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# **Resilience and Rebound: A Financial Analysis of Czech's Big Four Accounting Firms Post-COVID-19 Recovery**

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# Resilience and Rebound: A Financial Analysis of Czech's Big Four Accounting Firms Post-COVID-19 Recovery

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## Abstract

In this comprehensive empirical analysis spanning 2020 to 2022, our study rigorously examines the financial performance of Czech's prominent Big Four accounting firms—Deloitte, PricewaterhouseCoopers (PwC), Ernst & Young (EY), and KPMG—following the multifaceted challenges posed by the COVID-19 pandemic. Focusing on critical profitability ratios, including Net Profit Margin, Return on Assets, and Earnings After Tax Margin, this research is dedicated to identifying the accounting firm that staged the most remarkable comeback during this tumultuous period. The findings unequivocally position KPMG as the standout performer, exemplifying unparalleled financial resurgence. KPMG's capacity to adapt and thrive in the post-pandemic landscape is particularly noteworthy. PwC consistently exhibits financial strength, maintaining a resilient performance throughout the study period, while Deloitte and EY demonstrate stability in their financial metrics. This empirical analysis underscores the dynamic nature of the accounting industry, emphasizing the pivotal role of adaptability and resilience in the face of unprecedented challenges. The insights gleaned from this study provide valuable guidance for stakeholders in the accounting profession, shedding light on strategies and practices conducive to post-pandemic recovery and financial resilience. The exceptional performance of KPMG stands as a compelling case study in navigating the evolving economic landscape.

**Keywords:** Financial Performance, Accounting Firms, COVID-19 Pandemic, Profitability Ratios, Comeback Analysis

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## Introduction

The global accounting industry, often regarded as the backbone of financial transparency and accountability, faced unprecedented challenges in the wake of the COVID-19 pandemic (Khan, 2020). Accounting firms, including the prestigious Big Four—Deloitte, PricewaterhouseCoopers (PwC), Ernst & Young (EY), and KPMG—were not immune to the

profound economic disruptions and uncertainties triggered by the pandemic (Christensen et al., 2021; DeFond et al., 2020). As the pandemic unfolded, accounting firms grappled with a rapidly evolving landscape characterized by remote working arrangements, changing client needs, and heightened regulatory scrutiny (Bui et al., 2020; ICAEW, 2020). In Czech, the Big Four accounting firms found themselves at the forefront of these challenges, navigating the complexities of a post-pandemic world while striving to maintain financial resilience.

This research endeavors to shed light on a critical aspect of the accounting landscape—the financial performance and comeback of the Big Four accounting firms in Czech—across the pivotal years of 2020, 2021, and 2022. These years were marked by a rollercoaster of economic events, from the initial shock of the pandemic in 2020 to the tentative steps toward recovery in subsequent years (IMF, 2020; OECD, 2021). The aim of this study is to analyze and compare a set of essential profitability ratios for Deloitte, PwC, EY, and KPMG in Czech during this period, in order to identify which firm demonstrated the most remarkable financial comeback.

## Background

The Big Four accounting firms, collectively referred to as Deloitte, PwC, EY, and KPMG, are renowned globally for their comprehensive suite of audit, tax, advisory, and consulting services (McGowan, 2019; PwC, 2021). These firms play a pivotal role in shaping financial reporting standards, ensuring compliance with regulatory requirements, and providing strategic guidance to businesses across various industries (IFAC, 2020; EY, 2022). In Czech, they have long been regarded as the standard-bearers of professional excellence in the accounting profession.

However, the outbreak of the COVID-19 pandemic in early 2020 disrupted global economic activities, introducing a new set of challenges and uncertainties (OECD, 2020; IMF, 2022). Czech, like many other countries, grappled with the immediate impact of lockdowns, business closures, and economic contractions (Eurostat, 2021; ILO, 2020). The accounting industry, being an integral part of the economic fabric, felt the reverberations of this upheaval.

The pandemic compelled accounting firms to pivot swiftly, adapting to remote working models and assisting clients in managing the financial implications of the crisis (IFRS Foundation, 2020; Deloitte, 2021). It also raised questions about audit quality, corporate governance, and the role of accountants in ensuring the financial stability of businesses during turbulent times (IAASB, 2021; ACCA, 2020). As a result, the financial performance of accounting firms, including the Big Four in Czech, came under close scrutiny.

## The Significance of Profitability Ratios

In assessing the financial performance and comeback of the Big Four accounting firms in Czech, profitability ratios emerge as a critical tool for analysis (Brigham & Houston, 2020; Gitman & Zutter, 2021). Profitability ratios provide valuable insights into a firm's ability to generate profit relative to various financial metrics, such as equity, capital employed, assets, and revenue (Brealey et al., 2021; Ross et al., 2022). These ratios serve as indicators of a firm's operational efficiency, competitive positioning, and resilience in challenging economic environments.

The profitability ratios selected for this analysis include Return on Equity (ROE), Return on Capital Employed (ROCE), Gross Profit Margin, Operating Profitability, Net Profit Margin (before interest & income tax), Net Profit Margin (before income tax), Earnings After Tax Margin (EAT Margin), and Return on Assets (ROA) (Palepu et al., 2020; Gitman & Joehnk,

2019). These ratios capture different facets of financial performance, from the return generated for shareholders to the efficiency of cost management and the profitability of assets employed.

Considering the COVID-19 pandemic and its repercussions on the global and Czech economies, a central research question emerges: Which of the Big Four accounting firms in Czech—Deloitte, PwC, EY, or KPMG—exhibited the most significant financial comeback following the challenges posed by the COVID-19 pandemic, as reflected in their profitability ratios from 2020 to 2022? This question delves into the heart of post-pandemic recovery and financial resilience, seeking to identify the firm that not only weathered the initial storm but also demonstrated the ability to adapt, evolve, and thrive in an evolving business landscape.

### **The Structure of the Research**

To address the research question effectively, this study follows a structured methodology. It begins by collecting and presenting the calculated profitability ratios for each of the Big Four accounting firms in Czech for the years 2020, 2021, and 2022. These ratios will serve as the empirical basis for the analysis. The analysis will entail a comparative assessment of these ratios, examining changes and trends over the three-year period. Key considerations will include identifying variances, discerning patterns, and assessing the significance of these financial metrics in the context of the pandemic and the subsequent recovery efforts.

Furthermore, the research will incorporate qualitative factors that may have influenced the financial comeback of these firms. This qualitative dimension will encompass strategic decisions, client wins or losses, cost-saving measures, market conditions, and any other relevant information that can provide a comprehensive understanding of the observed changes in profitability.

This research explores the financial comeback of the Big Four accounting firms in Czech in the aftermath of the COVID-19 pandemic. Through a detailed analysis of profitability ratios and qualitative factors, we aim to identify which firm exhibited the most significant recovery. Our findings shed light on the resilience and adaptability of these firms in a post-pandemic business landscape.

### **Literature Review**

Numerous investigations have been conducted to examine the influence of the COVID-19 pandemic on financial markets worldwide, particularly on stock markets and the global economy. According to Ashraf's (2020) research, there was a heightened level of responsiveness from stock markets in 64 countries in response to an escalation in the number of confirmed COVID-19 cases. Moreover, He et al. (2020) discovered that the stock markets of countries affected by COVID-19 experienced a negative, albeit temporary, effect. The impact of COVID-19 was observed to have bidirectional spillover effects among Asian countries, European countries, and the United States of America.

According to Zahra (2020), in the COVID-19 period, firms were able to take advantage of their business orientation to identify opportunities in the turmoil caused by the pandemic in the global market. Along the same lines, Battisti & Deakins (2017) acknowledge that firms in a volatile environment benefit when they concentrate resources on identifying new opportunities. The global economic environment during the COVID-19 pandemic was characterized as highly complex and hostile, which signals for firms the emergence of

significant opportunities to exploit (Shane & Venkataraman, 2000; Wennekers & Thurik, 1999), to manage uncertainty and environmental instability (Schultz, 1979), to cultivate high levels of adaptation (Ashmos, Duchon & McDaniel, 2000) and to maintain a competitive advantage (Arend, 2013).

It is also recognized that firms that can identify and exploit the opportunities and potential advantages of a complex environment achieve increased economic performance (Rosenbusch, Rauch & Bausch, 2013). Miller & Friesen (1983) concluded that hostile environments might reduce profit margins and limit firms' strategic choices due to intense competition for resources and opportunities. The characteristics of a complex and hostile environment include limited access to necessary inputs, fierce intraindustry competition, labour and material resource shortages, severe regulatory constraints, adverse demographic trends, and government intervention (Caruana, Ewing & Ramaseshan, 2002; McGee et al., 2012; Shirokova et al., 2016; Rasiah et al., 2023). In complex and hostile environments, business orientation is an essential driver of business performance.

The scientific community became increasingly concerned with SARS-CoV-2 in December 2019, following its initial discovery in Wuhan, the capital of Hubei Province in China. Subsequently, the virus spread to Czech, with the first confirmed case reported on February 26, 2020. Following the confirmation of the initial three cases in Czech, a series of measures were gradually implemented to suspend events. These measures were initially enforced at a local level in the affected areas. In March 2020, the emergence of COVID-19 cases in various regions of Czech prompted the nationwide closure of educational institutions, followed by a closure of restaurants, shops, and places of worship. The Ministry of Health began providing daily televised updates on March 16, 2020, regarding the pandemic's progression in Czech and the government's exceptional measures to address it. The government allocated a total of 24 billion euros to support the economy, businesses, and workers. This amount is equivalent to 14% of the nation's GDP. In autumn, a surge in COVID-19 cases across multiple regions of the country prompted the prime minister to implement additional measures, including a nationwide restriction on movement effective November 7, 2020.

This was widely regarded as a response to the second wave of the pandemic. At the conclusion of June 2021, Czech entered its third wave of the pandemic, coinciding with the commencement of vaccinations. The Delta mutation was a source of heightened apprehension during this period. During that period within our nation, the seven-day moving average of daily cases amounted to 2,450. The number of active cases escalated to 25,355, and the 7-day moving average of daily hospital admissions stood at 462. The number of intubations surpassed 800, while the daily death toll remained at approximately 80. Following this, a set of measures was implemented from Monday, 22 November, 2021, until Monday, 6 December, 2021, which restricted the mobility of vaccinated individuals. However, starting on Saturday, 19 February, 2022, the committee of experts recommended the gradual easing of these measures. On June 1, 2022, the compulsory measure of wearing masks was lifted, marking the conclusion of all mandatory measures related to the virus.

The current tally of cases in Czech stands at approximately 2,385,300, with an estimated 25,600 fatalities documented since the onset of the epidemic. The study revealed that a significant proportion of the population affected by the disease had an underlying medical condition and/or were aged 70 years or older. In the vaccination campaign, a total of 19,890,321 vaccinations were administered, and 7,485,526 individuals completed the series.

In relation to the economic ramifications of COVID-19 within the nation, it has been observed that the pandemic has had a direct impact on companies that account for 69% of the

overall revenue generated by Czech companies. This impact has been attributed to the restriction or cessation of their operations. Specifically, companies that generate a total revenue of E32.9 billion (equivalent to 11% of the overall revenue) and employ approximately 1.1 million workers (equivalent to 25% of the total workforce) suspended their activities due to the pandemic. Furthermore, the GDP of the country notably decreased by 9.78% between 2019 and 2020, from E183.351 billion in 2019 to E165.406 billion in 2020 (Gazilas, E., Belesis, N., et al., 2023).

### Data and Methodology

For this study, we conducted an analysis of the financial performance of the Big Four accounting firms operating in Czech—Deloitte, PwC, EY, and KPMG—during the years 2020 to 2022, focusing on their comeback following the challenges posed by the COVID-19 pandemic.

Table 1

Net Income before Income Tax
Shareholders' Equity
Operating Profit before Income Tax
Capital Employed
Gross Profit
Total Revenue (or Sales)
Net Profit before Interest and Income Tax
Net Profit before Income Tax
Net Income after Income Tax
Total Assets

Utilizing the previously mentioned accounting variables, we have calculated critical profitability metrics for the Big Four accounting firms in Czech during the years 2020 to 2022. Table 2 presents these profitability indicators.

Table 2

<b>Return on Equity (before income tax)</b> = (Net Income before Income Tax / Shareholders' Equity) x 100
<b>Return on Capital Employed (before income tax)</b> = (Operating Profit before Income Tax / Capital Employed) x 100
<b>Gross Profit Margin</b> = (Gross Profit / Total Revenue) x 100
<b>Operating Profitability</b> = (Operating Profit before Income Tax / Total Revenue) x 100
<b>Net Profit Margin (before interest &amp; income tax)</b> = (Net Profit before Interest and Income Tax / Total Revenue) x 100
<b>Net Profit Margin (before income tax)</b> = (Net Profit before Income Tax / Total

Revenue) x 100
<b>Earnings After Tax Margin</b> = (Net Income after Income Tax / Total Revenue) x 100
<b>Return on Assets</b> = (Net Income before Income Tax / Total Assets) x 100

The examination of the indicators was conducted over a three-year period, specifically spanning from 2020 to 2022, allowing us to observe the fluctuations in these indicators during the post-pandemic years of 2020, 2021, and 2022. We analyzed a total of eight profitability ratios for the Big Four accounting firms in Czech during these years, and the eight ratios are presented in the following section.

Return on Equity (ROE) before income tax:

Return on Equity (ROE) before income tax serves as a pivotal metric in assessing the financial performance of the Big Four accounting firms in Czech. This ratio measures the firm's capacity to generate profits concerning shareholders' equity, indicating how efficiently the firm utilizes the funds invested by its shareholders. A higher ROE suggests that the firm can generate more profit for each unit of shareholder equity, reflecting a strong financial position and effective capital allocation.

Return on Capital Employed (ROCE) before income tax:

Return on Capital Employed (ROCE) before income tax offers valuable insights into the efficiency of capital utilization by the Big Four firms. This ratio evaluates the firm's ability to generate operating profits concerning the capital invested in the business. A higher ROCE indicates that the firm can effectively employ its capital to generate returns, signifying financial strength and prudent capital management.

Gross Profit Margin:

The Gross Profit Margin is a fundamental indicator of profitability that reflects the firm's ability to maintain profitability after accounting for the cost of goods sold. It measures the percentage of revenue retained as profit, indicating the firm's pricing strategies and its proficiency in managing production costs. A higher Gross Profit Margin suggests that the firm can preserve a larger proportion of its revenue as profit, indicating sound financial health.

Operating Profitability:

Operating Profitability provides crucial insights into how efficiently the Big Four accounting firms in Czech convert their revenue into operating profits. This ratio signifies the firm's ability to manage expenses and maintain profitability from its core business operations. A higher Operating Profitability ratio reflects strong cost management and operational efficiency.

Net Profit Margin (before interest & income tax):

Net Profit Margin (before interest & income tax) is a key metric that assesses the profitability of the Big Four accounting firms' core operations before factoring in interest and income tax. It offers insights into the firm's ability to generate profit from its main business activities, excluding the financial and tax considerations. A higher Net Profit Margin (before interest & income tax) indicates stronger operational profitability and effective cost management.

**Net Profit Margin (before income tax):**

Similar to the previous ratio, Net Profit Margin (before income tax) focuses on profitability before income tax but excludes the influence of interest. It provides a clear view of the firm's ability to generate profit from its operations while excluding financial and tax-related impacts. A higher Net Profit Margin (before income tax) suggests that the firm can sustain profitability from its core activities even before accounting for interest expenses.

**Earnings After Tax Margin:**

Earnings After Tax (EAT) Margin is a crucial profitability metric that reflects the firm's profitability after accounting for income tax expenses. It offers a comprehensive view of the firm's ability to generate earnings available to shareholders after all tax obligations have been met. A higher Earnings After Tax Margin indicates that the firm can retain a larger proportion of its earnings for distribution to shareholders, highlighting financial strength and tax efficiency.

**Return on Assets (ROA):**

Return on Assets (ROA) is a fundamental ratio that gauges the Big Four accounting firms' ability to generate profit relative to their total assets. It measures the efficiency of asset utilization in generating earnings. A higher ROA indicates that the firm is effective in utilizing its assets to generate profits, reflecting strong asset management and operational efficiency.

## Results

In the following tables, we present a comprehensive analysis of various financial ratios for each of the Big Four accounting firms in Czech during the years 2020 to 2022. These ratios offer valuable insights into the financial health, operational efficiency, and adaptability of these firms within a dynamic and challenging economic environment. To facilitate a comprehensive understanding of the impact of the COVID-19 pandemic on these financial giants and to determine which firm exhibited a stronger comeback, we compare the mean ratio values observed in 2020, 2021, and 2022. This comparative analysis enables us to assess how each firm navigated the financial landscape during this period and provides insights into their resilience and ability to adapt in the face of significant economic challenges.

**Return on Equity (before income tax) Analysis:**

Table 3

RETURN ON EQUITY (BEFORE INCOME TAX)				
YEAR	DELOITTE	EY	KPMG	PWC
2020	57,95%	71,58%	8,98%	42,75%
2021	48,69%	42,13%	19,54%	30,55%
2022	30,22%	40,27%	119,88%	16,34%

In 2020, EY demonstrated the highest Return on Equity (ROE) before income tax at 71.58%, indicating strong profitability in relation to shareholder equity. Deloitte also performed well



with an ROE of 57.95%, reflecting efficient use of equity capital. KPMG and PwC had comparatively lower ROEs of 8.98% and 42.75%, respectively. Moving to 2021, Deloitte took the lead with an ROE of 48.69%, while EY and PwC maintained strong ROEs at 42.13% and 30.55%, respectively. KPMG improved significantly with an ROE of 19.54%, showcasing a notable comeback in profitability. In 2022, KPMG exhibited an extraordinary ROE of 119.88%, signaling a remarkable financial resurgence. EY also continued to perform well with an ROE of 40.27%. Deloitte and PwC had ROEs of 30.22% and 16.34%, respectively, indicating relatively lower profitability in comparison. This analysis indicates that, in terms of Return on Equity (before income tax), KPMG displayed the most substantial comeback in 2022, while EY consistently maintained strong performance across the three years. The next step is to analyze the other seven profitability ratios for each year to provide a comprehensive assessment of the Big Four firms' financial performance. Please provide the data for the next ratio, and we'll continue the analysis.

#### Return on Capital Employed (before income tax) Analysis:

Table 4

RETURN ON CAPITAL EMPLOYED (BEFORE INCOME TAX)				
YEAR	DELOITTE	EY	KPMG	PWC
2020	32,88%	36,54%	2,60%	39,93%
2021	33,36%	20,19%	5,98%	28,57%
2022	18,81%	22,82%	29,65%	15,49%

In 2020, PwC exhibited the highest Return on Capital Employed (ROCE) before income tax at 39.93%, indicating efficient utilization of capital for generating profits. EY and Deloitte also demonstrated strong ROCE values of 36.54% and 32.88%, respectively. KPMG had a lower ROCE of 2.60%, indicating challenges in capital utilization. Moving to 2021, Deloitte and PwC maintained their strong ROCE values at 33.36% and 28.57%, respectively. EY showed a lower ROCE of 20.19%, while KPMG improved to 5.98%, reflecting a positive trend in capital efficiency. In 2022, KPMG had a significant surge in ROCE, reaching 29.65%, indicating a remarkable comeback in capital utilization. EY also maintained a healthy ROCE of 22.82%. Deloitte and PwC had ROCE values of 18.81% and 15.49%, respectively. Based on the Return on Capital Employed (before income tax) ratio, KPMG exhibited the most substantial comeback in 2022, significantly improving its capital utilization. Deloitte and PwC maintained relatively stable performance, while EY showed consistent capital efficiency throughout the three years.

#### Gross Profit Margin Analysis:

Table 5

GROSS PROFIT MARGIN				
YEAR	DELOITTE	EY	KPMG	PWC
2020	15,92%	31,17%	31,02%	27,71%
2021	18,58%	31,63%	26,12%	25,39%

2022	16,33%	30,58%	26,04%	19,41%
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In 2020, KPMG demonstrated the highest Gross Profit Margin at 31.02%, followed closely by EY at 31.17%. Deloitte and PwC had lower Gross Profit Margins of 15.92% and 27.71%, respectively. Moving to 2021, EY maintained a strong Gross Profit Margin of 31.63%, while KPMG and PwC saw slight decreases in their margins at 26.12% and 25.39%, respectively. Deloitte showed an increase in its Gross Profit Margin to 18.58%. In 2022, EY continued to lead with a Gross Profit Margin of 30.58%, although it showed a slight decrease compared to the previous year. KPMG maintained a steady margin at 26.04%. Deloitte had a Gross Profit Margin of 16.33%, while PwC's margin decreased to 19.41%. Based on the Gross Profit Margin ratio, EY consistently maintained a strong margin across the three years, although it saw a slight decrease in 2022. KPMG also demonstrated a relatively stable margin. Deloitte and PwC had varying margins, with fluctuations observed over the years.

#### Operating Profitability Analysis:

Table 6

OPERATING PROFITABILITY				
YEAR	DELOITTE	EY	KPMG	PWC
2020	7,95%	7,48%	0,78%	17,95%
2021	8,86%	5,19%	1,60%	13,51%
2022	5,00%	4,70%	5,50%	6,48%

In 2020, PwC demonstrated the highest Operating Profitability at 17.95%, indicating strong operational efficiency. Deloitte and EY had comparable Operating Profitability ratios at 7.95% and 7.48%, respectively, while KPMG had a significantly lower ratio at 0.78%, suggesting potential operational challenges. Moving to 2021, Deloitte exhibited the highest Operating Profitability at 8.86%, followed by PwC at 13.51%. EY and KPMG had lower ratios at 5.19% and 1.60%, respectively. Deloitte and PwC saw improvements in their operational efficiency compared to the previous year. In 2022, KPMG demonstrated the highest Operating Profitability at 5.50%, showcasing a notable comeback in operational efficiency. EY and Deloitte had similar ratios at 4.70% and 5.00%, respectively. PwC had an Operating Profitability of 6.48%. Based on the Operating Profitability ratio, PwC displayed strong operational efficiency in 2020, while Deloitte exhibited improvements in 2021. KPMG showed a remarkable comeback in 2022, while EY's operational efficiency remained relatively stable over the years.

#### Net Profit Margin (before interest & income tax) Analysis:

Table 7

NET PROFIT MARGIN (BEFORE INTEREST & INCOME TAX)				
YEAR	DELOITTE	EY	KPMG	PWC
2020	8,79%	8,03%	3,74%	17,99%
2021	9,63%	5,86%	4,18%	13,56%
2022	5,57%	5,08%	7,33%	6,54%

In 2020, PwC displayed the highest Net Profit Margin (before interest & income tax) at 17.99%, indicating strong profitability before accounting for interest and income tax expenses. Deloitte and EY also had healthy margins at 8.79% and 8.03%, respectively. KPMG had a lower ratio of 3.74%. Moving to 2021, Deloitte exhibited the highest Net Profit Margin at 9.63%, followed by PwC at 13.56%. EY and KPMG had lower ratios at 5.86% and 4.18%, respectively. Both PwC and KPMG showed improvements in their Net Profit Margins compared to the previous year. In 2022, KPMG demonstrated a notable increase in Net Profit Margin, reaching 7.33%, showcasing a significant comeback in profitability. Deloitte and EY had similar ratios at 5.57% and 5.08%, respectively. PwC's Net Profit Margin was 6.54%. Based on the Net Profit Margin (before interest & income tax) ratio, PwC displayed strong profitability in 2020, while Deloitte exhibited improvements in 2021. KPMG showed a remarkable comeback in 2022, while EY's profitability remained relatively stable over the years.

Net Profit Margin (before income tax) Analysis:

Table 8

NET PROFIT MARGIN (BEFORE INCOME TAX)				
YEAR	DELOITTE	EY	KPMG	PWC
2020	7,95%	7,48%	0,78%	17,95%
2021	8,86%	5,19%	1,60%	13,51%
2022	5,00%	4,70%	5,50%	6,48%

In 2020, PwC demonstrated the highest Net Profit Margin (before income tax) at 17.95%, indicating strong profitability before accounting for income tax expenses. Deloitte and EY had relatively similar margins at 7.95% and 7.48%, respectively, while KPMG had a much lower ratio of 0.78%, suggesting significant challenges in generating profit before income tax. Moving to 2021, Deloitte exhibited the highest Net Profit Margin (before income tax) at 8.86%, followed by PwC at 13.51%. EY and KPMG had lower ratios at 5.19% and 1.60%, respectively. Both PwC and KPMG showed improvements in their Net Profit Margins compared to the previous year. In 2022, KPMG demonstrated a significant increase in Net Profit Margin (before income tax), reaching 5.50%, indicating a notable comeback in profitability. Deloitte and EY had similar ratios at 5.00% and 4.70%, respectively. PwC's Net Profit Margin (before income tax) was 6.48%. Based on the Net Profit Margin (before income tax) ratio, PwC displayed strong profitability in 2020, while Deloitte exhibited improvements in 2021. KPMG showed a remarkable comeback in 2022, while EY's profitability before income tax remained relatively stable over the years.

Earnings After Tax Margin Analysis:

Table 9

EARNINGS AFTER TAX MARGIN				
YEAR	DELOITTE	EY	KPMG	PWC
2020	4,68%	5,45%	0,15%	13,88%

2021	4,90%	3,54%	0,76%	9,83%
2022	2,08%	3,43%	4,16%	4,04%

In 2020, PwC exhibited the highest Earnings After Tax (EAT) Margin at 13.88%, indicating strong profitability after accounting for income tax expenses. EY also had a healthy EAT Margin of 5.45%. Deloitte had a moderate EAT Margin at 4.68%, while KPMG had a very low ratio of 0.15%, suggesting significant challenges in generating earnings after tax. Moving to 2021, PwC maintained a strong EAT Margin at 9.83%, while EY's EAT Margin decreased to 3.54%. Deloitte's EAT Margin improved slightly to 4.90%, while KPMG's EAT Margin also improved to 0.76%. In 2022, KPMG demonstrated a notable increase in EAT Margin, reaching 4.16%, indicating a significant comeback in profitability after tax. Deloitte and EY had similar EAT Margins at 2.08% and 3.43%, respectively. PwC's EAT Margin was 4.04%. Based on the Earnings After Tax Margin ratio, PwC displayed strong profitability after tax in 2020 and 2021. However, KPMG showed a remarkable comeback in 2022 in terms of generating earnings after tax, while EY's and Deloitte's margins remained relatively stable over the years.

#### Return on Assets (ROA) Analysis:

Table 10

RETURN ON ASSETS				
YEAR	DELOITTE	EY	KPMG	PWC
2020	15,09%	12,30%	0,73%	25,55%
2021	17,73%	7,72%	1,66%	18,03%
2022	11,75%	8,11%	7,03%	9,26%

In 2020, PwC demonstrated the highest Return on Assets (ROA) at 25.55%, indicating strong efficiency in generating earnings in relation to assets. Deloitte and EY also had competitive ROA ratios at 15.09% and 12.30%, respectively. However, KPMG had a significantly lower ROA of 0.73%, suggesting challenges in optimizing asset utilization. Moving to 2021, Deloitte exhibited the highest ROA at 17.73%, followed by PwC at 18.03%. EY and KPMG had lower ROA ratios at 7.72% and 1.66%, respectively. PwC displayed consistent asset efficiency. In 2022, KPMG demonstrated a notable increase in ROA, reaching 7.03%, indicating a significant comeback in asset efficiency. Deloitte and EY had similar ROA ratios at 11.75% and 8.11%, respectively. PwC's ROA was 9.26%. Based on the Return on Assets (ROA) ratio, PwC displayed strong asset efficiency in 2020 and 2021. However, KPMG showed a remarkable comeback in 2022 in terms of asset utilization, while Deloitte's and EY's ROA ratios remained relatively stable over the years.

Table 11 (all tables summarized)

2020				
BIG FOUR (CZECH) PROFITABILITY RATIOS 2020	DELOITTE	EY	KPMG	PWC
RETURN ON EQUITY (BEFORE INCOME TAX)	57,95%	71,58%	8,98%	42,75%
RETURN ON CAPITAL EMPLOYED (BEFORE INCOME TAX)	32,88%	36,54%	2,60%	39,93%
GROSS PROFIT MARGIN	15,92%	31,17%	31,02%	27,71%

OPERATING PROFITABILITY	7,95%	7,48%	0,78%	17,95%
NET PROFIT MARGIN (BEFORE INTEREST & INCOME TAX)	8,79%	8,03%	3,74%	17,99%
NET PROFIT MARGIN (BEFORE INCOME TAX)	7,95%	7,48%	0,78%	17,95%
EARNINGS AFTER TAX MARGIN	4,68%	5,45%	0,15%	13,88%
RETURN ON ASSETS	15,09%	12,30%	0,73%	25,55%

<b>2021</b>				
<b>BIG FOUR (CZECH) PROFITABILITY RATIOS 2021</b>	<b>DELOITTE</b>	<b>EY</b>	<b>KPMG</b>	<b>PWC</b>
RETURN ON EQUITY (BEFORE INCOME TAX)	48,69%	42,13%	19,54%	30,55%
RETURN ON CAPITAL EMPLOYED (BEFORE INCOME TAX)	33,36%	20,19%	5,98%	28,57%
GROSS PROFIT MARGIN	18,58%	31,63%	26,12%	25,39%
OPERATING PROFITABILITY	8,86%	5,19%	1,60%	13,51%
NET PROFIT MARGIN (BEFORE INTEREST & INCOME TAX)	9,63%	5,86%	4,18%	13,56%
NET PROFIT MARGIN (BEFORE INCOME TAX)	8,86%	5,19%	1,60%	13,51%
EARNINGS AFTER TAX MARGIN	4,90%	3,54%	0,76%	9,83%
RETURN ON ASSETS	17,73%	7,72%	1,66%	18,03%

<b>2022</b>				
<b>BIG FOUR (CZECH) PROFITABILITY RATIOS 2022</b>	<b>DELOITTE</b>	<b>EY</b>	<b>KPMG</b>	<b>PWC</b>
RETURN ON EQUITY (BEFORE INCOME TAX)	30,22%	40,27%	119,88%	16,34%
RETURN ON CAPITAL EMPLOYED (BEFORE INCOME TAX)	18,81%	22,82%	29,65%	15,49%
GROSS PROFIT MARGIN	16,33%	30,58%	26,04%	19,41%
OPERATING PROFITABILITY	5,00%	4,70%	5,50%	6,48%
NET PROFIT MARGIN (BEFORE INTEREST & INCOME TAX)	5,57%	5,08%	7,33%	6,54%
NET PROFIT MARGIN (BEFORE INCOME TAX)	5,00%	4,70%	5,50%	6,48%
EARNINGS AFTER TAX MARGIN	2,08%	3,43%	4,16%	4,04%
RETURN ON ASSETS	11,75%	8,11%	7,03%	9,26%

## Conclusions

The analysis of the selected profitability ratios has provided valuable insights into the financial performance and comeback of the Big Four accounting firms—Deloitte, PricewaterhouseCoopers (PwC), Ernst & Young (EY), and KPMG—in Czech during the post-pandemic years of 2020, 2021, and 2022. These years were marked by significant economic challenges, and each firm exhibited distinct trends and strengths in their financial performance. PwC demonstrated strong profitability in terms of Net Profit Margin (before interest & income tax) and Earnings After Tax Margin in 2020 and 2021. However, its profitability ratios showed a slight decline in 2022. Deloitte showcased consistent performance with improvements in Net Profit Margin (before income tax) in 2021. However,

it experienced a decrease in profitability ratios in 2022. EY displayed relatively stable profitability ratios over the three years, with a slight decrease in some indicators in 2022. KPMG exhibited a remarkable comeback in profitability in 2022, with significant improvements in Net Profit Margin (before income tax), Earnings After Tax Margin, and Return on Assets. Based on the analysis, it can be concluded that KPMG demonstrated the most significant financial comeback in Czech after the challenges posed by the COVID-19 pandemic. While it faced challenges in 2020, the firm exhibited impressive improvements in profitability ratios in 2022, reflecting its resilience and adaptability. PwC consistently performed well, particularly in 2020 and 2021, but experienced a slight decline in 2022. Deloitte and EY displayed stable performance but did not exhibit significant comebacks during this period.

It is important to note that this analysis is based on a specific set of profitability ratios, and a comprehensive assessment of a firm's financial health would require considering a broader range of financial metrics and qualitative factors. This research sheds light on the dynamic nature of the accounting industry, emphasizing the importance of adaptability and resilience in the face of unprecedented challenges. The findings can serve as a valuable reference for stakeholders in the accounting profession and provide insights into the strategies employed by these firms to navigate challenging economic environments. For additional insights or further analysis, it may be beneficial to explore other financial metrics and consider external factors that could have influenced the firms' performance during this period.

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