transactions with social enterprises provide practical insight into the supply chain dynamics described in SESA. Regional competitors, indirectly influenced by SESA, shape the competitive environment for global social economy entities. Environmental sustainability practices within the social economy, advocated by global environmental organisations, are reflected in SESA. International educational institutions are influenced by SESA findings in the development of educational resources and curricula, training the future leaders of the social economy. Global

technology providers have an impact on operational efficiency and innovation in the social economy, influencing the parameters of SESA. Finally, the global public, as the ultimate beneficiaries, indirectly influence the direction and outcomes of SESA through their evolving needs and perceptions (Sébastien Mariaux 2018).

2. Stakeholder Mapping

We will now carry out a stakeholder mapping in the context of the SESAs. The first objective is to identify and understand the different entities involved in the social economy ecosystem and their respective roles.

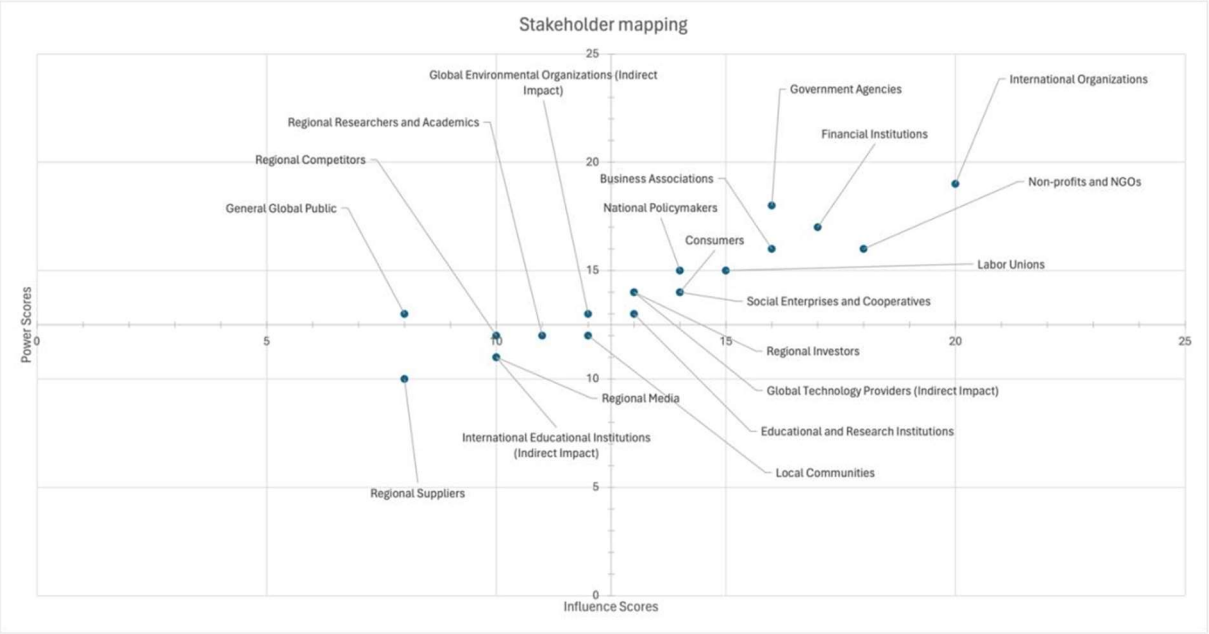
Strategic planning and policy formulation: Understanding who the key stakeholders are, and their levels of power and influence, is essential for effective strategic planning and policy formulation. This helps identify who needs to be involved and how to approach them for successful implementation of policies and initiatives.

Stakeholders play a central role, each bringing unique influences and dynamics. The criteria of "power" and "influence" were chosen for the stakeholder mapping.

Power reflects a stakeholder's ability to exert control or impose action, often linked to authority, resources or position. It is a crucial measure for understanding which stakeholders can have a direct impact on the social economy landscape.

Influence, on the other hand, refers to the ability to influence or change opinions, behaviours and outcomes, even without direct control. It encompasses aspects such as advocacy, public opinion and advisory roles.

By assessing stakeholders on the basis of these two criteria (scored out of 20), we can obtain an overview of the social economy ecosystem, identifying those who can guide or shape the discourse and direction of the social economy.



**Explanation of this mapping in Appendix "Stakeholder mapping"*

3. Stakeholder Engagement

Government Agencies

Government agencies play a key role in the SESA landscape. Their involvement is driven by the need to develop evidence-based policies and regulations that effectively support and nurture the social economy sector. These agencies use SESA to better understand the contributions of the social economy to the wider economy, including its role in job creation, social well-being and innovation.

The influence of SESA research on government agencies extends to several areas. Firstly, it contributes to policy development, helping to shape initiatives that foster an environment

conducive to the growth of the social economy. This includes creating favourable regulatory frameworks, identifying areas for financial investment and developing programmes that strengthen the capacity and sustainability of the sector.

Social Enterprises and Cooperatives

Social enterprises and cooperatives are at the heart of the social economy, embodying models that reconcile economic success with social objectives. They are very interested in how SESA can provide recognition and understanding of their roles and challenges. They expect SESA to provide them with a clearer picture of their economic impact, including their contribution to local and national economies and their effectiveness in solving social problems.

These stakeholders face distinct challenges, such as securing sustainable funding, navigating market dynamics and complying with regulatory requirements. They expect SESA research to shed light on these challenges, offering insights that can lead to more favourable policies and practices. In addition, social enterprises and cooperatives expect research findings to help them attract support and partnerships, improve their credibility and visibility, and provide benchmarks against which to measure their performance and impact.

Non-profits and NGOs

Non-profit organizations and NGOs are an integral part of the fabric of the social economy, often at the heart of social change and community development. Their impact in SESA is driven by a desire to quantify and demonstrate their social impact. These organizations rely on SESA results to validate their contributions to the well-being of society, to secure funding and to guide

their strategic and operational decisions, much in the manner of Social Enterprises and Cooperatives.

Non-profit organizations and NGOs are particularly interested in how SESA research aligns with their missions and strategic objectives. They seek data that can inform the development of their programs, ensuring that their activities are both effective and meet community needs. Organizations use SESA findings to engage more effectively with other stakeholders, including government agencies, donors and the communities they serve, strengthening their ability to bring about positive social change.

4. Community and General Public

The academic and research community plays an essential role in the understanding and development of SESA. The involvement of researchers and academics in SESA is essential to advance the academic discourse on the social economy. Their interest in SESA research stems from its potential to offer new perspectives on the dynamics of the social economy, challenging existing theories and contributing to the development of new ones.

The data and knowledge provided by SESA research are invaluable for the development of university curricula. It ensures that the next generation of economists, policy-makers and social entrepreneurs has a deep and comprehensive understanding of the social economy. This is particularly important at a time when the intersection of economic viability and social impact is increasingly recognised as crucial to sustainable development.

The collaborative nature of SSE research opens up many opportunities for partnerships across disciplines and sectors. These collaborations are essential to ensure that research findings are not only theoretically sound, but also practically relevant. Academics and researchers often

work alongside government agencies, NGOs and economists to translate research findings into effective policies, strategies and programmes. This collaborative approach ensures that the unique perspectives and needs of different stakeholders are taken into account, leading to more effective outcomes.

Knowledge dissemination is another key aspect of the academic community's involvement in SESA. Academics and researchers are responsible for translating the results of complex research into formats that are accessible to a wider audience. By publishing in academic journals, presenting at conferences and engaging in public education, they ensure that the knowledge generated by SESA research reaches beyond academic circles, influencing policy decisions, guiding practitioners and raising public awareness of the social economy.

The engagement of the academic and research community in SESA research is multifaceted and integral to the development of the field. Their contributions to academic discourse, innovative methodologies, collaborative initiatives and knowledge dissemination play a crucial role in improving our understanding of the social economy and shaping its future direction. Through their work, academics and researchers ensure that the social economy is recognised as an essential component of the wider economic landscape, deserving of attention, support and investment.

Chapter 6: Data Science Integration in Satellite Accounts

In the ever-changing landscape of economic analysis, data science has emerged as a central element, transforming traditional methodologies with its unique blend of statistical techniques, machine learning and massive data analysis (Farragher 2018). This evolution has seen data science evolve from a supporting tool to an integral component of modern economic evaluations. The evolution of data science in economics reflects a significant shift from

conventional models to sophisticated approaches that exploit large datasets and complex algorithms to obtain ever deeper and more accurate information.

The role of data science in improving economic analysis is manifold. It goes beyond simply processing data. It is now possible for economists to extract significant patterns and trends from large, unstructured data sets. Practical applications of these techniques can be seen in various fields, such as the prediction of market trends, the analysis of consumer behaviour and the evaluation of economic policies (Chkoniya 2021). These applications highlight the practical benefits of data science for discovering and predicting complex economic phenomena. A crucial aspect of this development is the integration of data science into SESA methodology. Data science methodologies provide a more accurate and comprehensive measure for SESA, using advanced data modelling, machine learning for pattern recognition, and big data tools for managing large datasets. This increased accuracy and depth of analysis is invaluable in the field of economic measurement.

1. Data Science Techniques for Advanced Economic Insights

We begin by introducing various data science techniques that hold relevance in economic analysis. This includes an exploration of machine learning, big data analytics, and predictive modeling, and how these methodologies can be applied to economic data to extract deeper insights. The section will detail the fundamentals of these techniques and their applicative potential in the realm of satellite accounts (Chkoniya 2021).

Machine Learning:

Machine learning algorithms are capable of identifying complex patterns and trends in economic data, which might not be apparent through traditional analytical methods. This

capability is particularly advantageous in analyzing the intricate dynamics of social economies, as seen in countries like Portugal, France, and Poland.

Predictive analytics:

Predictive models play an essential role in anticipating future economic scenarios, enabling policy-makers and economists to make informed decisions on the basis of predicted trends. The usefulness of these models in the dynamic domain can be very practical, for example to simulate several solutions in order to aid decision-making.

Big data analytics:

The ability of big data tools to process and analyse large and complex data sets is crucial to the creation of satellite accounts. These accounts offer a global perspective on economic activities, which means handling a huge amount of data. Annalysis of Big Data analysis ensures that all relevant economic elements are included, providing a better understanding of the economic terrain.

To illustrate the practical application of these methods, we will look at several case studies where data science techniques have been successfully employed in satellite accounts. These concrete examples will demonstrate the tangible benefits and impact of integrating advanced data science techniques into economic analysis.

1. **Case Study: Machine Learning in Agricultural Sector Analysis - Portugal** (Cláudia M. Viana 2021)

    - **Background**: Analysis of Portugal's agricultural sector using machine learning.

- **Methodology**: Application of regression algorithms and neural networks.
- **Outcome**: Prediction of crop yields with high accuracy.
- **Impact**: Informed government policy on agricultural subsidies and investment.

2. **Case Study: Predictive Analytics in Labor Market Trends - France** (CEDEFOP 2023)

- **Background**: France's use of predictive analytics for labor market trends.
- **Methodology**: Time-series analysis and trend forecasting models.
- **Outcome**: Identification of future skill shortages and areas of labor surplus.
- **Impact**: Shaped educational policies and labor regulations.

3. **Case Study: Big Data Analytics in Healthcare Expenditure - Poland** (Kornelia Batko 2022).

- **Background**: Analysis of healthcare spending patterns in Poland.
- **Methodology**: Data mining techniques on extensive healthcare datasets.
- **Outcome**: Insights into cost drivers and inefficiencies.
- **Impact**: Reformed healthcare policies, leading to improved patient outcomes.

These case studies illustrate the application of data science to economic analysis, revealing the depth and breadth of knowledge that these technologies can offer. They demonstrate the effectiveness of data science in improving understanding of complex economic sectors. Indeed, it can guide strategic decisions and policy development.

2. Framework for Incorporating Data Science in Satellite Account Development

We will now focus on establishing a comprehensive framework for integrating data science into the development of satellite accounts. As we have seen, this framework is essential for improving the accuracy and depth of economic analysis in the social economy.

Identifying Key Economic Indicators for Data Science Analysis:

This step involves a meticulous analysis of the economic landscape in order to identify the crucial indicators for a comprehensive economic analysis. In the context of satellite accounts, these may include indicators such as gross domestic product (GDP), employment rates, sectoral contributions and indicators of financial health. These indicators are carefully selected for their potential to be improved using data science methodologies, to ensure that they provide the most meaningful information when analysed.

Integration of Data Science Tools in Current Satellite Account Methodologies:

This part of the framework focuses on how data science tools can be integrated into existing satellite account methodologies. This involves selecting and using tools such as advanced machine learning algorithms, big data analysis platforms and predictive modelling techniques. The aim is to improve existing methodologies, ensuring that they can adapt and benefit from the depth and breadth of analysis that data science offers.

Step-by-Step Guide to Implementing Data Science Techniques in Satellite Accounts:

The final aspect of the framework is to provide a detailed guide to implementing data science techniques in satellite accounts. This guide would cover everything from the initial stages of data preparation and cleaning through to the application of specific data science methods. It would also include how to interpret and integrate the results of these analyses into the broader

economic narratives of the satellite accounts, ensuring that the information gathered is both accurate and applicable to economic decision-making.

By following this framework, satellite accounts can harness the full potential of data science to provide more accurate, comprehensive and insightful economic analysis.

3. Overcoming Challenges in Data Science Integration

Integrating data science into satellite account methodologies brings its own set of challenges. We will look at what these challenges are, focusing on practical strategies and solutions to manage and overcome them effectively.

Economic data is often voluminous, diverse and sometimes unstructured, requiring advanced processing techniques. To simplify this complexity, the application of robust data processing tools and close collaboration between data scientists and economists are essential in order to understand how data should be sorted and processed.

Data quality and integrity are the foundations of reliable data science integration. Poor data quality can lead to flawed analysis, which can distort the economic outlook. Regular data audits, rigorous validation and the use of quality management tools are crucial steps in maintaining data integrity. It is essential to use the same process with the same rigour over the years, so that results can be compared year after year.

Another major challenge is bridging the skills gap. The specialised nature of data science requires a certain level of expertise, which is not necessarily inherent in traditional economic analysis teams. It is essential to fill this gap through comprehensive training programmes, recruiting qualified staff and fostering collaborations with academic entities.

Interpreting the results of analyses, particularly using complex models, is often not straightforward. It is essential to make these results understandable and relevant. The use of visualisation tools and narrative techniques can help to translate technical results into economic information that can be used by both professionals and people who do not have the knowledge to interpret the results.

When it comes to data confidentiality and ethics, maintaining the highest standards is nonnegotiable. Compliance with ethical guidelines and data protection laws, as well as the implementation of rigorous cybersecurity measures, are essential to preserve the integrity and confidentiality of business data.

Finally, it is essential to keep up with the rapidly evolving field of data science. Keeping abreast of the latest technological advances and methodologies helps to guarantee the relevance and effectiveness of satellite accounts, which must be constantly evolving to ensure that they are as accurate and complete as possible.

4. The Future of Satellite Accounts with Data Science

Exploring the trajectory of satellite accounts in the context of data science, it becomes clear that the integration of these two fields is not static, but rather an ever-evolving landscape.

Evolving Role of Data Scientists:

The role of data scientists, which is essential for adding value to data, is evolving as a result of technological innovation and market development. This evolution is influencing the way satellite accounts will be developed and analysed, with greater attention being paid to the advanced machine learning and predictive analysis models we saw earlier.

Technological Advancements and Automation:

Technological advances in data science, such as the development of platforms that automate data preparation tasks, are redefining the role of data scientists. These advances point to a future where the focus will shift from manual data manipulation to more strategic analytical tasks, impacting the methodology and efficiency of satellite account development.

Emergence of New Tools and Techniques:

The introduction of visual pipeline tools and the growing importance of expert analysts in this area indicate a move towards more specialized and targeted analysis of satellite accounts. In addition, the application of graphical cognition and the use of mathematical graphs for inferential analysis are becoming an integral part of data science, which could influence satellite account methodologies and enable a maximum number of people to analyze these data without any particular skills.

Quantum Computing in Data Science:

The emergence of quantum computing presents a new frontier for data scientists, including those working on satellite accounts. Quantum computing offers novel ways to process and analyze economic data, which could lead to groundbreaking methodologies in satellite account development. There is therefore a great need for technological monitoring in this area.

Chapter 7: Recommendations and Framework Development

In this chapter we begin by summarising the main findings from the analysis of the SESA and INSEE reports on the social economy in various national contexts. Building on the methodological foundations and diverse applications of SESA discussed in previous chapters, this chapter aims to synthesise these ideas into a series of concrete recommendations and a development framework tailored to the specific needs of the social economy.

This chapter provides an overview of current practices, challenges and successes in the field of SESA. It seeks not only to learn from past experience, but also to anticipate and influence future trends in SSE. This forward-looking approach is essential to maintain the relevance and effectiveness of SESA in understanding and supporting the social economy.

From this point of view, the chapter serves as a link between theoretical concepts and practical implementation. It presents a way of applying the knowledge acquired in the course of this research. The aim is to offer guidance to policy makers, practitioners and researchers. This guidance will help to better understand, develop and use SESA. In this way, they will be able to support the social economy more effectively in its various dimensions, while adapting as best they can to national contexts.

1. Establishing a Global Framework for Social Economy Satellite Accounts

In this section, we consider the possibility of creating a global framework for SESAs. The framework proposed here is designed not only to provide a harmonised methodological basis, but also to encompass the unique facets of the various social economies around the world.

This idea is particularly useful as it aims to standardise and harmonise the way in which the social economy is measured and evaluated internationally. The usefulness of this framework

lies in its ability to provide a consistent and comparative understanding of the social economy across different countries and regions, which is crucial for different stakeholders. Such a framework would allow a better comparison of data and a more accurate assessment of the impact of the social economy on overall development and sustainability. Comparing the social economy between different countries is currently difficult due to the lack of a standardised methodology. Each country has its own definitions and systems for measuring the social economy, creating a major obstacle to reliable, global comparative analysis.

Faced with this challenge, the proposal to create a global framework for CSES is a crucial initiative. This framework would aim to harmonise methods of measuring and evaluating the social economy while respecting the unique specificities of each national context. (European Union 2021) / (International Labour Organization 2023)

Principles and Standards for a Harmonized Methodological Framework

A primary objective of this global framework is to establish a set of core principles and standards that can guide the development and implementation of SESA in any national context. These principles include:

- **Universality and Adaptability:** The framework should be universally applicable, providing a consistent methodological base, yet adaptable enough to cater to the specific needs and peculiarities of different social economies.
- **Comprehensive and Inclusive Data Representation:** A commitment to inclusivity in data collection and representation, ensuring that all forms of social economy activities, even those not traditionally captured in economic measurements, are recognized and valued.

- **Transparency and Consistency:** Ensuring that the methodologies and data sources used are transparent and consistent across different contexts, enabling comparability and reliability.

Incorporating Socio-Economic Diversity into the Methodology of Satellite Accounts

Recognizing the vast socio-economic diversity across nations, the framework must be flexible enough to accommodate various forms of social economies. This involves:

- **Contextual Methodological Adjustments:** Tailoring methodologies to account for unique socio-economic conditions, such as varying levels of formalization and digitalization in different economies.
- **Cultural Sensitivity:** Incorporating culturally-specific forms of social economy activities, recognizing and valuing the diversity in how social economies operate across different cultural contexts.
- **Sector-Specific Considerations:** Adapting the framework to capture the nuances of different sectors within the social economy, like healthcare, education, or cooperative movements.

Collaboration with international organisations, governments, academic experts and social economy practitioners is essential to the development of this global methodology. Their views and experiences will be instrumental in developing a framework that is both comprehensive and nuanced, effectively bridging the gap between global standards and local specificities.

2. Specific Recommendations for Portugal

This section focuses on tailoring the global framework of SESA to the specific context of Portugal's social economy. The aim is to provide targeted recommendations that enhance the effectiveness and relevance of SESA in capturing and supporting the unique characteristics of Portugal's social economy landscape.

Adapting the Global Framework to the Specifics of the Portuguese Social Economy

- **Customizing Methodologies:** Adapting the global SESA framework to align with the unique aspects of Portugal's social economy. This involves recognizing the role of traditional sectors like cooperatives and mutual societies, as well as emerging areas such as social entrepreneurship and digital platforms in the social economy.
- **Integration of Local Economic Indicators:** Incorporating local economic indicators that are particularly relevant to Portugal's social economy, such as metrics related to rural and community-based economies, and sectors where Portugal shows distinct activity, like tourism and cultural industries.
- **Leveraging Historical and Cultural Contexts:** Recognizing the historical and cultural influences on Portugal's social economy and reflecting these in the SESA methodology to ensure a comprehensive understanding of its impact and dynamics.

Proposals for Improving Data Collection and Analysis

- **Enhanced Data Collection Mechanisms:** Developing and implementing advanced data collection methods to capture a wide range of social economy activities, including

those in informal sectors or community-based initiatives that are significant in the Portuguese context.

- **Collaboration with National Statistical Bodies:** Working closely with national statistical offices and other relevant government bodies to ensure data completeness, accuracy, and consistency. This collaboration could also facilitate the integration of SESA data into national economic planning and policy-making processes.
- **Utilization of Technology in Data Collection and Analysis:** Leveraging technology, including digital data collection tools and platforms, to gather real-time and granular data from various segments of the social economy, enhancing the robustness and timeliness of the SESA.

By incorporating these recommendations, Portugal can significantly improve the accuracy and depth of its economic analysis of the social economy sector. This would enable a finer assessment of the contribution of this sector to the national economy, particularly in terms of job creation, social innovation and sustainable development.

3. Strategic Use of Satellite Accounts in Decision Making

This chapter describes the essential role of SESAs in policy development and strategic decisionmaking. This section is designed to guide policy makers and stakeholders in using SESA data to effectively inform and improve their policy decisions.

We will look at several examples of the application of SESA in various scenarios. By illustrating through case studies how SESA data has been used in different countries we will demonstrate the practical usefulness of SESA in policy development. The use of SESA for scenario analysis

and planning is also discussed. Policy makers can use the data to model the potential impacts of policy changes on the social economy sector, which can help them make informed decisions.

Case Study: Portugal's Social Economy During the COVID-19 Pandemic

A critical example comes from Portugal, where the Statistics Portugal (INE) and the Cooperative António Sérgio for Social Economy (CASES) conducted the fourth edition of the Social Economy Satellite Account (SESA) for 2019 and 2020. This edition was pivotal as it captured the initial effects of the COVID-19 pandemic on the social economy sector. Key findings from this study include:

- In 2020, the Gross Added Value (GVA) of the Social Economy sector constituted 3.2% of the national economy's GVA, slightly increasing from 2019. This data was contrary to the national economy, which saw a decrease due to the pandemic's adverse effects.
- Employment in the Social Economy sector also showed resilience, slightly increasing and contrasting with the national decrease in employment.
- Human health and social services were identified as the most relevant activities in terms of GVA and employment within the Social Economy.

The SESA data revealed the exceptional capacity of Portugal's social economy to withstand and even thrive in times of crisis, as demonstrated by its growth during the COVID-19 pandemic. This discovery was a turning point for policymakers, highlighting the crucial role of the social economy in the overall stabilisation of the Portuguese economy in times of crisis. This case study illustrates the usefulness of the SESA as an analytical tool for strategic decision-making.

These accounts provide a detailed and quantifiable overview of the economic impact of the social economy, which would be difficult to capture using traditional methods. By adopting a similar approach, other countries could benefit from a deeper understanding of their own social economy sectors, enabling them to respond in a more targeted and effective way not only in times of crisis but also in their long-term economic planning.

4. Integration of Data Science and Artificial Intelligence

We believe that the integration of data science and artificial intelligence (AI) into SESAs could have an impact in enriching these accounts with advanced analytical capabilities. We will look at how advanced data analysis tools and artificial intelligence technologies can be used to improve the depth, accuracy and predictive power of SESAs.

Utilizing Advanced Data Analysis Tools to Enrich Satellite Accounts

Data science offers a wealth of techniques that can substantially boost SESA's analytical power. Implementing machine learning algorithms, big data analytics, and predictive modeling uncovers new perspectives on intricate economic patterns and trends in the social economy. These methods facilitate extracting deeper insights from extensive datasets, enabling a richer comprehension of the social economy's impacts and identifying potential growth and development areas.

Examples of Predictive Modeling and Trend Analysis

The practical application of AI in SESA includes the use of predictive models to forecast future trends within the social economy. This predictive capability is invaluable for policymakers and stakeholders, as it allows them to anticipate changes and challenges, thereby enabling proactive and well-informed decision-making. Additionally, trend analysis using AI can uncover emerging patterns and opportunities within the social economy, which in many cases is not immediately apparent through traditional analytical methods.

The integration of these advanced data science techniques in SESA is not without its challenges. It requires a blend of economic expertise and technical know-how in data science. However, the potential benefits in terms of enhanced analytical depth, improved accuracy, and the ability to handle complex and large datasets make this integration a pivotal step forward in the evolution of satellite accounts.

By harnessing the power of data science and AI, SESA can transcend traditional analysis and become a more dynamic and predictive tool, offering invaluable insights for the strategic development and support of the social economy.

5. Capacity Building and Training

The successful implementation and use of SESAs is highly dependent on the availability of skilled professionals, adept at both economic analysis and the advanced data science techniques that increasingly underpin these accounts. Indeed, we have noted that although SESAs are highquality tools, their use and recognition remain limited. Increasing awareness of these tools could prove extremely beneficial, allowing a better understanding and wider use of these valuable resources for economic analysis and strategic decision-making.

Training Programs for Economists and Data Analysts

Developing and implementing extensive training programs is key for providing economists and data analysts with the skills needed to proficiently manage and utilize the complexities of SESA. These programs should address a wide array of topics, from the basics of social economy satellite accounting to sophisticated data analysis methods, and their real-world application in policy assessment and decision-making. A significant focus should be on integrating traditional economic analysis with contemporary data science techniques, making sure professionals are adept in both areas.

Collaboration Between Universities, Government, and Private Sector

Building robust partnerships among academic institutions, government bodies, and the private sector is crucial for creating a fertile environment for education and innovation in SESA. Universities are instrumental in devising advanced curricula and research initiatives centered on social economy satellite accounting. Meanwhile, collaborations with government and industry can offer practical insights and opportunities for applying these skills in real-world scenarios. These alliances also promote the sharing of ideas, resources, and best practices, thereby improving the effectiveness and applicability of training programs.

To maximise the effectiveness and relevance of SESA, it is essential to focus on training qualified staff and improving communication around these tools. By investing in in-depth training programmes, social economy stakeholders can develop a solid base of skilled professionals who can manage and interpret SESA data effectively. At the same time, by

stepping up communication efforts, we can raise awareness of the potential of SESA and increase its recognition and use in economic analysis and strategic decision-making. This dual approach, combining training and communication, is essential if we are to exploit the full potential of SESAs and make them more accessible and relevant in a dynamic and changing economic environment.

6. Promoting Data Transparency and Accessibility

We believe that a fundamental aspect of the development and effectiveness of SESAs is data transparency and accessibility. This is vital not only to strengthen user confidence in these tools, but also to broaden their scope and applicability. By ensuring transparent and easy access to SESA data, we can stimulate richer and more varied analysis, and encourage wider and more diverse use of this valuable information by a multitude of stakeholders. This openness of data is a crucial step towards a better informed, more integrated and more dynamic social economy, where decision-making is based on clear information that is accessible to all.

Mechanisms to Ensure Transparency and Accessibility of Satellite Account Data

For achieving transparency, it's vital to set up systems that guarantee the openness and accessibility of data collection, processing, and reporting for all stakeholders.

This involves:

- **Clear Documentation:** Offering comprehensive documentation of the methodologies, data sources, and analytical methods used in SESA's creation is essential. This documentation should be easily accessible to the public.

- **Open Data Initiatives:** Adopting open data policies where data from SESA are made available to researchers, policymakers, and the public in an accessible, userfriendly format. This approach encourages broader scrutiny, analysis, and application of the data.

Proposals for Data Sharing Platforms and Interactive Reporting

Developing platforms for data sharing and interactive reporting can significantly enhance the utility and reach of SESA data. Such platforms could include:

- **Online Portals:** Creating online portals where SESA data can be accessed, analyzed, and downloaded by users. These portals can feature tools for custom data visualization and analysis, catering to diverse user needs.
- **Interactive Dashboards:** Creating interactive dashboards that offer real-time insights and visual representations of critical indicators from the social economy is important. These dashboards are key in making data more comprehensible and practical for users without expert knowledge.

7. Monitoring and Evaluation Measures

We now turn to the need for comprehensive monitoring and evaluation measures to assess the effectiveness and impact of the SESAs. This section is devoted to the establishment of robust performance indicators and methodologies for regular review and updating, ensuring the continued relevance and accuracy of the SESAs.

Performance Indicators to Assess the Effectiveness of Satellite Accounts

Developing and implementing a set of performance indicators is essential for gauging the effectiveness of SESA. These indicators should be carefully selected to reflect the key objectives of SESA, such as accuracy in economic representation, influence on policy-making, and effectiveness in reflecting the dynamics of the social economy. Key performance indicators could include:

- **Data Accuracy and Completeness:** Measuring the degree to which SESA captures the breadth and depth of social economy activities.
- **Policy Impact:** Evaluating how effectively SESA data have been utilized in shaping and guiding economic and social policies.
- **User Engagement:** Assessing the extent of use and engagement with SESA data by various stakeholders, including policymakers, academics, and social economy practitioners.

Planning for Regular Audits and Methodological Updates

To ensure that SESA remains up-to-date and relevant, it is crucial to establish a regular schedule for audits and methodological reviews. These reviews should examine both the data and the methodologies used to ensure they align with the latest economic realities and technological advancements. Areas for potential revision could include:

- **Methodological Refinement:** Continuously refining and updating the methodologies used in SESA to incorporate new data sources, analytical tools, and economic developments.

- **Data Quality Improvement:** Regularly assessing and improving the quality of data collection, processing, and reporting mechanisms.
- **Adaptation to Economic Changes:** Adjusting the SESA framework to reflect changes in the social economy sector, including emerging trends and shifts in economic activities.

The implementation of these provisions, including the development of specific performance indicators for the Social Economy Satellite Accounts (SESA), would represent a significant step forward in their development. The introduction of these measures would considerably increase the value and effectiveness of the SESAs by providing clear and reliable assessment tools.

This would ensure that SESAs are better aligned with the real needs and objectives of stakeholders, improving their relevance and impact in policy formulation and understanding of the social economy. In addition, by measuring data accuracy, policy impact and user engagement, these arrangements would facilitate continuous improvement of the SESAs, ensuring that they remain up to date, accurate and responsive to developments in the social economy.

8. Stakeholder Engagement and Knowledge Dissemination

The insights from the survey responses underscore the importance of engaging a wide range of stakeholders in the development and application of Social Economy Satellite Accounts. This engagement is crucial to ensure that SESA reflects the diverse needs and perspectives of those involved in or affected by the social economy. Stakeholders, ranging from government officials

and social economy practitioners to academic researchers and private sector representatives, offer unique insights that can significantly enhance the relevance and effectiveness of SESA.

Strategies for Effective Stakeholder Involvement

The development of SESA can benefit greatly from strategies aimed at fostering active participation and collaboration among various stakeholders. This can be achieved through:

- **Inclusive Workshops and Consultations:** Organizing forums where stakeholders can share their experiences, challenges, and best practices in the social economy. Such interactions can provide valuable feedback for refining SESA methodologies.
- **Regular Communication Channels:** Establishing regular communication channels, such as newsletters or online platforms, to keep stakeholders informed about developments in SESA and to gather ongoing feedback.

Leveraging Insights from Stakeholder Feedback

The survey responses highlight several perceived limitations of SESA, such as its cost and limited scope in capturing certain aspects of the social economy. Addressing these concerns requires:

- **Cost-Effective Strategies:** Exploring ways to reduce the costs associated with implementing and maintaining SESA, possibly through shared resources or international collaboration.
- **Broadening Scope:** Expanding the scope of SESA to include a wider range of social economy activities, ensuring a more comprehensive representation of this sector.

Knowledge Dissemination and Public Awareness

Raising public awareness about the significance and benefits of SESA is key to its wider acceptance and utilization. This can be facilitated through:

- **Educational Campaigns and Seminars:** Conducting campaigns and seminars to educate stakeholders about the importance and utility of SESA.
- **Publishing Findings and Case Studies:** Regularly publishing findings from SESA, along with case studies demonstrating their practical application, to illustrate the real-world impact of these accounts.

As mentioned above, active stakeholder engagement, combined with effective knowledge dissemination strategies, is essential to the success and sustainability of social economy satellite accounts. By integrating diverse perspectives and continually evolving to meet the changing needs of the social economy, SESAs can become an indispensable tool for economic analysis and policy making.

9. Future Considerations and Evolution Perspectives

As we look toward the future of Social Economy Satellite Accounts (SESA), it is essential to anticipate the evolving trends and potential innovations that may shape this field. This section of the chapter explores the opportunities and challenges that lie ahead, offering recommendations for adapting SESA to future economic and technological changes.

Anticipating Future Trends in Social Economy

The landscape of the social economy is continuously evolving, influenced by global economic trends, technological advancements, and changing societal needs. It's crucial for SESA to remain adaptable and responsive to these changes. Future considerations might include:

- **Digital Transformation:** As digital technologies continue to permeate all sectors, SESA must incorporate these advancements to accurately capture digital-based social economy activities.

- **Sustainable Development Goals (SDGs):** Aligning SESA with the SDGs can provide valuable insights into the social economy's contributions to achieving these global objectives, especially in areas like poverty reduction, quality education, and climate action. The alignment of SESA with the Sustainable Development Goals (SDGs) is of major strategic utility, as both tools serve a common purpose: to promote sustainable and inclusive economic and social development. By providing detailed data on the contributions of the social economy, SESAs offer valuable insight into how economic activities can support the SDGs. For example, SESAs can highlight the impact of cooperatives, non-profit organisations and other social economy entities in key areas such as poverty reduction, quality education, gender equality, decent work, and the fight against climate change. Linking the SESAs with the SDGs provides a better understanding of how local economic initiatives contribute to global sustainable development goals. This helps decision-makers to align their policies and strategies with the SDGs while taking advantage of the unique strengths of the social economy. It also paves the way for a better allocation of resources, by targeting investment towards sectors that maximise positive social and environmental impact. Integrating the SESAs into the SDG framework enriches the understanding of the role of the social economy in achieving a sustainable and equitable future. This encourages a more holistic approach to development, where

economic, social and environmental objectives are pursued in a coherent and integrated manner.

Innovations in Data Science and Technology

The rapid advancements in data science and technology offer new opportunities for enhancing SESA. Future developments might involve:

- **Artificial Intelligence and Machine Learning:** as discussed above, taking advantage of AI and machine learning to analyse complex datasets more efficiently, providing deeper insights into the dynamics of the social economy can be very useful and powerful.
- **Blockchain and Data Security:** Explore the use of blockchain technology to ensure data integrity and security within SESA, enhancing trust and reliability. The use of blockchain technology within SESA offers significant potential for strengthening data integrity and security. Thanks to its decentralised and immutable infrastructure, blockchain guarantees the transparency and traceability of information. By integrating this technology, SESA data becomes more reliable and traceable, boosting the confidence of users and stakeholders.

10. Conclusion

This chapter has used the research we have carried out during our thesis to define a strategic framework for the development, implementation and future evolution of SESAs, highlighting their essential role in the social economy sector.

We began by establishing a global framework for SESA, setting out principles and standards to ensure their relevance and adaptability across diverse socio-economic contexts. This was followed by specific recommendations tailored for Portugal, demonstrating how the global framework can be localized to meet the unique needs of national social economies.

The strategic use of SESA in policy-making was then explored, emphasizing their value in providing nuanced economic insights that can inform and shape effective policy decisions. The integration of data science and AI was discussed as a key enabler for enhancing the analytical power of SESA, making them more robust and forward-looking.

Capacity building and training emerged as crucial elements, ensuring that professionals are well-equipped to handle the complexities of SESA. We then delved into the importance of promoting data transparency and accessibility, which is fundamental for the credibility and utility of SESA.

The significance of stakeholder engagement and knowledge dissemination was highlighted, emphasizing the need for collaborative efforts and public awareness to maximize the impact of SESA. The chapter also looked ahead, considering future trends and technological innovations that could influence the evolution of SESA.

In summary, this chapter has not only provided a roadmap for the effective implementation and utilization of SESA but has also envisioned a future where these tools play a central role in enhancing our understanding and support of the social economy. The insights and recommendations presented here pave the way for SESA to become integral components in shaping economic policies and strategies, aligning with the broader goals of sustainable and inclusive growth.

As we move forward, sustaining and nurturing the development and application of SESA will be pivotal in realizing their full potential in illuminating the multifaceted nature of the social economy, both within Portugal and on a global scale.

Chapter 8: Conclusions

Our research journey through the intricacies of Social Economy Satellite Accounts (SESA) or equivalent has led us to a profound understanding of their pivotal role in modern economic analysis. The comparative study across Portugal, France, and Poland has illuminated the diverse methodologies and applications of SESA, revealing their versatility in capturing the economic dynamics of various sectors of the social economy. The integration of data science, particularly the use of artificial intelligence and machine learning, stands out as a transformative advancement, enhancing the depth and accuracy of SESA.

Interviews with experts in the field, such as Rafael Chaves and Edith Archambault, have been instrumental in identifying both challenges and solutions in the implementation and development of SESA. Key challenges include the limitation in capturing the full spectrum of social economy activities and the costs associated with SESA implementation. However, innovative solutions such as expanding methodologies to include non-market contributions, like volunteer work, and leveraging technological advancements for cost-effective data analysis, offer promising pathways forward. The implications of our findings are significant and broad. SESA, as a tool, is not static; it constantly evolves, adjusting to technological advancements and the ever-changing economic landscapes. This adaptability is crucial for its relevance in future economic analysis and policy formulation. Looking ahead, the potential integration of environmental and sustainability metrics in SESA presents an exciting avenue for exploration, aligning economic analysis with global sustainability goals.

The journey through the world of SESA reaffirms their indispensable role in providing a comprehensive economic narrative. The future of SESA lies in its ability to embrace technological innovations, expand its methodological scope, and maintain collaborative networks across different sectors. This approach will not only enhance the understanding of the

social economy but also contribute to shaping policies that are reflective of the diverse economic realities and challenges of our time. As we continue to navigate a rapidly changing economic landscape, SESA stands as a beacon, guiding the way towards more inclusive, sustainable, and informed economic planning and policy-making.

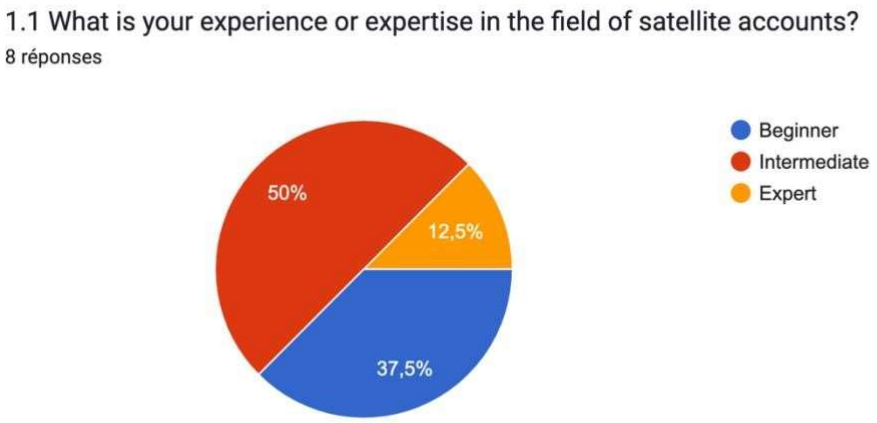
Appendices

Sources description

Source	Description	Quantity
Primary Data		
Questionnaire	Survey designed and conducted with Social economy / Satellite account specialist	8 valid answers
Social Economy Satellite Account report	Report specially designed to address social economy	6
Scientific review	About social economy, about satellites account, about data collection, about optimization of data transformation	17
Secondary Data		
Document analysis	Relative to social economy	Around 20
Community Post	Review of relevant posts from community	Around 80

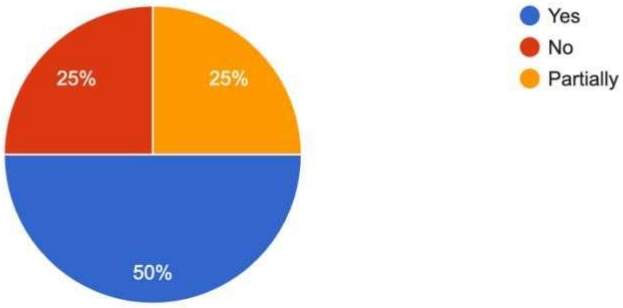
Results of the Social Economy Satellite Accounts Questionnaire

Full Name:	Position/Title:	Organization/Institution:
Gabriel Salathé-Beaulieu	Conseiller en transfert	TIESS
Rafael Chaves	professor	University of Valencia
Edith Archambault	Emerita Professor	Université Paris1 Panthéon-Sorbonne
Helena Sadzot	Researcher	Center for Social Economy - ULiège
Prouteau	Emeritus professor of economics	Nantes University
Marie J. Bouchard	/	/
Peter Kellermann Brandorff	Head consultant	Kooperationen
Danijel Baturina	assistant professor	Faculty of Law Zagreb



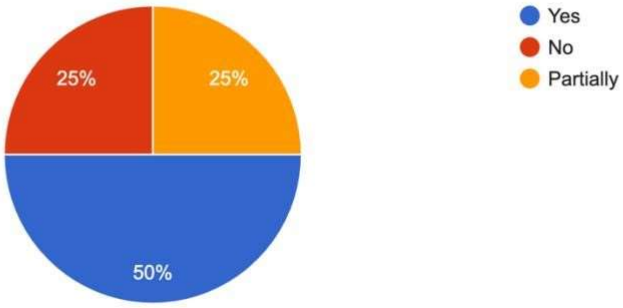
1.2 Do you have specific knowledge of Social Economy Satellite Accounts (SESA)?

8 réponses



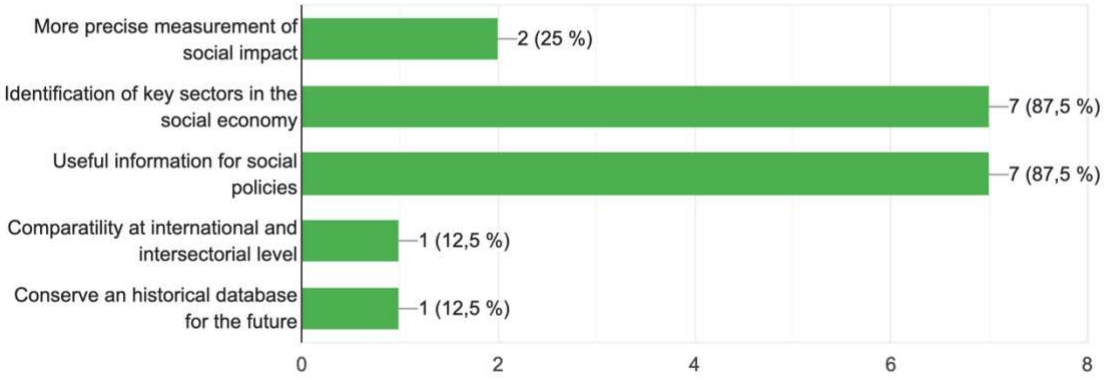
1.2 Do you have specific knowledge of Social Economy Satellite Accounts (SESA)?

8 réponses



2.1 In your opinion, why is it important for a country to develop Social Economy Satellite Accounts (SESA)?

8 réponses



2.2 What, in your view, is the most significant advantage of SESA compared to traditional satellite accounts?
SESA are not "better" than other satellite accounts
ns
It is not a field but a set of organizations
Because social economy can't be considered as a whole
It can free itself from the constraints inherent
It helps targeting some indicators
To measure the impact of the social economy
They are specific and put focus on SE

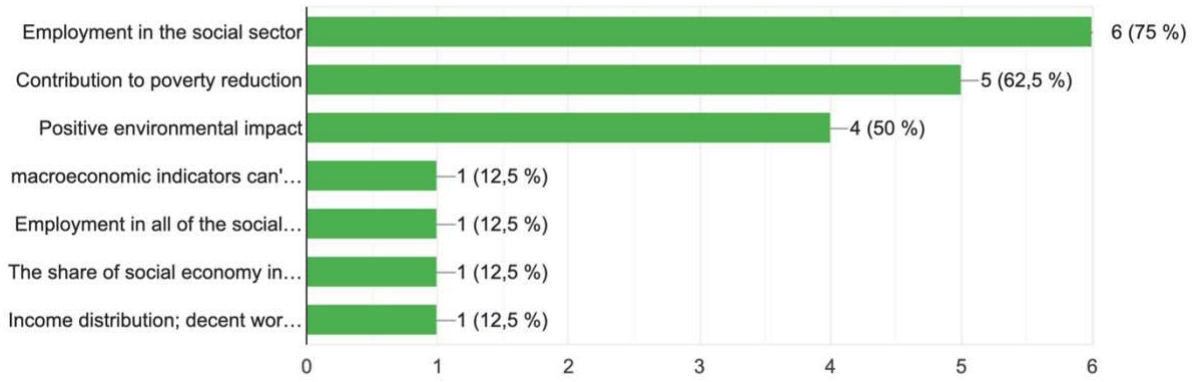
2.3 What are, in your opinion, the target stakeholders of the SESA?
representatives ot the SE sector, researchers and policymakers

statisticians
Mainly people belonging to SE organizations and statisticiansnd
Not clear if you talk about the organisations that should organise the SESA or the organisation that should be included in the accounts?
Public authorities
Public policy and SE umbrella organizations
Policy makers and local authorities
Government, SE sector, wider public

2.4 What should be changed in order to have an impact on the target stakeholders?
Having a satellite account in the first place would be agood start as there isn't such a thing in Canada
ISFL, must include SE
more awareness of public powers at local, national and international levell
?
Timely and targeted diffusion of SESA results
Political and administration will to implement them

3.1 What metrics or indicators do you think are most important for assessing the performance of the social economy in a country?

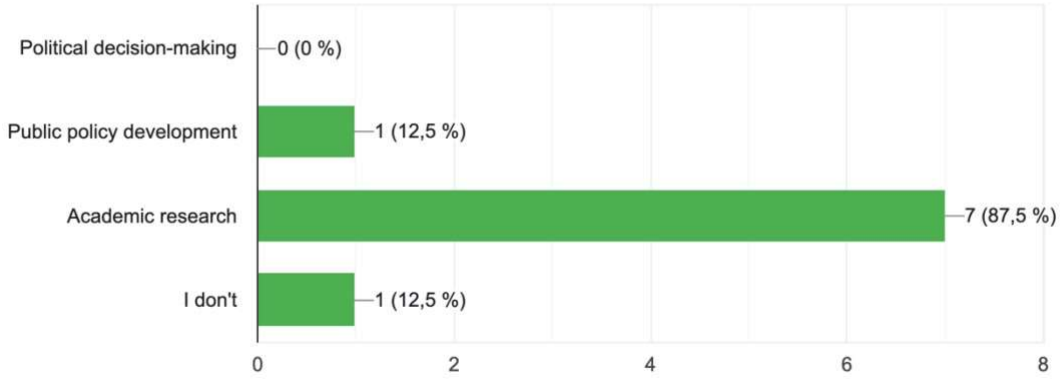
8 réponses



3.2 How can these metrics or indicators be used to inform public policies and economic decisions?
Statistics are useful to understand the weight of the social economy, target key sectors for its development, support its workforce and many more uses. But it cannot really inform us on the performance of the sector. That question requires a more "micro" perspective.
ns
More dissemination of the results of SESA if any
To show the weight and the social role of social economy
Indicator of economic diversity, social cohesion, resilience to crisis
To compare the impact of the social economy compared to public sector and for profit actors
More precise info about the size and impacts of the SE sector

4.1 How do you currently utilize information from SESA in your professional activities or area of expertise?

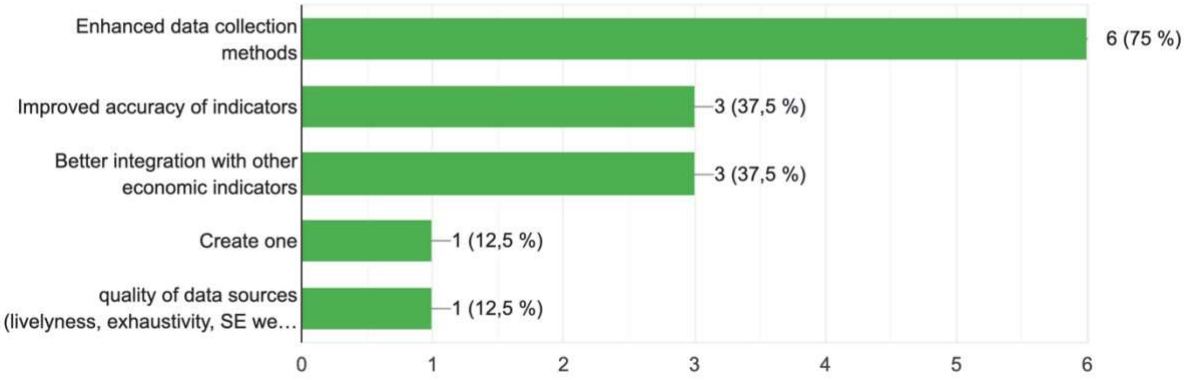
8 réponses



4.2 In your opinion, what are the main challenges or obstacles to the effective use of information from SESA?
No SESA in Canada.
ns
Too few political support and too few knowledge of SE by public powers
Agregate comparable data in all regions / countries
Lack of knowledge about (and interest for) the SE; lack of knowledge about what is a SESA and what purposes can it serve
We don't have them in Croatia so establishment

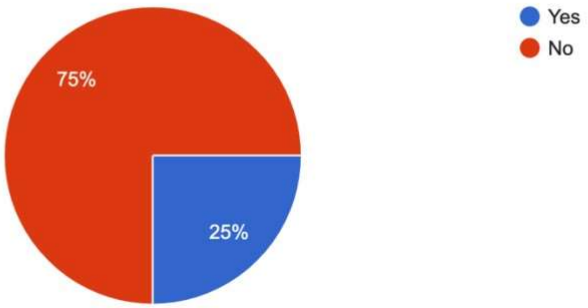
5.1 In your opinion, how could the current Social Economy Satellite Accounts (SESA) system be improved?

8 réponses



5.2 Do you have any recommendations for incorporating advanced technologies or methodologies to enhance the effectiveness of SESA?

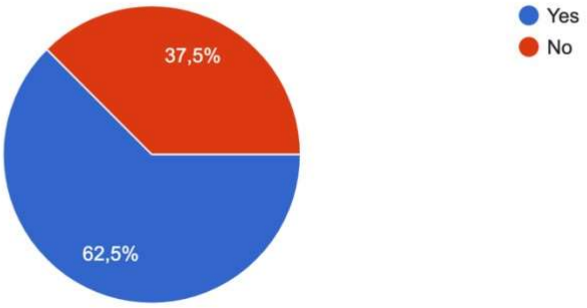
8 réponses



Could you please provide those specific recommendations?
ns
Diversify indicator metrics and avoid reducing measurement to monetary instruments alone

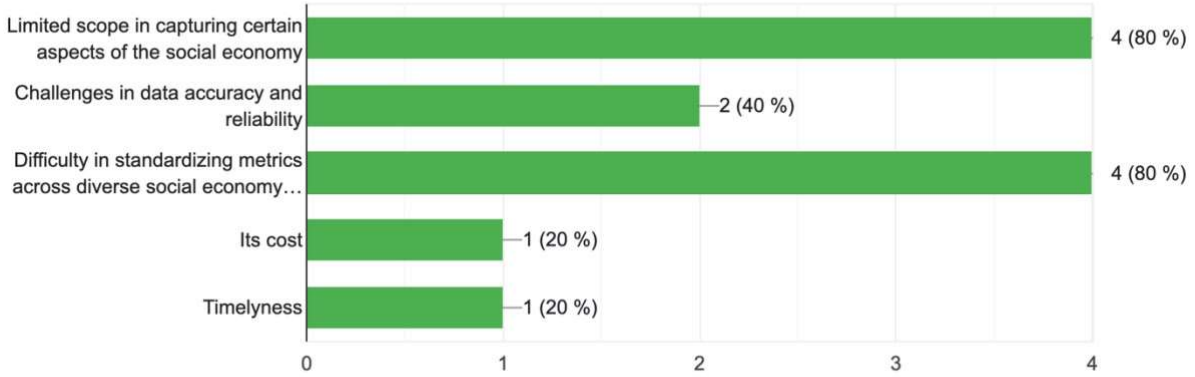
6.1 In your experience or knowledge, are there any perceived drawbacks or limitations of Social Economy Satellite Accounts (SESA)?

8 réponses



6.2 Please elaborate on the perceived drawbacks or limitations of SESA:

5 réponses



6.3 How do you think these drawbacks could be mitigated or addressed to enhance the overall effectiveness of SESA?
Sharing information between countries about how to design it so statistical agencies with limited resources can still do it.
Yes
Develop alternative and complementary periodic censuses and surveys

Evolution of the date of establishment of the Social Solidarity Cooperatives that submitted information in CASEs Accreditation Portal, 2018

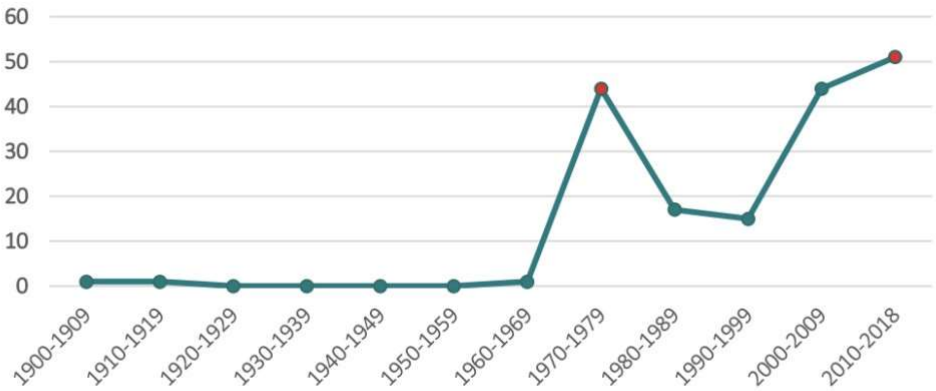


Figure 7 – Evolution of the date of establishment of the Social Solidarity Cooperatives that submitted information in CASEs Accreditation Portal, 2018

Stakeholder mapping

Power Scores (1 to 20):

1. **Government Agencies:**
   - Power Score: 18
   - Justification: High regulatory power and control over policies impacting the social economy.
2. **Social Enterprises and Cooperatives:**
   - Power Score: 14
   - Justification: Significant influence in their respective sectors, but power may vary based on size and resources.
3. **Non-profits and NGOs:**
   - Power Score: 16
   - Justification: Power derived from their social impact and advocacy for important causes.
4. **Financial Institutions:**
   - Power Score: 17
   - Justification: Substantial financial influence and ability to shape funding directions.
5. **Labor Unions:**
   - Power Score: 15

- Justification: Influence in advocating for fair labor practices but may vary based on membership size.

6. **Educational and Research Institutions:**
   - Power Score: 13
   - Justification: Influence in shaping academic discourse but may have less direct impact on policy.
7. **Business Associations:**
   - Power Score: 16
   - Justification: Power in representing industry interests and shaping businessrelated policies.
8. **Local Communities:**
   - Power Score: 12
   - Justification: Influential at a local level but may have limited power at higher administrative levels.
9. **Consumers:**
   - Power Score: 14
   - Justification: Collective power through purchasing decisions but may be dispersed.
10. **International Organizations:**
    - Power Score: 19 - Justification: High influence in setting global agendas and policies.
11. **National Policymakers:**
    - Power Score: 15
    - Justification: Substantial power at a national level but influenced by global trends.
12. **Regional Researchers and Academics:**
    - Power Score: 12
    - Justification: Moderate power with influence at a regional or national academic level.
13. **Regional Investors:**
    - Power Score: 14
    - Justification: Substantial power at a regional financial level, influenced by global initiatives.
14. **Regional Media:**
    - Power Score: 11 - Justification: Moderate power with the ability to shape regional perceptions.
15. **Regional Suppliers:**
    - Power Score: 10 - Justification: Limited power but may have influence in regional supply chains.
16. **Regional Competitors:**
    - Power Score: 12 - Justification: Moderate power regionally, influenced by global changes.
17. **Global Environmental Organizations (Indirect Impact):**
    - Power Score: 13
    - Justification: Moderate power globally, particularly in influencing environmental policies.

-
18. **International Educational Institutions (Indirect Impact):**
    - Power Score: 11 - Justification: Moderate power at an international academic level.
19. **Global Technology Providers (Indirect Impact):**
    - Power Score: 14 - Justification: Substantial power globally, especially in technological advancements.
20. **General Global Public:**
    - Power Score: 10
    - Justification: Limited power individually but collective influence in shaping global trends.

Influence Scores (1 to 20):

1. **Government Agencies:**
    - Influence Score: 16
    - Justification: High influence due to their role in shaping policies and regulations.
2. **Social Enterprises and Cooperatives:**
    - Influence Score: 14 - Justification: Influence in their respective sectors but may vary based on size.
3. **Non-profits and NGOs:**
    - Influence Score: 18 - Justification: High influence due to their social impact and advocacy work.
4. **Financial Institutions:**
    - Influence Score: 17
    - Justification: Substantial influence due to their financial contributions and direction-setting.
5. **Labor Unions:**
    - Influence Score: 15
    - Justification: Influence in advocating for fair labor practices but may vary based on membership size.
6. **Educational and Research Institutions:**
    - Influence Score: 13
    - Justification: Influence in shaping academic discourse but may have less direct impact on policy.
7. **Business Associations:**
    - Influence Score: 16
    - Justification: Influence in representing industry interests and shaping businessrelated policies.
8. **Local Communities:**
    - Influence Score: 12
    - Justification: Influential at a local level but may have limited influence at higher administrative levels.

-
9. **Consumers:**
    - Influence Score: 14
    - Justification: Collective influence through purchasing decisions but may be dispersed.
10. **International Organizations:**
    - Influence Score: 20

      Justification: Highest influence due to their role in setting global agendas and policies.
11. **National Policymakers:**
    - Influence Score: 14
    - Justification: High influence in shaping national policies, influenced by global trends.
12. **Regional Researchers and Academics:**
    - Influence Score: 11 ○ Justification: Moderate influence at a regional or national academic level.
13. **Regional Investors:**
    - Influence Score: 13
    - Justification: Substantial influence at a regional financial level, influenced by global initiatives.
14. **Regional Media:**
    - Influence Score: 10 ○ Justification: Moderate influence in shaping regional perceptions.
15. **Regional Suppliers:**
    - Influence Score: 8 ○ Justification: Limited influence but may impact regional supply chains.
16. **Regional Competitors:**
    - Influence Score: 10 ○ Justification: Moderate influence regionally, influenced by global changes.
17. **Global Environmental Organizations (Indirect Impact):**
    - Influence Score: 12
    - Justification: Moderate influence globally, particularly in shaping environmental policies.
18. **International Educational Institutions (Indirect Impact):**
    - Influence Score: 10 ○ Justification: Moderate influence at an international academic level.
19. **Global Technology Providers (Indirect Impact):**
    - Influence Score: 13
    - Justification: Substantial influence globally, especially in technological advancements.
20. **General Global Public:**
    - Influence Score: 8
    - Justification: Limited individual influence but collective impact in shaping global trends.

Acronyms list

SESA: Social Economy Satellite Account

SEE: Social Economy Europe

GDP: Gross Domestic Product

INE: Instituto Nacional de Estatistica

FUE: General Register of Statistical Units

IAP: Survey on employers' associations, unions, federations and confederations

IASM: Survey of Mutual Associations

LFS: Labour Force Survey

INSEE: Institut National de la Statistique et des Études Économiques

FTE: Full-Time Equivalent

GVA: Grodd Added Value

PPP: Purchasing Power Parity

CASES: Cooperativa António Sérgio para a Economia Social

CGE: Conta Geral do Estado

TSE: Third/Social Economy sector

ILO: International Labour Organisation

NGO: Non-governmental organisation

EESS: Emploi et économie sociale et solidaire

CSE: Social and Economic Committee

SSE: Social and Solidarity Economy

SDGs: Sustainable Development Goals

Bibliography

Academia de Líderes Ubuntu. s.d. *Academia de Líderes Ubuntu.* Accès le 11 25, 2023. https://www.academialideresubuntu.org/en/.

BRANDELEER, Céline. 2013. *Social Economy in Poland.* 07. Accessed 09 1, 2023. https://www.ess-europe.eu/sites/default/files/read-more.pdf.

CASES. s.d. *Oferta Formativa.* Accès le 12 5, 2023. https://cases.pt/programas/formacao/oferta-formativa/.

CEDEFOP. 2023. *2023 skills forecast - France.* Accessed 11 3, 2023. https://www.cedefop.europa.eu/files/skills_forecast_2023_france.pdf.

Chkoniya, Valentina. 2021. *Challenges in Decoding Consumer Behavior with Data Science.* 06. Accessed 11 20, 2023. https://revistia.com/files/articles/ejes_v7_i1s_21/Chkoniya.pdf.

CIRIEC. 2016. *Recent Evolutions of Social Economy - Study .* 12. Accès le 10 2023. https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/recentevolutions-social-economy-study#downloads.

Cláudia M. Viana, Maurício Santos, Dulce Freire, Patrícia Abrantes, Jorge Rocha. 2021. *Evaluation of the factors explaining the use of agricultural land: A machine learning and model-agnostic approach.* Accessed 11 17, 2023. https://repositorio.ul.pt/bitstream/10451/49691/1/Viana_Santos_Freire_Abrantes_Rocha_2021.pdf.

Edith Archambault, Philippe Kaminski. 2009. *La longue marche vers un compte satellite de l'économie sociale: un bilan à partir de l'expérience française.* 1 06. Accès le 09 15, 2023. https://core.ac.uk/download/47878859.pdf.

ESS France. s.d. *La liste des entreprises de l'ESS* . Accès le 12 11, 2023. https://www.essfrance.org/fr/la-liste-des-entreprises-de-less.

Esteban Ortiz-Ospina, Marco Molteni. 2017. *What are PPP adjustments and why do we need them?* 03 16. Accessed 11 28, 2023. https://ourworldindata.org/what-are-ppps.

European Commission. n.d. *Social Economy Gateway - France.* Accessed 09 11, 2023. https://social-economy-gateway.ec.europa.eu/my-country/france_en.

—. n.d. *Social Economy Gateway - Portugal.* Accessed 08 2023. https://social-economygateway.ec.europa.eu/mycountry/portugal_en#:~:text=Holy%20Houses%20of%20Mercy%20,established%20th rough%20a%20collaboration%20protocol.

European Union. 2021. "Eurostat." *ec.europa.* Accessed 09 5, 2023. https://ec.europa.eu/eurostat/esa2010/chapter/view/22/.

Eurostats. 2023. *Glossary:Satellite account* . 09 08. Accès le 11 30, 2023. https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Glossary%3ASatellite_account.

Farragher, Mark. 2018. *Why Economists Should Embrace Data Science.* Accessed 09 29, 2023. https://www.cambridgespark.com/info/why-economists-should-embrace-datascience.

Ferreira, Sílvia. 2019. *SOCIAL ENTERPRISES AND THEIR ECOSYSTEMS IN EUROPE.* 04. Accessed 10 12, 2023. https://ec.europa.eu/social/BlobServlet?docId=21136&langId=en.

French government. 2014. *LOI n° 2014-856 du 31 juillet 2014 relative à l'économie sociale et solidaire.* Accès le 12 8, 2023. https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000029313296/.

GUS. 2018. *Social Economy Satellite Account for Poland 2018.* Accessed 11 23, 2023. https://stat.gov.pl/download/gfx/portalinformacyjny/en/defaultaktualnosci/3681/5/1/1/social_economy_satellite_account_for_poland_2018.pdf.

INSEE. 2023. *L'économie sociale en 2020 .* Accès le 12 16, 2023. https://www.insee.fr/fr/statistiques/7636546?sommaire=7636553.

—. 2014. *L'économie sociale, des principes communs et beaucoup de diversité.* 11 21. Accessed 10 1, 2023. https://www.insee.fr/fr/statistiques/1281365.

Instituto Nacional de Estatistica. 2023. *SOCIAL ECONOMY SATELLITE ACCOUNT.* 07 31. Accessed 08 30, 2023. https://www.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=621748627&att_displ a y=n&att_download=y.

International Labour Organization. 2023. *Measuring the social and solidarity economy (SSE): A roadmap towards Guidelines concerning statistics of the SSE.* 10. Accès le 12 10, 2023. https://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/meetingdocument/wcms_894547.pdf.

International Monetary Fund. 2023. *GDP current prices.* Accessed 10 18, 2023. https://www.imf.org/external/datamapper/NGDPD@WEO/FRA/POL/PRT.

José Barea, José Luis Monzón. 2006. *MANUAL FOR DRAWING UP THE SATELLITE ACCOUNTS OF COMPANIES IN THE SOCIAL ECONOMY: CO-OPERATIVES AND MUTUAL SOCIETIES.* Accessed 09 11, 2023. https://www.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=150386007&att_displa y=n&att_download=y.

Joseph Stiglitz, Amartya K. Sen, Jean-Paul Fitoussi. 2009. *The measurement of economic performance and social progress revisited: Reflections and Overview.* Accessed 08 26, 2023. https://sciencespo.hal.science/hal-01069384/document.

Kornelia Batko, Andrzej Ślęzak. 2022. *The use of Big Data Analytics in healthcare.* Accessed 11 15, 2023. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8733917/.

Marie, Pierre. 2016. *Les entreprises autogérées au Portugal, de la révolution des Œillets à l'économie sociale.* 04. Accessed 08 28, 2023. https://www.cairn.info/revue-recma2016-4-page-86.htm.

Portugal 2030. n.d. *What it is Portugal 2030.* Accessed 10 25, 2023. https://portugal2030.pt/en/portugal-2030/o-que-e-o-portugal-2030/.

Ramos, Cristina. 2019. "knowledgehub." *knowledgehub.unsse.* 12. Accessed 08 23, 2023. https://knowledgehub.unsse.org/wp-content/uploads/2019/12/Ramos_2019_SocialEconomy-Satellite-Account-in-Portugal.pdf.

Rzeczpospolita Polska. s.d. *Ekonomia społeczna* . Accès le 08 29, 2023. https://www.gov.pl/web/rodzina/ekonomia-spoleczna-i-solidarna.

n.d. *Santa Casa da Misericordia de Macau.* Accessed 08 21, 2023. http://www.scmm.mo/frontend/main/index.php?hl=en.

Science Direct. 2021. "sciencedirect." *sciencedirect.* Accessed 08 11, 2023. https://www.sciencedirect.com/topics/economics-econometrics-and-finance/satelliteaccount.

Sébastien Mariaux, Emmanuelle Reynaud. 2018. *The social and solidary economy and its stakeholders: a discourse analysis* . Accès le 12 15, 2023. https://journals.openedition.org/fcs/2551.

2001. *The Tourism Satellite Account as an Ongoing Process: Past, Present and Future Developments.* Accessed 09 23, 2023. https://www.eunwto.org/doi/book/10.18111/9789284404247#:~:text=The%20Tourism%20Satellite %20Accounts%20Project,the%20steps%20still%20to%20go.

UNESCO. 2015. *Culture Satellite Account: An Examination of Current Methodologies and Country Experiences.* 10. Accessed 10 2, 2023. https://unstats.un.org/unsd/nationalaccount/workshops/2015/Montreal/MontrealBK2.PDF.

United Nations New York. 2018. *Satellite Account on Non-profit and Related Institutions and Volunteer Work.* Accessed 08 28, 2023. https://unstats.un.org/unsd/nationalaccount/docs/UN_TSE_HB_FNL_web.pdf.

Unstats. n.d. "unstats." *unstats.un.* Accessed 09 2, 2023. https://unstats.un.org/unsd/sna1993/drafts/chapter29dv2.pdf.

Ven, Peter van der. 2021. «Developing thematic satellite accounts: The example of a thematic satellite account for transport.» *OECD iLabrary.* 20 08. Accès le 12 13, 2023. https://www.oecd-ilibrary.org/docserver/b833cbfaen.pdf?expires=1702825059&id=id&accname=guest&checksum=136B680052951074 7DF1B69E11C2EEFC.