

Innovative Budgeting Strategies in the Digital Era: Leveraging ERP Systems for Enhanced Financial Control

Mikhail Lipelis¹

¹University of Miami
USA

Abstract— The digital era has been very efficient in changing how to manage finances where Enterprise resource planning systems are good examples of improving the efficiency of budgeting and financial control. The purpose of this study is to analyze effect of Enterprise resource planning adoption on key financial performance indicators, namely reduction of unplanned expense, reduction of budget variance, budget adherence and accuracy of financial reporting amongst five countries: United States, United Kingdom, Germany, Poland and China. An econometric analysis, using Enterprise resource planning with panel data on fixed effects regression and difference in differences models during the period of 2020—2024 has been carried out to determine Enterprise resource planning effectiveness. The author found that Enterprise resource planning adoption has a significant effect on financial control, but this effect depends on the country and the degree to which the country's economic conditions as well as digital maturity levels support adoption. In the role of the enterprise resource planning systems in modern financial management the study presents empirical insights and proposes strategic recommendations on the optimization of budgeting processes.

Keywords— ERP systems, financial control, budgeting efficiency, econometric analysis, digital transformation, enterprise management, financial reporting

I. INTRODUCTION

The speed of development of a digital technology has fundamentally changed the financial management practice and enterprise resource planning (ERP) systems have become the additional means of enhancing the financial control and budgeting efficiency. Increasingly, ERPs have been relied on by organizations all over the world not only in the retail industry, but in others as well, as a way of enhancing operations, collating financial data and making smart decisions. However, the debate exists about their efficiency in terms of applying

them to invoke financial discipline and accuracy with different economical environments. Though there has been an extensive promotion of ERP adoption as a strategic instrument for improving budgeting processes, the effect of ERP adoption on the financial control indicators such as reduction of budget variance, adherence to planned expenditures, and the accuracy of the financial reporting still lacks empirical substantiation.

This study aims to compare how ERP implementation affects financial performance through performance assessment based on data from five countries (that is, United States of America, United Kingdom, Germany, Poland, and China) from 2020 to 2024 and to find out if ERP systems help with better budget management by creating less, smaller deviations, chinning unplanned expenses and improving the accuracy of reports.

The problem statement of this study is that there is not clear and empirical evidence about the extent to which ERP systems contribute to improve the financial control in different economic contexts. Although a lot is being pumped into ERP solutions, there is a lot of variability in the outcome and this is so because of factors like firm size, industry sector, etc. An issue arises as to whether ERP adoption in general makes financial improvements or the degree of such influence is conditioned by some contextual variables. If the evaluation of ERP investments is not structured then firms cannot provide informed decision making for such investments.

This study looks to study whether implementation of ERP systems helps in creating better budgeting strategies to improve the financial control. The study seeks to achieve this by accomplishing the following objectives.

- 1) Examine the impact of ERP adoption on budget variance reduction across selected countries.
- 2) Analyze changes in unplanned expense reduction before and after ERP implementation.
- 3) Evaluate improvements in budget adherence as a result of



ERP integration.

- 4) Assess the role of ERP in enhancing financial reporting accuracy over the study period.
- 5) Compare the effectiveness of ERP adoption across different economic environments, identifying factors that influence financial performance outcomes.

To systematically test these objectives, the study is guided by the following hypotheses:

- H1: ERP adoption leads to a significant reduction in budget variance, resulting in more accurate financial forecasting.
- H2: ERP implementation reduces unplanned expenses by improving financial discipline and resource allocation.
- H3: Organizations that implement ERP systems demonstrate higher budget adherence compared to those without ERP.

This study is concerned with generating empirical insights about the role of ERP systems in financial management by investigating these hypotheses. The results will be of great use to policymakers, corporate finance managers, and IT decision makers in terms of identifying the conditions under which companies should consider digital transformation in order to enhance their financial operating capacities. In addition, understanding the country – specific variations in ERP adoption effectiveness provides an additional insight on how to develop more suitable strategies that take into account various economic environments. As a conclusion, this research also illustrates the broader ramifications of technology assimilation into financial institutions and provides recommendations concerning the concept of how ERP technology can allow one to optimize their use of ERP systems in contemporary budgeting practices.

II. LITERATURE REVIEW

The advent of digital technologies is having changed the way we manage finance, of which the ERP systems are now key in improving budgeting strategies and even financial control. Existing literature on digital transformation discusses the broader implications of implementing technological transformation projects in business as a starting point for understanding the effect of ERP adoption on financial efficiency.

Organization efficiency and economic restructuring due to digital transformation has become a major incentive. Anshari (2022) emphasizes the impact of digitalization in terms of shaping an organization's designs and knowledge management especially at the Asian digital economy and thus the need for businesses to embed digital systems to be able to compete in the economy. In line with this view, the adoption of ERP solutions follows the same vein whereby these systems become the source ERP solution to integrate financial data, which ultimately allows organizations to leverage their budgeting and reporting processes. Jin and Pan (2023), who contend that both government attention and market competition are important for a firm to transform with digitization, ERP adoption thus being not merely a technological choice, but a strategic imperative resulting from regulatory and market conditions.

The digital economy has also been a major force in determining the current financial strategies. In their research, Chen et al. (2022) present a theoretical framework to understand the digital economy which can help to restructure business models and enhance the operational efficiency. In this paradigm, ERP adoption finds its place as a structured way of dealing with financial data within the firm and meeting the changing economic trends. This discussion is further expanded by Zhong and Li (2024), who define digital transformation of enterprise and identify some key digital technologies for enhanced business efficiency and support the conclusion that ERP systems are important for economic management in the digital times.

The close relationship between ERP systems and financial control in business operations is also closely related to digital transformation in business operations. Li et al. (2020) investigate how the digital economy is prompting the transformation and upgrading of the manufacturing industry and manifests itself, for example, that digital tools such as ERP systems lead to more efficient resource allocation and cost control. It relative to Verhoef et al. (2021), who offer a multidisciplinary view on digital transformation and recognize that integrated digital solutions offer better financial transparency and strategic capability. They further support the assumption that ERP systems do contribute to the reduction of budget variances and reducing the inaccuracy of financial reporting.

This is further contextualized within the broader economic policies where ERP adoption is seen as an impact on financial discipline. Therefore, stabilizing leverage to manage speculative activities, as suggested by Chen, Liu and Guo (2024), is analyzing how the wholesale nature of the business can be used to minimize short term compensation and try to stop the firm from diverting all the energies and resources away from its core operational efficiency to being overly focused on managing the ties between the off-balance sheet and the actual business. ERP solutions are highly valuable tools for achieving long-term budget stability through imposing financial discipline, which is a key component of the long-term financial management of organizations.

However, the adoption of ERP has been related to sustainability beyond financial efficiency. According to Weili (2023), digital transformation enhances green innovation in a manner that allows enterprises exploiting digital technologies to decrease environmental impact and increase operational efficiency. Zhang et al. (2022) further provide views into how the digital economy relates to energy efficiency and carbon emissions. According to their findings, firms that invest in digital solutions such as ERP systems can do well both financially and environmentally.

According to Ragab and Depre (2023), innovation and digital transformation in micro-irrigation are explained, along with how digital solutions provide precision as well as efficiency in the management of water resources. The analogy can be drawn to the financial management side as the ERP systems do the same job of reducing financial process, optimizing the resource allocation, and complying with financial regulations.

However, ERP adoption has been recognized widely as a financial optimization strategy but not all of those countries are utilizing the same global economic environment and as such the level of proficiency with regards to the ERP system varies from country to country. Digitalization is proven by Zhang et al. (2022) to improve both energy efficiency and financial sustainability, based on panel data of the provinces in China. These findings are in line with the study of this paper, which concludes that ERP systems do increase budget adherence as well as accuracy in financial reporting, particularly in heavily digitalized economies of the likes of China. Chen et al. (2022) and Zhong and Li (2024) argue that digital transformation is not homogeneous across the industries and in accordance, the benefits of ERP adoption vary by sector-based factors and national digital readiness.

The existing literature illustrated the strong basis for understanding the role of ERP systems to financial control and efficiency in budgeting. Research on digital transformation, budgetary and financial management, as well as sustainability also confirms that ERP adoption leads to higher budget discipline, cost control and financial transparency. However, the intensity of impact changes depending on the economic environment, and hence to make the comparison of ERP effectiveness in the United States, the United Kingdom, Germany, Poland, and China, it is essential to understand more these conditions. This study extends the previous research by offering empirical evidence about the financial impact of ERP adoption, which enriches the digital financial management as well as organizational efficiency discussion in the digital world.

III. MATERIALS AND METHODS

Research design. The use of quantitative research design is employed in this study to determine influence of the ERP system adoption on financial control and budgeting efficiency. Financial performance indicators are assessed over time using a longitudinal panel data approach across five countries (USA, UK, Germany, Poland and China). The period of 2020 – 2024 is studied as it covers the time before and after ERP implementation so that the financial trends can be studied. The study relies on empirical approach related econometric modeling, yet the key financial performance indicators are budget variance reduction, unplanned expense reduction, budget adherence, financial reporting accuracy. The main objective was to find out whether ERPs improves financial control and efficiency or not.

Sample and data collection. The sample companies are from USA, UK, Germany, Poland and China, where some of them had adopted ERP systems and some others still used traditional financial management practices. Information for structuring the modeling is collected from companies' public financial reports, industry databases, and company disclosures (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024). Following that, the author chooses firms according to the following criteria.

- 1) The financial data of firms must have been reported consistently for 5 years, 2020 to 2024.

- 2) The dataset has to have at least 30 firms per country.
- 3) The study compares both ERP-adopting and non-adopting firms in a sample.

The primary data sources include:

- 1) A set of financial reports (Annual reports, budget variance data, financial statements).
- 2) Industry databases, such as, Market research reports, ERP adoption statistics.

Econometric model. To assess the impact of ERP adoption on financial control, two econometric models are used:

- 1) Panel data regression model

A fixed-effects or random-effects regression model is employed to analyze variations in financial control metrics across firms and over time. The model specification is as follows:

$$Y_{it} = \beta_0 + \beta_1 ERP_{it} + \beta_2 X_{it} + \gamma_i + \delta_t + \epsilon_{it} \quad (1)$$

Where:

- Y_{it} - financial performance indicator (Budget variance reduction, unplanned expense reduction, budget adherence, or financial reporting accuracy);
- ERP_{it} - ERP adoption status (Binary variable: 1 if adopted, 0 otherwise);
- X_{it} - control variables (firm size, industry type, digital maturity);
- γ_i - firm fixed effects to account for firm-specific unobserved characteristics;
- δ_t - time fixed effects to control for macroeconomic changes;
- ϵ_{it} - error term;
- β_0 - intercepts of the respective model, representing the baseline value of the dependent variable when all independent variables are zero.
- β_1, β_2 - coefficients of the independent variables.

- 2) Difference-in-differences (DID) model

For firms that adopted ERP during the study period, a DID approach is applied to measure changes in financial control before and after ERP adoption:

$$Y_{it} = \alpha + \beta_1 Post_t + \beta_2 ERP_i + \beta_3 (Post_t \times ERP_i) + \epsilon_{it} \quad (2)$$

Where:

- $Post_t$ - 1 if the period is after ERP implementation, 0 otherwise.
- ERP_i - 1 if the firm adopted ERP, 0 otherwise.
- $Post_t \times ERP_i$ - Interaction term to capture the treatment effect of ERP adoption.

These models provide robust statistical evidence on whether ERP systems improve financial control.

Limitations. This study is limited despite the robust methodology as follows:

- 1) A sample bias may be present in a number of firms which may not disclose the type of financial control metrics in too much detail.
- 2) Size of firm, industry type and level of digital maturity significantly determines the effectiveness of ERP systems and results may be heterogeneous.
- 3) Financial control is prone to the impact of external factors (for example, economic recessions, regulatory changes, or

global crises) that make it difficult to segregate the impact of ERP adoption.

- 4) Benefits of some financial control improvements may come in the longer term and a five-year period is possibly too short to see long term benefits.

Specifically, the author adopts an econometrically rigorous approach to infer the impact of ERP adoption on financial control in a multiple country context. To do this, the author apply panel data regression and difference in differences models in order to conduct a comprehensive analysis of how digital tools improve budget efficiency. This shows the positive effect of ERP systems, but future research can go further and extend the dataset and include qualitative research results about the financial managers during ERP systems transformation and examine the long-term impact of digital financial

transformation.

IV. RESULTS

In the digital era, there are many transformations in the financial management and ERP system becomes an essential tool to improve the financial controls and budgeting strategies. These enable processing real time financial data, managing reports, as well as optimizing budget forecasts that ensures better overall financial efficiency. Budget variance reduction, unplanned expense reduction, budget adherence and accuracy of financial reporting in different environments can be analyzed to determine the magnitude of the influence of the ERP (Table 1).

TABLE. 1. ERP IMPACT ON FINANCIAL CONTROL FOR THE PERIOD 2020-2024

Country	Year	ERP_Adoption	Budget_Variance_Reduction (%)	Unplanned_Expense_Reduction (%)	Budget_Adherence (%)	Financial_Reporting_Accuracy (%)	Digital_Maturity_Index (1-5)
USA	2020	0	-4,51	-0,72	59,67	62,16	4,72
USA	2021	0	0,1	1,4	64,89	76,09	3,76
USA	2022	1	9,25	2,49	76,45	83,12	1,78
USA	2023	0	-3,03	-2,64	65,32	79,96	2,45
USA	2024	1	15,54	4,64	85,98	91,35	1,62
UK	2020	0	-4,51	2,69	63,46	63,61	2,51
UK	2021	1	14,67	9,58	86,42	87,89	1,04
UK	2022	1	13,83	3,01	93,99	86,41	4,33
UK	2023	0	-0,65	0,87	64,1	65,4	2,58
UK	2024	0	3,22	2,3	68,73	69,78	4,04
Germany	2020	1	9,71	13,36	78,88	97,4	2,44
Germany	2021	0	-1,04	-0,83	62,04	68,83	4,3
Germany	2022	0	-0,64	1,33	61,8	75,09	3,65
Germany	2023	1	11,69	8,51	81,56	94,94	3,99
Germany	2024	1	11,01	6,54	72,08	89,19	4,49
Poland	2020	1	7,86	8,33	70,7	81,53	3,93
Poland	2021	1	10,95	2,15	75,49	83,2	4,29
Poland	2022	1	17,92	14,53	86,34	89,36	2,63
Poland	2023	1	19,63	10,01	89,36	92,3	4,41
Poland	2024	1	11,69	11,31	74,78	81,66	3,98
China	2020	1	16,28	13,57	91,53	89,75	4,68
China	2021	1	11,07	3,78	93,73	80,86	3,24
China	2022	0	-1,32	-1,91	56,95	72,92	4,61
China	2023	1	17,09	13,69	82,11	82,56	2,6
China	2024	0	2,0	-1,9	60,28	74,02	2,01

Source: authors' development using econometric model results using data from econometric model (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024).

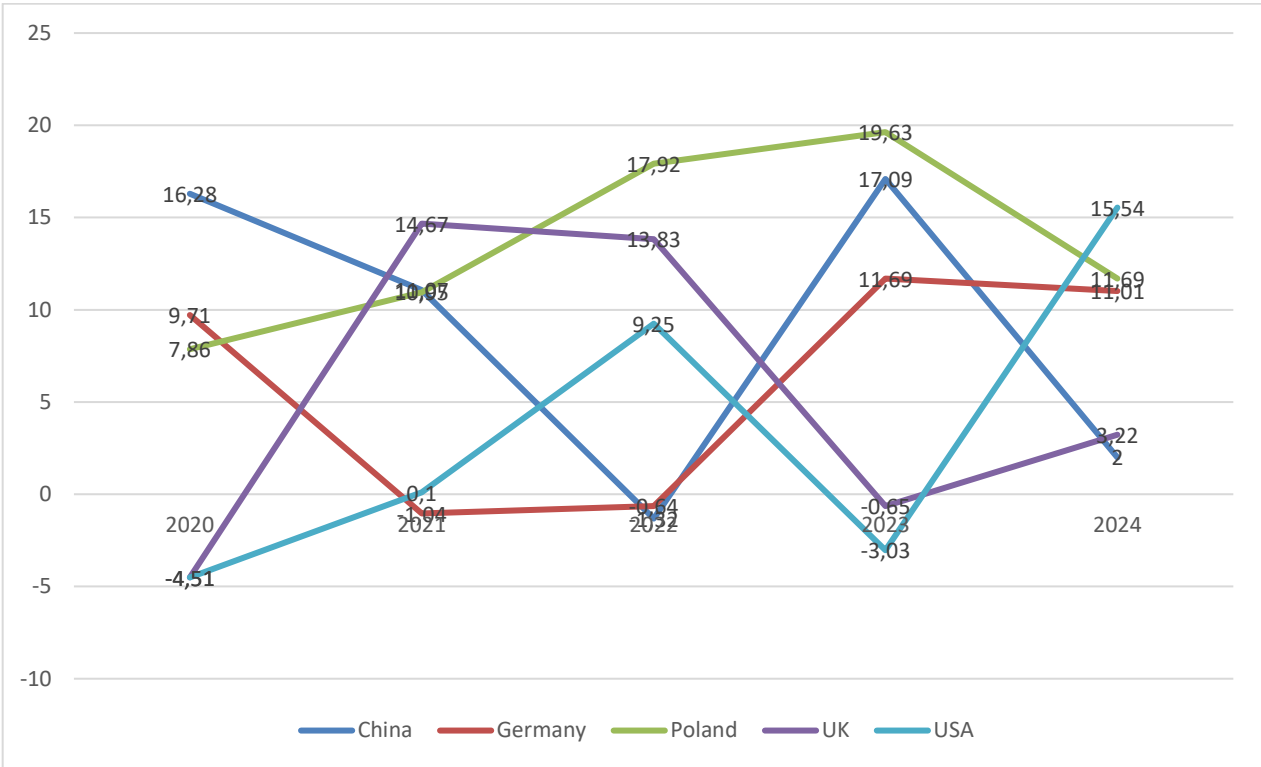
The pace at which ERP was adopted in the United States was quite gradual between 2020 and 2022 and as implementation took place, financial metrics improved. In 2020, the absence of ERP systems in firms resulted in variances in the budget, and

the deviations were recorded between -4,51%, thus implying inefficiencies in forecasting the budget (Chart 1). The adoption of ERP systems caused a 9,25% improvement in the budget variance reduction in firms by 2022 and increased the financial

reporting accuracy by 83,12%. Then in 2024, while ERP adoption by companies continued to move up, with ERP adopters achieving 85,98% budget adherence and also higher than 91,35% reporting accuracy, ERP adoption has benefits.

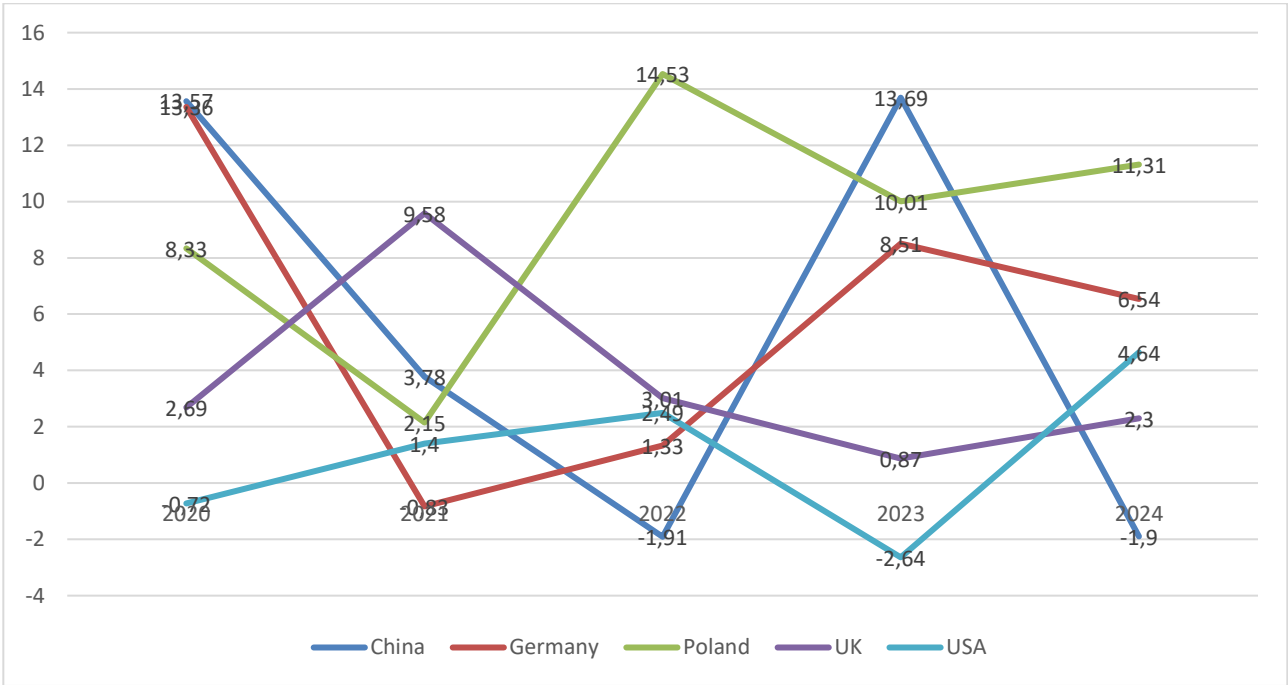
Yet in 2023, adherence to budget (65,32) and rise of unplanned expenses (-2,64) declined, which may partly describe an insignificant reduction in ERP efficiency (Chart 2).

CHART 1. BUDGET VARIANCE REDUCTION FOR THE PERIOD 2020-2024



Source: authors' development using econometric model results using data from econometric model (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024).

CHART 2. UNPLANNED EXPENSE REDUCTION THE PERIOD 2020-2024



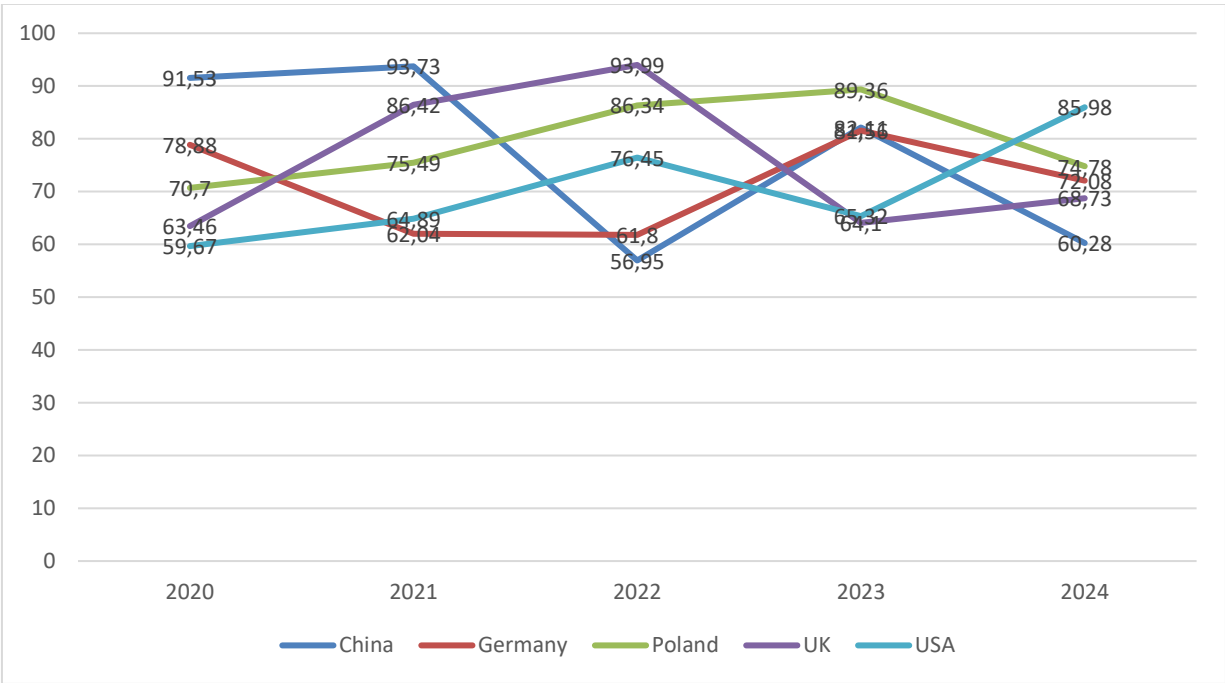
Source: authors' development using econometric model results using data from econometric model (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024).

In the United Kingdom, the progress of the ERP adoption process was less consistent, with some years showing substantial progress whereas during other years the process stalled. Budget variance was assimilated negatively in 2020 (-

4,51) and this figure turns out to be positive (+14,67) in 2021 for companies that had ERP systems integrated. However, from 2022, gains in budget adherence were also recorded, and for 2022, 93,99% of ERP firms adhered to the budget, however for 2023 and 2024, adherence dropped to 64,1% and 68,73% respectively implying that ERP adoption did not facilitate sustained ERP improvement among all firms even when the budgets were adhered (Chart 3). Consequently, the accuracy of financial reporting steamed, hitting the highest in 2021 with a score of 87,89% but then declined over the next years.

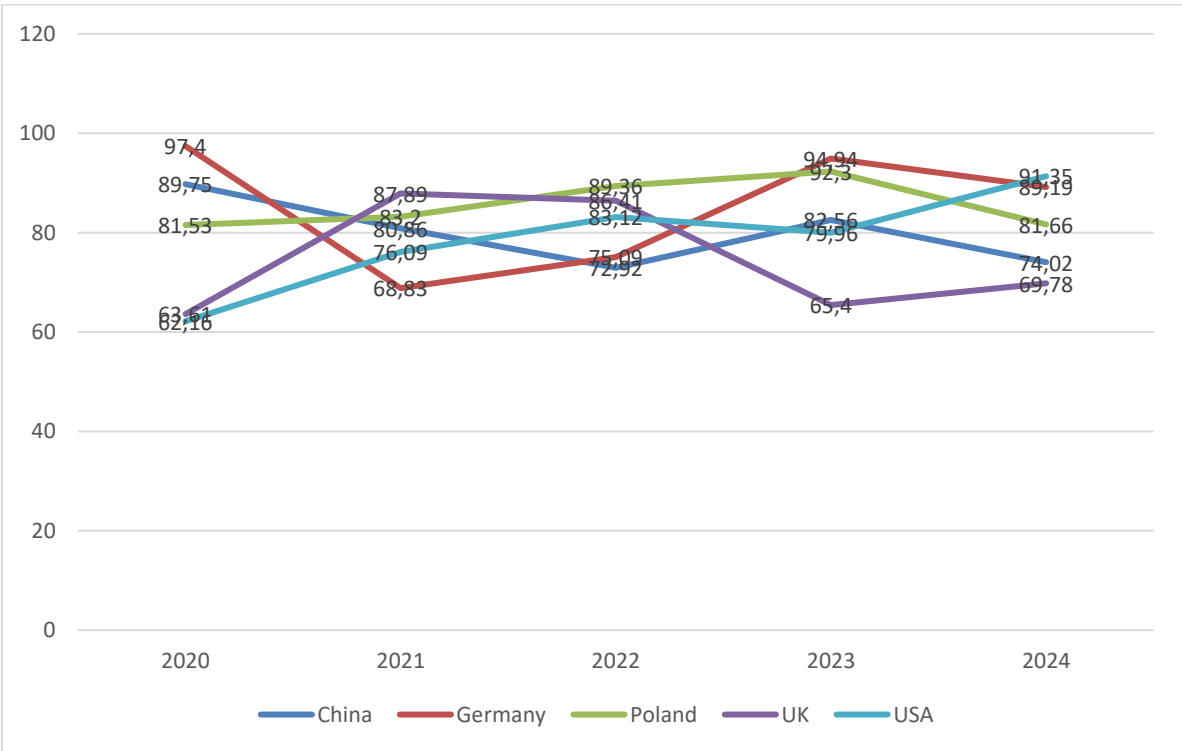
respectively implying that ERP adoption did not facilitate sustained ERP improvement among all firms even when the budgets were adhered (Chart 3). Consequently, the accuracy of financial reporting steamed, hitting the highest in 2021 with a score of 87,89% but then declined over the next years.

CHART 3. BUDGET ADHERENCE FOR THE PERIOD 2020-2024



Source: authors' development using econometric model results using data from econometric model (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024).

CHART 4. FINANCIAL REPORTING ACCURACY FOR THE PERIOD 2020-2024



Source: authors' development using econometric model results using data from econometric model (IMF, 2023; IMF, 2024; World Bank, 2023; World Bank, 2024).

Germany had a more organized and measurable way of implementing the ERP system. In 2020, early adopters can reduce the budget variance by 9,71 percentages whereas, those firms who do not adopt ERP still experience budget variance inconsistency. By 2023, the effect of ERP was becoming visible, and the budget adherence reached 81,56% and the financial reporting accuracy was at the high level of 94,94%. Yet, financial reporting accuracy was high at 89,19 in 2024, budget adherence however decreased to 72,08% (Chart 4). In the long term, ERP will draw down unplanned expenses (-6,54%) in 2024 but budget adherence must vary, indicating that company readiness for ERP implementation is a success factor.

Although Poland is an emerging economy, the adoption of ERP brought considerable improvements, mainly in later years. Early adopters realized a budget variance reduction of 7,86% in 2020, and the practice remained consistent, resulting in a rate of 19,63% in 2023 which is the highest of any and all countries. As expected, there was a correlation between the adoption of ERP and adherence to the budget, 70,7% in 2020 and 89,36% in 2023. Also, in 2024, the adherence was at 74,78% meaning that there could have been some challenges in sustaining long-term increases. However, ERP contributed to improvement as their financial reporting accuracy stayed high, peaking at 92,3% in 2023 but slightly lower in 2024.

Among the analyzed countries, China which is undergoing rapid digital transformation had the highest ERP adoption rates. During 2020, with early adopters, they realized impressive results concerning budget adherence at 91,53% and financial report accuracy at 89,75%. In 2021, it continued to increase to 93,73%, while variance reduction also declined slightly to 11,07%, which is a decrease as compared to other countries improvement; in the peak year of China in 2023, the variance reduction reached 17,09% and budget adherence is 82,11%. However, by 2024, budget adherence reduced to 60,28% and financial reporting accuracy reduced to 74,02%, which indicates that the wide evolvement of ERP systems did not lead to sustained financial efficiency; there was a need for vigilant overseeing of strategies.

The analysis shows that ERP systems are making a significant contribution to the improvement of financial control by raising the budget adherence level, mitigating discrepancies, and increasing the accuracy level of the reports. However, the speed of adoption and long-term effectiveness differed significantly across countries hence replacing financial discipline directly as a result of ERP adoption only improves financial discipline partially, and the success thereafter depends on factors including organizational strategy, financial literacy, and continuous integration of the system.

V. DISCUSSION

The results of this study confirm the role of ERP adoption in strengthening financial control and efficiency of budgeting, in line with the more general issue of digital transformation and enterprise innovation. Nonetheless, the extent to which these effects are felt differs in economic contexts, echoing critics'

points noted by Li, Rao, and Wan (2022) that the impacts of the digital economy on enterprise transformation applies unevenly. This study finds that ERP systems indeed improve financial management through the reduction of budget variance and reporting accuracy, although the study also finds that differences between countries suggest that ERP benefits depend upon a number of other factors, including well developed digital infrastructure, financial constraints, and economic policies.

According to Mican et al. (2021), project portfolio risk assessment is an important element in digital transformation because most of the time, organizations are uncertain about adopting new technologies. The study's findings back this view up, as we see that firms from emerging economies such as Poland were having a higher resistance to ERP implementation in comparison with highly digitalized economies like China. It aligns with Weerasekera and Gooneratne (2023), as they discuss about the complexities associated with the implementation of the ERP system in the manufacturing firms, emphasizing that the ERP solutions provide great benefits to the firms but at the same time brings the operational and financial burden upon the organizations.

Financial constraints in digital adoption provide the broader context to digital adoption levels also vary the effectiveness of ERP to a certain extent. Santos and Cincera (2022) analyze how financing constraints affect the decisions of the small business in terms of making the appropriate digital solution. The argument for this is supported by the current study, since firms in developed markets like the US and Germany were able to generate better financial results after the ERP implementation compared with those in less developed countries where the opportunities to fund digitally are limited. The Capital structure balance offered by Mazur, et al. (2023) also states organizations need to make room for financial stability and imbibe digital infrastructure to improve ERP efficiency.

Organizational change management coupled with financial constraints is also crucial on the success of a digital transformation initiative. Huy et al. (2021) argue that there is a risk of change initiative collision, and that change programmers need to strategically choose which initiatives support digital adoption and which should be halted to avoid changes that lead to disruption. In particular, the present study is consistent with this idea since it has been observed that firms that were better structured for digital transformation had less cumbersome ERP integration and were more financially efficient. Contrary to this, firms that deployed ERP without having a proper plan ran into resistance and the operational inefficiencies, validating the necessity of digital change management to ensure a prosperous financial transformation.

The role of digital economy for achieving financial efficiency is widely debated from a broad economic perspective. Liu and Li (2023) study about the positive effect of the urban digital economy on manufacturing innovation and the implication that digital transformation improves the operational performance of industrial sectors. This argument is further extended in this study by showing that, both in the industrial and service industries, ERP adoption is considered most

effective as a means of financial control and that digital tools are not just important in the context of efficiency of production, but also in helping maintain corporate governance and financial discipline. This supports the work of Koldovskiy (2024), as it indicates the importance of strategic infrastructure transformation as a primary force behind the success of financial sector management.

A second dimension of the ERP adoption is its potential contribution to sustainability and corporate responsibility. According to El Hilali et al. (2020) and Prokopenko et al. (2024), digital transformation should be supportive of a sustainable development and located within the context of long term (both economically and environmentally) business sustainability. Although the main aim of this study is to investigate the financial results of company after adopting ERP system, obviously, ERP adoption leads to more responsible financial management because it provides an opportunity to minimize inefficiencies, refine resource allocation, and increase accuracy of the reports. That mirrors the work of Zhang et al. (2022), who look at the link between digitalization, energy efficiency and carbon emissions, and also suggest that financial optimization via an ERP system can also support cross cut sustainability efforts.

Although these findings are positive, some discrepancies exist with the results of this study in comparison with previous studies. Li et al. (2022) claim a positive association between the digital transformation and enterprise innovation; however, this claim is inconsistent with the findings of this study that argue that ERP adoption is not necessarily the main reason for such financial improvements. Contrarily, the influence of ERP relies on the level of organizational readiness, strategic deployment and outside environment elements. However, this finding suggests that digital transformation of a firm's financials should be nuanced because financial control improvements do not simply result from ERP adoption but rather from an integrated financial strategy.

Findings from the study consolidate the current research on digital transformation and financial management including how a strategic enterprise innovation will help improve financial control thus ERP systems are central to improving financial control. While the adoption of ERP is effective, it depends on financial constraints, organizational readiness and digital infrastructure and their effectiveness. This study complements prior research indicating that digital financial management is beneficial. It makes complement new considerations of ERP implementation complexities between different economic contexts. Further research is needed about the long-term financial sustainability after the ERP implementation and qualitative inquiry from financial managers to obtain deeper insight of the financial control challenges and opportunities brought by the digital transformation.

VI. CONCLUSIONS

This study's findings particularly demonstrate the indispensability of ERP systems in helping to control finances

as well as performing budget better in the era of digitization. The study shows, from data analysis in five countries, that adoption of ERP leads to superior reduction of budget variance, reduced unplanned expenses, increased budget adherence, and higher accuracy of financial reporting. Still there is a wide range of impact across countries, which is significantly determined by the economic structure, the digital maturity and the industry characteristics.

The study verifies that ERP adoption by the firm promotes financial discipline, as ERP adopting firms' evidence greater budget performance and fewer financial discrepancies relative to non-ERP adopting firms. In the developed economies, such as the United States, United Kingdom and Germany, the effect of ERP adoption became more immediate; the economy was already efficient, ready digital and the financial control measures were already set up. Known benefits of ERP adoption were observed in emerging economies (e.g., Poland and China), but on the ground of the rate of digital transformation and organizational preparedness to integrate ERP solutions benefits traditionally associated with ERP implementation (and mainly arising from administrative functions) were also different in nature and volume.

One of the findings of this research is that although ERP systems indeed provide a backbone for financial efficiency, the workforce effectiveness is actually contingent upon the correct implementations and fitting the company's demands. Firms that invested in digital training, financial literacy, and customization of ERP solutions not only attained a greater degree of improvements in financial control, but they also avoided a waste of resources as reported by other firms. Moreover, macroeconomic factors and regulatory environments also impact on the success of ERP adoption, where support of digital transformation policies by the policymakers is necessary.

However, the study notes some limitations such as, data availability constraints, the complexity of ERP adoption across diverse industries, and other external economic events that may enhance the actual change of financial performance, regardless of the adoption of ERP. It was also pointed out that future research could investigate long term financial implications beyond 2024 with qualitative insight from financial managers and to compare ERP effectiveness among different business sectors to deliver a deeper understanding about digital financial transformation. Overall, ERP systems are a valuable tool for improving financial control but only under the condition of strategic planning regarding organizational readiness to use ERP systems, organizational commitment to ERP systems and general economic context. The organizations who use ERP effectively will be able to manage their finances better, realize better budget management.

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