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ECONOMIC PERFORMANCE AND THE ROLE OF STRATEGIC ACCOUNTING IN EU COUNTRIES

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Abstract

Performance management and strategic accounting are interlinked, both contributing to long-term organizational objectives. An effective integration of these two areas can give an organization a clearer vision and greater control over performance and strategic direction. These concepts are key to guiding organizations to success by providing a sound basis for decision-making and creating an environment in which employees can contribute effectively and are motivated to achieve their goals. In general, healthy economic performance can lead to increased competitiveness and this can contribute to improved economic performance. Contributing factors may include innovation, quality of human resources, infrastructure, tax and monetary policy, as well as government regulation and access to international markets. In boosting economic performance, innovation plays a key role in generating growth, competitiveness, efficiency and significant improvements in a variety of economic sectors and areas.

Keywords: performance management; strategic accounting, economic performance, trade.

JEL Classification: E32, G01.

I. INTRODUCTION

This paper aims to highlight the interconnection between the economic performance of various EU countries under the impact of the war in Ukraine, the relevant performance indicators and how strategic accounting can play a key role in analyzing and understanding the economic situation and performance of these countries.

Strategic accounting plays a significant role in analyzing and understanding the economic situation of different countries in the European Union. This discipline not only focuses on financial aspects, but brings a strategic perspective to the collection, interpretation and use of financial information to support decision-making processes at government and economic level. Thus, strategic accounting provides the tools to assess and monitor a country's economic performance in a holistic way. It involves analyzing financial data such as GDP, inflation, public debt, exports and imports to identify trends and assess the overall economic health of the country.

The data provided by strategic accounting are essential in the formulation and implementation of economic policies at national and supranational level. Financial information and strategic analyses help identify weaknesses, opportunities and risks, supporting policy decisions to improve economic performance and promote sustainable development.

Strategic accounting provides a framework for continuously monitoring a country's economic performance and reporting relevant data. This includes the preparation and presentation of financial and economic reports to stakeholders and the interpretation of this information to support transparency and accountability of government. Using analysis of financial data and information, strategic accounting can contribute to long-term economic forecasting and planning of future strategies. This helps governments and economic bodies to anticipate change, identify potential threats and opportunities and develop strategies for sustainable growth and development.

Strategic accounting plays a key role in the analysis of countries in the European Union, providing critical data and information for economic and political decision-making. It provides a clearer view of economic performance, facilitates policy formulation and assists in strategic planning to support the sustainable development and long-term prosperity of EU Member States.

II.LITERATURE REVIEW

In the view of some economists, making managerial decisions that determine both the long-term prospects for the development of the enterprise and the current use of resources is one of the core tasks of managerial accounting. In Michael Porter's classic competition model, any business that wants to survive and succeed must develop and implement strategies. An organization's accounting system plays an important role in helping to adopt and maintain a strategic position, its role being vital, adding value to an organization and providing important

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information for decision making. Within a contemporary organization, the accounting system associated with it has a number of functions and applications: helps investors to assess the risks and value they can expect, it is useful in identifying the type and locations of an organization's resources, and helps managers to assess employee performance (Boonmakt, 2008).

Accounting information systems (AIS) are a tool which, when integrated with information and technology (IT) systems, are designed to help manage and control subjects related to the economic and financial area of the organization. But the amazing advance in technology has opened up the possibility of generating and using accounting information from a strategic point of view. Accounting literature argues that strategic success is considered a result of the accounting information system, which combines accounting methodologies, controls, and techniques with IT industry technology to track transactions and provide internal and external reporting data, financial statements, and trend analysis capabilities and thereby influence organizational performance.

Accounting is an information system and, more precisely, it is the practice of general information theory in the field of efficient economic activities and consists to a large extent of presenting the necessary information in quantitative form. "Financial-accounting information is at the intersection of accounting and financial analysis (the practical proof being represented by the very terminological change introduced by the IASB in the generic name of the standards it produces, from IAS - International Accounting Standards - to IFRS - International Financial Reporting Standards)" (Robu & Sandu, 2006).

In the context of the 21st century business environment, accounting information combined with information technologies are closely related to the performance of companies contributing to the economic performance of a country. This relationship is defined by the fact that the strategic decisions that will be taken subsequently by the management of companies are directly affected by the accounting information obtained. On these decisions depends the future of the business, in other words, whether the company will reach a higher level of performance or go into decline.

The concept of "performance" is interpreted differently by users of accounting information, depending on their interests. Thus, managers are interested in the rationale for decisions on overall performance, investors are mainly interested in the return on their investments, employees are interested in the stability and profitability of the company, and creditors are interested in the solvency and ability of the company to pay its debts on time. We can say that the measurement of a company's financial performance is based on the objectives of the information users and all of them find the answers to their questions in the financial statements, i.e. in the balance sheet and income statement, which shows that the link between performance and accounting information is undeniable.

In the literature, we will identify several basic concepts that are closely related and interlinked with the economic performance term, namely competitiveness and innovation. In order to effectively understand the business environment and make informed decisions, strategic accounting provides the necessary tools, which can directly influence the level of competitiveness of an organization in the market in which it operates.

The literature explores the strong relationship between economic performance and competitiveness and suggests that overall economic performance contributes to competitiveness and at the same time, competitiveness can influence economic performance. Thus, strong economic performance with stable GDP growth, low unemployment, investment in research and development, strong infrastructure, etc. can strengthen a country's or a company's competitiveness in the market. A healthy economy can facilitate innovation and provide the necessary resources to sustain efforts to be competitive.

The term competitiveness is used by analysts to identify the achievement of a comparative advantage. The
concept of pursuing a level of comparative advantage was theorized by Porter (1990). Depending on how the
characteristics of competitiveness are perceived by different interest groups in the literature, three categories of
competitiveness are nominated (Stankiewicz, 2009):
normal competitiveness - which is when the outcomes of specific interactions are equal to the
expectations of participating stakeholders;
□ lower than normal competitiveness - where actual results do not meet expectations; in such situations,
stakeholders take steps to withdraw from interaction with outperformers, and more attractive decisions are most
often formulated in the immediate aftermath;
□ higher than normal competitiveness - when actual results are higher than expected by the benchmark
entities; in these cases, stakeholders try to strengthen their relationship with the entity that has higher than normal
competitiveness.
We cannot ignore the fact that economic performance and innovation are closely interlinked and have a
particularly important relationship in the development of an economy or a company. The link between innovation
and economic performance is evident for several reasons:
☐ Catalyst for economic growth: innovation plays a key role in stimulating economic growth by creating
new products, services and technologies that can improve efficiency and productivity;
☐ Market competitiveness: innovative companies are often more competitive in the marketplace because
they can offer unique products or services that are better or more efficient than their competitors; this can give
them a competitive advantage and help them gain and maintain a larger market share;

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 \Box Cycle of innovation and growth: innovation can initiate a cycle of economic growth, in which new discoveries and technologies lead to new business opportunities and the development of entire industries, thereby generating jobs and creating economic value.

☐ Efficiency and sustainability: innovation can help increase economic efficiency by using resources in a smarter way and developing more sustainable and greener technologies, which can lead to lower costs and higher profits in the long run.

Today, the literature promotes also the link between digitalization and innovation.

☐ Impact on living standards: innovation can improve quality of life by introducing technologies that facilitate access to services, improving health systems or creating more effective solutions to social problems.

Regarding the link between digitalization and innovation, we can appreciate that technological change will always have an impact on all organizations. There will be a need for new kinds of managerial, diplomatic and social skills and a concomitant need for a new kind of decision-making process that is not unfamiliar with existing organizational structures. Technological change will affect three specific aspects of the organization's environment: market competition and uncertainty will increase; the organization's products or services will need to be more diverse and of higher quality; foreign policy and regulatory reform will increase in complexity.

Dynamic Capabilities Theory (Tortora et al., 2021; Tajudeen et al., 2022), argues that through effective management of resources (digital technologies), organizations can explore and exploit innovation capabilities. When we talk about technologies in the 21st century, we often think of information technologies. Companies spend significant amounts of money on information technology (IT) resources, but they are often challenged in developing appropriate strategies to direct these resources towards creating business value (profit). Given that profit equals revenue minus expenses, it is clear that there are three strategic IT paths to performance: they can be used to reduce expenses by improving productivity and efficiency; increase revenue by fully exploiting existing customer, channel, and product/service opportunities or by finding and creating new customers, channels, and products/services; reduce expenses and increase revenue simultaneously (Sunil & Rust, 2016).

The direct relationship between digitalization and innovation is currently intensely debated (Kastelli et al., 2022), with some studies finding the link to be implicit, while other researchers dispute the legitimacy of the relationship, arguing that not all digital technologies foster increased innovation (Usai et al., 2021). Similarly, examining the relationship between digitalization and environmental innovation in 24 EU countries, Hung highlights the importance of digital activity (Hung et al., 2023). Starting from the context of coevolution, Marti and Puertas analyze the innovation capacity and level of digitalization of countries as determinants of competitiveness (Marti & Puertas, 2023).

The level of digitalization has a significant impact on the degree of innovation in EU countries. Regarding its impact on skills adequacy, researchers propose new approaches to exploit the benefits of IT&C for upskilling and reskilling (Tay et al., 2022). Vial argues that digital transformation has an increased potential to drive employees to go beyond the boundaries of the profession, thus developing human resource skills (Vial, 2019). Analyzing the relationship between digitalization and professional development by adopting an identity-based approach, Wallin finds that this link is influenced by the meaning of work and the perception individuals have of themselves, concluding that the gap between work and professional identity can be bridged by improving the level of professional training (Wallin et al., 2022). Although in exceptional cases the level of human factor involvement leads to an increase in skill levels in the context of accelerated digitalization, this relationship is not easily quantifiable (Dima et al., 2022).

III. RESEARCH METHODOLOGY

This study is based on an extensive analysis of global economic data sourced from Haver Analytics, national databases, Eurostat, OECD, and the European Central Bank (ECB). The research integrates macroeconomic indicators, trade statistics, inflation rates, and fiscal policies across various regions, with a focus on the impact of Russia's war in Ukraine on global economic dynamics.

The analysis involves a comprehensive review and synthesis of economic trends, trade dynamics, inflationary pressures, energy markets, and their interconnections. Various charts and figures sourced from reputable databases and calculations by relevant institutions underpin the empirical understanding and visual representation of the economic shifts observed during 2022. This comprehensive examination forms the basis for drawing conclusions regarding the multifaceted impacts of geopolitical conflicts on global economic stability, inflation, trade dynamics, and fiscal policy responses within the Euro area and beyond.

IV. RESEARCH RESULTS

Russia's war in Ukraine has affected global economic growth, increasing uncertainty and inflation. Global economic growth slowed to 3.4% in 2022 from 6.4% in 2021 as Russia's war in Ukraine and other geopolitical factors created uncertainty, inflation rose and financial conditions tightened. The deceleration was broad-based

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across developed and emerging market economies (Figure 1.a). This occurred after the strong recovery in 2021, mainly as a result of the easing of constraints imposed by the pandemic context and the subsequent rise in global demand. In early 2022, the war in Ukraine generated a new major shock to the global economy. It led to a significant increase and very high volatility in commodity prices and undermined food security, particularly in emerging market economies. Higher energy and food prices have amplified global inflationary pressures, reducing real household disposable incomes and prompting central banks to rapidly tighten monetary policy. Amid rising interest rates, falling stock prices and increased risk aversion, global financial conditions tightened significantly.

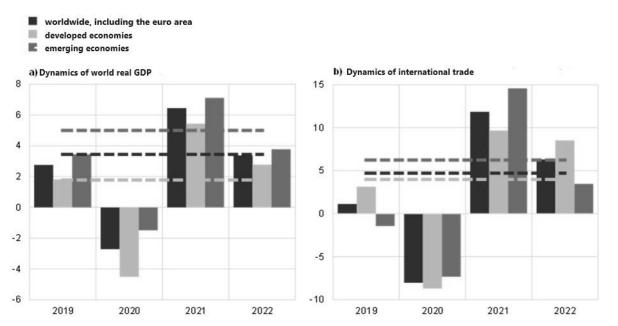


Figure 1a. World real GDP dynamics

Figure 1b. Trade dynamics international trade

Source: Haver Analytics, national data sources and ECB calculations.

(Note: Figure 1.a: Aggregate data are calculated using purchasing power parity adjusted GDP with weights. Columns indicate data. Dashed lines indicate long-term averages (between 1999 and 2022). The latest data refer to 2022 and have been updated on 18 April 2023. Figure 1.b: International trade dynamics is defined as the dynamics of global imports including the euro area. Columns show the dates. Dashed lines indicate long-term averages (between 1999 and 2022). The latest data refer to 2022 and have been updated on 18 April 2023).

International trade dynamics declined in 2022, although it remained above the historical average (Figure 1.b). This decline was mainly due to modest activity in manufacturing. In the first half of the year, international trade remained relatively resilient as the effects of the Russian-led war in Ukraine and persistent global supply bottlenecks were partly offset by the recovery in tourism and transport services amid the easing of restrictions imposed by the pandemic situation. However, in the second half of the year, trade slowed down significantly, reflecting in particular lower imports from emerging market economies. While integration into global value-added chains has stagnated since the global financial crisis, the pandemic and geopolitical developments have pushed firms to revert to domestic production and diversify their suppliers, which could lead to a fragmentation of global value-added chains in the future.

Headline inflationary pressures - reflected in both measures of headline inflation and measures of inflation excluding energy and food - increase significantly in 2022 (Figure 2). Inflationary pressures have been fueled by high and volatile commodity prices, global supply bottlenecks, protracted effects from the reopening of the economy following the pandemic, and tight conditions in labor markets. In countries belonging to the Organization for Economic Co-operation and Development (OECD), the overall inflation rate reached 10.7% in October, after which it started to fall. Inflation excluding energy and food reached 7.8% in the same month. In most countries, the significant increase in inflation in the first half of the year mainly reflected the rise in commodity prices. The rise in inflation excluding energy and food later in the year indicated that inflationary pressures have become increasingly generalized in both developed and emerging market economies. Core inflationary pressures were also fueled by rising wage pressures, as labor market conditions in the major developed economies remained tight despite the slowdown in global economic activity.

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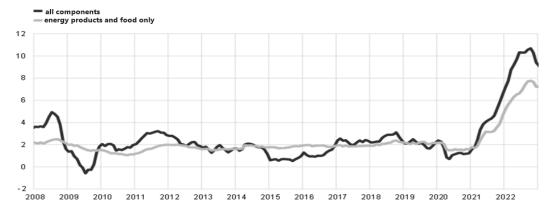


Figure 2. Inflation rates in OECD countries (annual percentage changes; monthly data) Source: OECD. Note: The latest data refer to December 2022 and were updated on 18 April 2023.

Energy prices rose sharply during 2022, but eased somewhat towards the end of the year. Oil prices increased by 6% due to supply chain bottlenecks, mainly as a result of Russia's invasion of Ukraine, leading to high oil prices in spring 2022. Supply-side bottlenecks were partly offset by falling demand amid slowing global growth and containment measures in China. Also, the invasion of Ukraine and reduced gas deliveries to Europe have led to unprecedented increases in gas prices on European markets, following the more than 240% year-on-year rise in gas prices in the immediate aftermath of the conflict. Overall, the sharp rise in gas prices has had a significant impact on energy product prices in Europe, fueling the rise in wholesale electricity prices. Gas prices have slowed down over the last quarter as increased imports of liquefied natural gas (LNG) and gas saving measures have led to high stock levels in the EU at the beginning of the cold season, with gas prices at the end of 2022 broadly similar to pre-invasion levels, but 14% higher than at the beginning of the year.

Russia's invasion of Ukraine in February was a turning point for Europe. The unjustified war had a significant impact on economic activity and inflation during 2022, including in the euro area, through higher energy and commodity prices, disruption of international trade and reduced confidence.

Financial stability conditions in the euro area deteriorated during 2022, reflecting high inflation levels, tighter financial conditions and the prospect of a slowdown in economic growth. Following Russia's invasion of Ukraine, commodity and energy prices have seen large increases, fueling inflationary pressures, along with disruptions in global supply chains.

In the Euro area, the real GDP grew by 3.5% in 2022, following a 5.3% advance in 2021 as the economy recovered from the pandemic recession (Figure 3). Economic growth in 2022 mainly reflected a solid contribution from domestic demand. At the end of the year, output in the Euro area was 2.4%, above the pre-pandemic level of Q4 2019. However, growth varied significantly across countries, reflecting different economic structures and the extent to which each country benefited from the reopening of the services sector and was affected by Russia's invasion of Ukraine. As the strong rebound in the first half of the year in demand for services involving long physical interaction subsequently lost momentum, the steep rise in energy prices began to dampen spending and output across the economy. The Euro area also felt the impact of weaker aggregate demand and tighter monetary policy in many major economies amid heightened economic uncertainty and declining business and household trust.

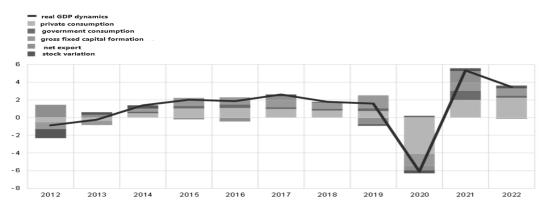


Figure 3. Real GDP (annual percentage changes; contributions expressed in percentage points) in the Euro area Source: Eurostat, 2023. Sustainable development in the European Union Monitoring report on progress towards the SDGs in an EU context 2023 edition Scoreboard. [online]

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Consumption growth was resilient in 2022 as labor income remained stable and savings supported pent-up demand (see Figure 4). The positive dynamics were mainly supported by consumption of services, which grew strongly as the restrictions imposed by the pandemic context were removed. However, private consumption dynamics slowed during the year, due to modest spending on current goods amid declining real disposable income dynamics and persistent uncertainty. Overall, household spending increased by 4.3% in 2022. With a strong increase in employment and a gradual acceleration in wage dynamics, labor income, generally used for consumption more than other sources of income, was the main factor contributing to the increase in disposable income in 2022. However, the advance in inflation increasingly dampened real disposable income towards the end of the year, fading the favorable effects of labor market resilience and fiscal support.

Non-construction investment dynamics - an indicator estimating private investment in non-residential targets - fluctuated strongly in 2022 (Figure 5).

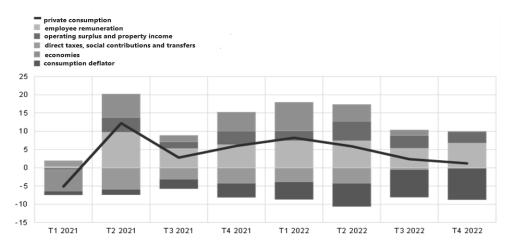


Figure 4. Real private consumption in the Euro area Source: Eurostat and ECB calculations. Note: Latest data refer to Q4 2022.

With the exception of the particularly volatile component of investment in Irish intangible assets, the momentum of investment in assets other than construction slowed throughout the year. It started the year strongly, boosted by high demand, significant corporate profits and favorable financing conditions in a context where the restrictions required by the pandemic situation have been lifted. However, Russia's war in Ukraine and the ensuing energy crisis, coupled with a reduction in monetary stimulus, have increased firms' energy and financing costs. In addition to the slowdown in domestic and global demand in an environment of high uncertainty, this has reduced companies' motivation to invest. By volume, investment in assets other than construction was at the end of 2022 well below the level recorded in Q4 2019, which had been boosted by a considerable increase in investment in intangible assets. With the exception of Irish intangible assets, these had already recovered by the end of 2020. Overall, investment in assets other than construction increased by 5.2% in 2022.

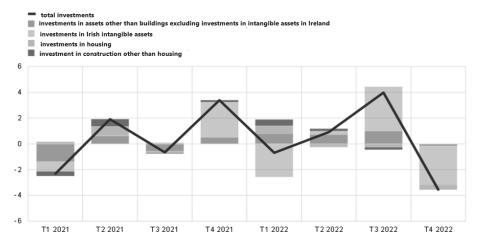


Figure 5. Real investment in the euro area (quarterly percentage changes; contributions expressed in percentage points)

Source: Eurostat and ECB calculations.

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Trade has been hit by rising energy costs, supply chain bottlenecks and falling global demand. The Euro area's goods trade balance moved into deficit in 2022, largely due to the higher cost of imports of energy products and modest export developments. On the import side, the robust expansion driven by energy storage and rising imports of intermediate goods was accompanied by a significant increase in prices, especially for energy imports. Exports of goods were held back by a re-intensification of supply chain bottlenecks in the first half of 2022. Thereafter, goods exports remained at modest levels as global demand weakened and supply chain problems only gradually improved. By contrast, exports of services, in particular tourism services, benefited from the relaxation and gradual removal of restrictions imposed in the context of the pandemic. Overall, the contribution of trade to GDP growth in the Euro area was broadly neutral in 2022.

The labor market remained generally resilient in 2022, continuing its significant recovery from the pandemic, alongside the revival of economic activity in the Euro area. In Q4 2022, the total number of persons employed and the total number of hours worked exceeded the levels recorded in Q4 2019 by 2.3% and 0.6% respectively (Figure 6). The labor market participation rate in the 15-74 age group increased to a level of 65.2% in Q4 2022, 0.5 percentage points above the level recorded in Q4 2019. In line with the increase in employment, the unemployment rate continued to fall, from an already historic low of 6.9% in January 2022, to 6.7% at the end of 2022 (Figure 7). Less use was made of job retention schemes, which had limited layoffs during the crisis, and people in these schemes largely resumed their normal working hours.

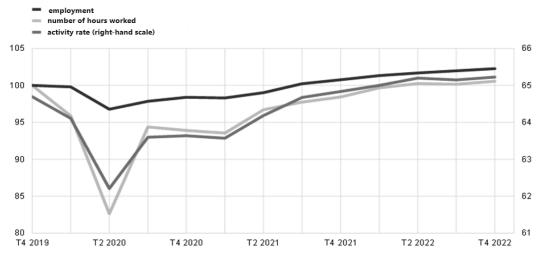


Figure 6. Employment rate, hours worked and labor market participation rate Source: Eurostat and ECB calculations

The Euro area labor market remained broadly resilient in 2022, despite Russia's war in Ukraine, as also indicated by continued high levels of job vacancies towards the end of the year. However, the labor market developments and survey indicators of labor demand have moderated in the second half of the year.

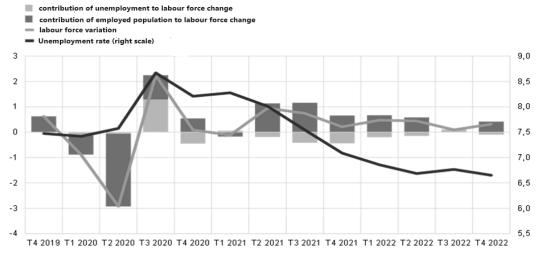


Figure 7. Unemployment and labor force Source: Eurostat and ECB calculations

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In 2022, Euro area governments faced, for the third year in a row, new challenges requiring reactive fiscal policies. The Euro area aggregate budget deficit as a share of GDP fell to 3.5% in 2022 from 5.1% in 2021 (Figure 8), as the supportive measures adopted in the context of the pandemic expired and were only partly offset by new support measures. The latter were aimed at counteracting energy price increases and their consequences, i.e. higher cost of living for the population and higher costs for companies. The measures also financed, to a lesser extent, the costs associated with Russia's war in Ukraine. These developments are reflected in the fiscal policy stance, which has tightened moderately in 2022 for the second consecutive year. However, as can be seen in the chart below, just over a third of the loosening of the fiscal policy stance in 2020 has been reversed so far.

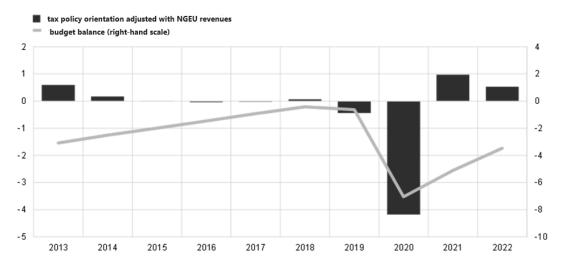


Figure 8. The general consolidated budget balance and fiscal policy stance in the euro area (% in GDP)

Source: Euro system staff macroeconomic projections for the Euro area, December 2022 and ECB calculations

Note: The measure of fiscal policy stance takes into account expenditure financed through the Recovery and Resilience Mechanism under the NGEU and other European Structural Funds.

V. CONCLUSIONS

Performance is important in any activity, and even more in business. The need for economic performance has become increasingly urgent in the context of the continuing development of the civilized world, particularly after the pandemic period. New demands are placed on the way economic operators approach, present and use the performance management system. There is a wide diversity of views on the concept of performance and its related concepts: productivity, efficiency, effectiveness and cost-effectiveness.

The evolution and the development of more and more complex activities accentuates the usefulness, the necessity of the profit and loss account in financial reporting by increasing the interest in the performance of the enterprise, especially the dynamic information that this can provide. Information on the performance of an enterprise, in particular its profitability, helps to assess potential changes in economic resources that the enterprise can control in the future. In addition, it is used to predict the ability of the enterprise to generate future cash flows with existing resources. The same information is useful in formulating and reasoning the efficiency of the enterprise to procure new resources. The result of the financial year, expressed in the profit and loss account, is commonly used as a measure of an enterprise's financial performance.

In the context of the 21st century business environment, accounting information combined with information technologies are closely related to business performance. This relationship is defined by the fact that the strategic decisions that will be taken later by the management of companies are directly affected by the accounting information obtained. The future of the business depends on these decisions, in other words, whether the company will reach a higher level of performance or go into decline. The concept of "performance" is interpreted differently by users of accounting information, depending on their interests. Thus, managers are interested in the rationale for decisions on overall performance, investors are mainly interested in the return on their investments, employees are interested in the stability and profitability of the company, and creditors are interested in the solvency and ability of the company to pay its debts on schedule. We can say that the measurement of a company's financial performance is based on the objectives of the information users, all of them finding the answers to their questions in the financial statements, i.e. in the balance sheet and income statement, which shows that the link between performance and accounting information is undeniable.

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REFERENCES

- 1. Boonmak, S. (2008). Strategically Involved: Accounting Information Systems Change The Way Businesses Compete. AAA IS Section Mid-Year Meeting. Chulalongkorn University.
- Dima, A. M., Busu, M., & Vargas, V. M. (2022). The mediating role of students' ability to adapt to online activities on the relationship between perceived university culture and academic performance, *Oeconomia Copernicana*, 13(4), 1253-1281. https://doi.org/10.24136/oc.2022.036.
- 3. Eurostat. (2023). Sustainable development in the European Union Monitoring report on progress towards the SDGs in an EU context 2023 edition Scoreboard. [online]
- Hung, B. Q., Nham, N. T. H., & Ha, L. T. (2023). The importance of digitalization in powering environmental innovation performance of European countries, *Journal of Innovation & Knowledge*, 8(1). https://doi.org/10.1016/j.jik.2022.100284.
- Kastelli, I., Dimas, P., Stamopoulos, D., & Tsakanikas, A. (2022). Linking Digital Capacity to Innovation Performance: the Mediating Role of Absorptive Capacity, *Journal of the Knowledge Economy*. https://doi.org/10.1007/s13132-022-01092-w
- 6. Marti, L., & Puertas, R. (2023). Analysis of European competitiveness based on its innovative capacity and digitalization level, *Technology in Society*, 72, 102206. https://doi.org/10.1016/j.techsoc.2023.102206.
- 7. Porter, M. E. (1990). The Competitive Advantage of Nations. Harvard Business Review. Retrieved April 10, 2023 from: https://hbr.org/1990/03/the-competitive-advantage-of-nation.
- 8. Robu, V., & Sandu, R. (2006). The problem of performance analysis a critical approach in the context of information theory and corporate governance. *Theoretical and Applied Economics Journal*, 8, 19.
- 9. Stankiewicz, R. (2009). The competitiveness of foreign trade and the principles of social economy the example of Poland, Ekonomia i Prawo, Uniwersytet Mikolaja Kopernika, 5(1), 117-132.
- 10. Sunil, M., & Rust, T. R. (2016). How information technology strategy and investments influence firm performance: Conjecture and empirical evidence, *Mis Quarterly*, 40(1), 223.
- Tajudeen, F. P., Nadarajah, D., Jaafar, N. I., & Sulaiman, A. (2022). The impact of digitalisation vision and information technology on organisations' innovation, *European Journal of Innovation Management*, 25(2), 607-629. https://doi.org/10.1108/EJIM-10-2020-0423.
- 12. Tay, J., Goh, Y. M., Safiena, S., & Bound, H. (2022). Designing digital game-based learning for professional upskilling: A systematic literature review, *Computers & Education*, 184. https://doi.org/10.1016/j.compedu.2022.104518.
- 13. Tortora, D., Chierici, R., Farina Briamonte, M., & Tiscini, R. (2021). 'I digitize so I exist'. Searching for critical capabilities affecting firms' digital innovation, *Journal of Business Research*, 129, 193-204. https://doi.org/10.1016/j.jbusres.2021.02.048.
- 14. Usai, A., Fiano, F., Messeni Petruzzelli, A., Paoloni, P., Farina Briamonte, M., & Orlando, B. (2021). Unveiling the impact of the adoption of digital technologies on firms' innovation performance, *Journal of Business Research*, 133, 327-336. https://doi.org/10.1016/j.jbusres.2021.04.035.
- 15. Vial, G. (2019). Understanding digital transformation: A review and a research agenda, *The Journal of Strategic Information Systems*, 28(2), 118-144. https://doi.org/10.1016/j.jsis.2019.01.003.
- Wallin, A., Nokelainen, P., & Kira, M. (2022). From Thriving Developers to Stagnant SelfDoubters: An Identity-Centered Approach to Exploring the Relationship Between Digitalization and Professional Development, *Vocations and Learning*, 15(2), 285-316. https://doi.org/10.1007/s12186-022-09288-6.