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INVESTMENTS IN HUMAN CAPITAL AND COMPANY'S FINANCIAL STABILITY: IS THERE ANY RELATION?

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ABSTRACT

The purpose of the research is to identify the impact of the investments in human capital on the general financial conditions of the largest private companies of the Republic of Kazakhstan, as well as to develop recommendations for companies to have better financial incentives for employees.

Research methodology – there was applied panel data of ten companies throughout the 2022 year. The data analysis includes the variables of the number of employees, company size, revenue, trainings, qualifications and other similar courses, provided by the companies.

Originality/value of the research – there are a lot of studies, that analyze how employees make an impact on company, however most of them have qualitative way of research. Authors, in turn, apply quantitative modelling and analyze the largest companies in Kazakhstan.

Findings. Our findings show that the number of employees appears to have a statistically significant positive impact on revenue. More employees are associated with higher revenue.

Keywords: human capital, financial stability, employees, trainees, input, output.

«Happy employees are productive employees»

INTRODUCTION

Nowadays, many companies focus on investing in projects, equipment, technology, and materials to stay competitive in the market. However, it is essential for successful organizations to recognize the value of human capital and prioritize the well-being and development of their employees. In this research, we try to figure out that human capital has an impact, which directly leads to company's financial stability, finally leading to the increase of financial performance on the competitive arena.

There are a lot of reasons why human capital investments is really valuable source of funding. Firstly, human resources can lead not only to higher productivity, but also to innovative and creative ideas, which can open unique perspectives and insights. Investing in training of employees, different development courses can further lead to the enhancement of the skills and abilities, leading to more innovative solutions and approaches. Moreover, a motivated and engaged workforce tends to be more productive and perform at higher levels. When companies invest in human capital, they are essentially investing in the knowledge, skills, abilities and well-being of their employees. Furthermore, investing in employee training and offering opportunities for advancement can enhance employee satisfaction and loyalty, reducing turnover rates.

MAIN BODY

Literature review. In order to have more outcomes from the employees, company should invest in them. By providing courses, qualifications and trainings, companies can earn more. A lot of different studies of strategic human resource management and applied psychology consistently demonstrate that making investments in human capital can lead to favorable results at both the individual and organizational levels. Such kind of investments can lead to the knowledge strengthening, enhancing skills and other working abilities of employees. So, the range of beneficial outcomes can be achieved by the “injections” from the employers. In turn, knowledge, skills and ability to work can lead to another possible outcomes as motivation and job satisfaction. Further, this chain will lead to productivity and finally to better financial performance of the company. Such employees will always try to acquire new knowledge, new skills and will become more flexible [1].

Wage is considered one of the most financial incentives and motivations for employees. Author authors suggest that there is a strong link between wages of employees and investments in human capital. The theory, which they apply, lies on different types of trainings: general and specific. Usually, in ideal conditions, expenses from general trainings are covered by workers, while specific one, are covered both by companies and workers. Figure 1 below, shows the significant difference between two types of trainings.

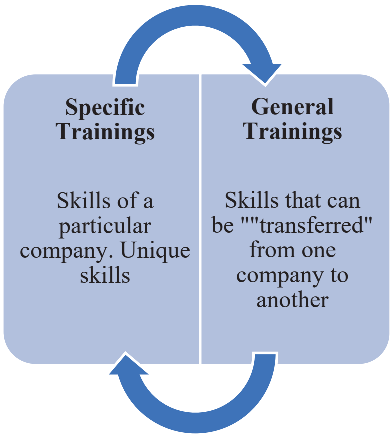

Figure 1 – Difference between specific and general trainings for employees

Note – Based on the source [1]

As, it is shown on the figure above, one of the main differences between specific and general trainings is that general can be applied everywhere across different companies, while specific only in one place. Employees play a crucial role in generating value for a company through their intellectual contributions and manual labor. Unlike physical assets, human capital assets possess heterogeneity, making the outcomes less predictable [2; 3]. Nevertheless, investments in human capital tend to appreciate over time instead of depreciating. This implies that human capital inputs can yield long-term benefits in certain situations [4].

The recognition of the enduring value of human capital has sparked an ongoing discussion regarding accounting practices for incorporating human capital inputs. The debate revolves around how to appropriately account for the contributions of human capital in financial reporting and measurement.

Various rewards of employees can be considered as one of the main “inputs” of employees. Usually, such employees are active participants of different trainings ans courses. These rewards come in the form of salary, benefits, job satisfaction, and opportunities for further learning and advancement, including promotions. These achievements not only benefit individuals and their families but also have wider implications for governments and societies [5].

From a government perspective, economic success and country’s overall efficiency can be affected by the human force investments, especially investments in their education and trainings. A well-educated and skilled workforce can drive innovation, productivity, and competitiveness, ultimately contributing to economic growth and development. Governments allocate resources to improve the quality of education, provide scholarships or grants, establish vocational training programs, and create policies that encourage continuous learning and skill development. By doing so, they aim to foster a highly capable workforce that can meet the demands of a changing economy and contribute to the country's prosperity [6] (Figure 2).

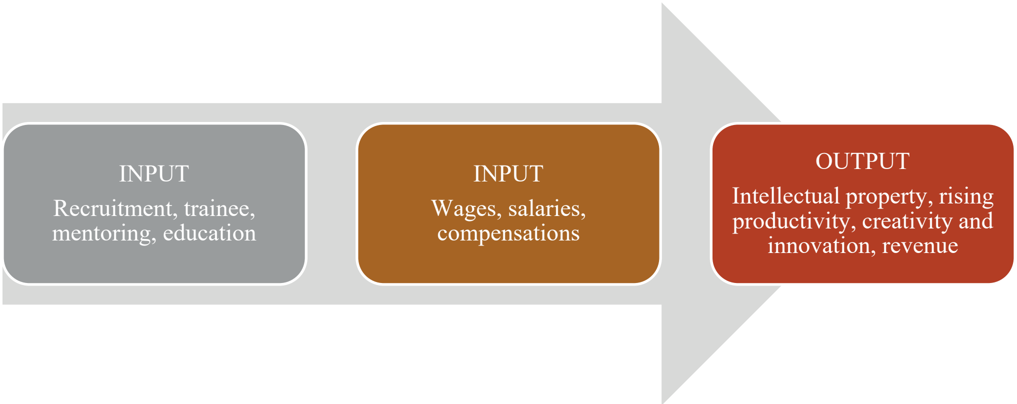

Figure 2 – Chain of inputs and Outputs of Human Resources
Note – Based on the source [5]

Also, primary owners and the employees, who worked for such companies can have an impact on company's future financial performance. When owners and employees have prior experience with high-productivity firms, they can transfer valuable knowledge spillover, including technological and managerial expertise, to the current firms they work for or own. Firms with high-quality owners tend to achieve and maintain sustained high levels of economic growth, competitiveness and employees' productivity. Productivity level strongly depends on, where the owner works, meaning that there is a strong correlation between his previous and current firms. Additionally, there is considerable employee mobility from high-productivity firms to ownership positions in new firms, where the owner is actively engaged. Owners or management usually move not alone, but with their own team of employees. The authors support the significance of employees transitioning from high-productivity firms to entrepreneurship, as it drives knowledge spillover and contributes to the dynamism of the economy [7].

However, there are some authors, who concluded that employees do not strongly aff ect the performance of the company. For example, Fred R. Kaen provided an analysis throughout the manufacturing fi rms in the USA. They assess profi tability using three measures of earnings before interest, taxes. The diff erence between them is that the first indicator is calculated with the margin, the second one as a percentage rate of total assets, and the final one counts the depreciation and amortization as well. Firm size is measured using the natural logarithm of the number of employees. The study resulted that in some firm's profitability initially increases but at a diminishing rate, eventually declining as firms grow larger. While other companies show that there is no discernible relationship between firm size and profitability. When considering the same level of total assets, firms with fewer employees demonstrate higher levels of profitability. Moreover, when comparing firms with the same level of sales, those with fewer employees show higher profitability [8].

Empirical methodology. According to our literature review, financial performance of any company probably depends on employees, their satisfaction and investments in them, as a capital. In this research, we analyze influence of human capital on the company's financial stability. For the analysis, we took several largest companies of Kazakhstan and analyzed their main financial indicators and how do they change due to investments in human capital, trainees and qualifications.

The research employed a multiple linear regression formula to model this relationship. We base on the study of Fred R. Kaen, which was mentioned before. The base on the comprehensive technological-organizational theory of the firm, it is predicted that as the firm's size grows, profitability will initially increase but at a diminishing rate, eventually reaching a point where it starts to decline. This pattern can be represented mathematically by a second-degree polynomial function [8].

However, some authors prove that profitability is positively influenced by net asset turnover, liquidity, foreign earnings intensity, and age of the company. On the other hand, solvency and size have a negative impact on firm performance. Moreover, the study reveals variations in the strength of these effects between private and publicly listed companies [9]. Other authors state that there are some configurations leading to higher firm performance are often associated with two main factors: high CEO compensation and a large-sized firm, which includes both high assets and a substantial number of employees. Additionally, the study highlights that achieving high firm performance requires a combination of multiple antecedent conditions rather than relying on a single factor. These complex antecedents are composed of simpler individual factors.

However, what is interestingly to note, there is no single specific condition that guarantees high firm performance. Instead, the study identifies five distinct configurations, each of which is sufficient to achieve high performance. However, none of these configurations is necessary, as alternative arrangements can also lead to high performance, even though they might be less commonly employed by firms [10]. Also, some authors find out that the CSR activities have a significant impact on employee loyalty, leading to increased commitment from employees towards their company. Moreover, their findings suggest a positive correlation between employee loyalty and the overall performance and competitiveness of the company. These results hold considerable importance for decision-makers and researchers, as they emphasize the unique role of CSR in shaping employee loyalty and its potential to be utilized in developing effective business strategies. By incorporating CSR into their operations, companies can enhance competitiveness and achieve improved overall results [11].

Below, there are presented top 10 largest companies in Kazakhstan with the revenue and number of employees (Figure 3).

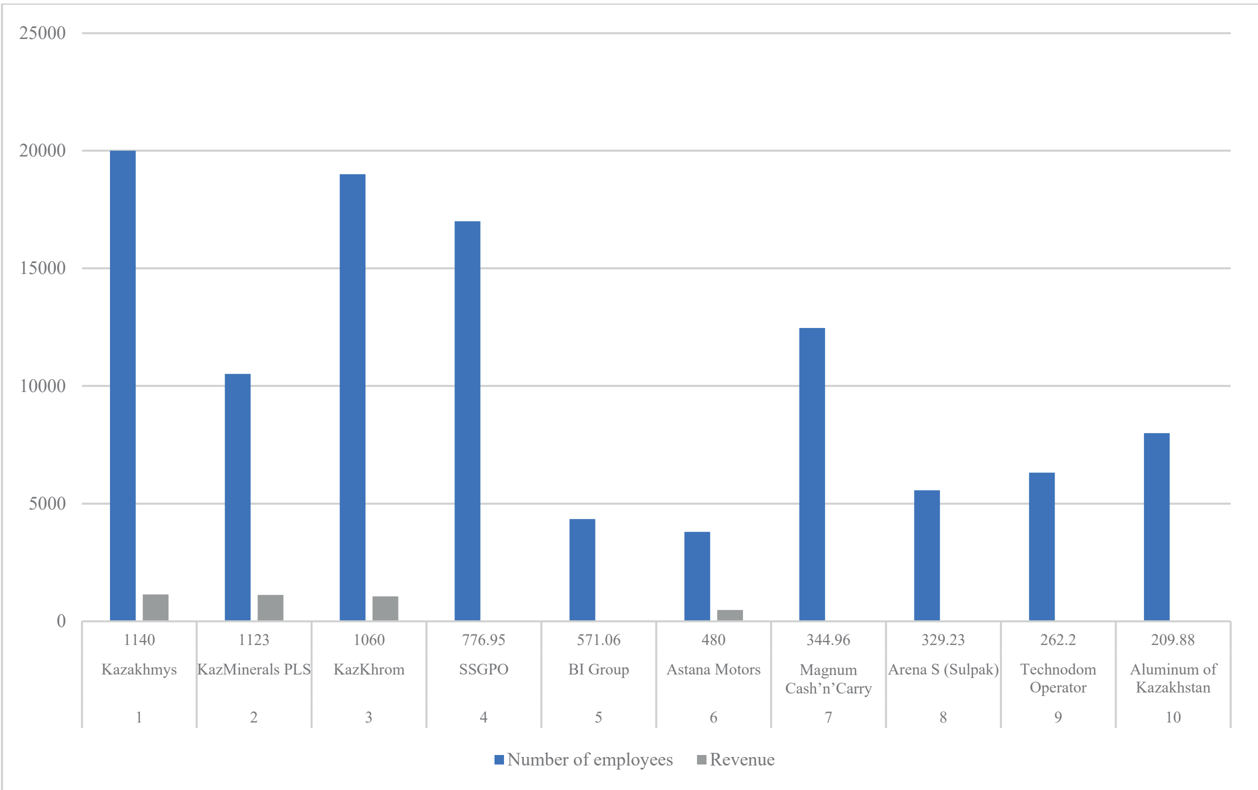

Figure 3 – Revenue (in bln) and number of employees (in thousands)

Note – Compiled by the author based on the source [12]

When evaluating the rankings of companies, multiple factors were considered alongside their revenue. These additional factors included the taxes paid by the companies during the year and the number of employees they had. The data used for this assessment was sourced from publicly available information or directly provided by the companies. In cases where certain data points were not available, an independent evaluation was conducted to ensure a comprehensive analysis.

Mostly, all of the companies operate in mining and metallurgical complex, which is not surprising fact, as this complex is considered as the main lever of our economic growth (Figure 4). The country is known for its abundant natural resources, including large reserves of minerals and metals. The mining and metallurgical industries have historically been crucial to Kazakhstan's economy and have played a vital role in its economic growth.

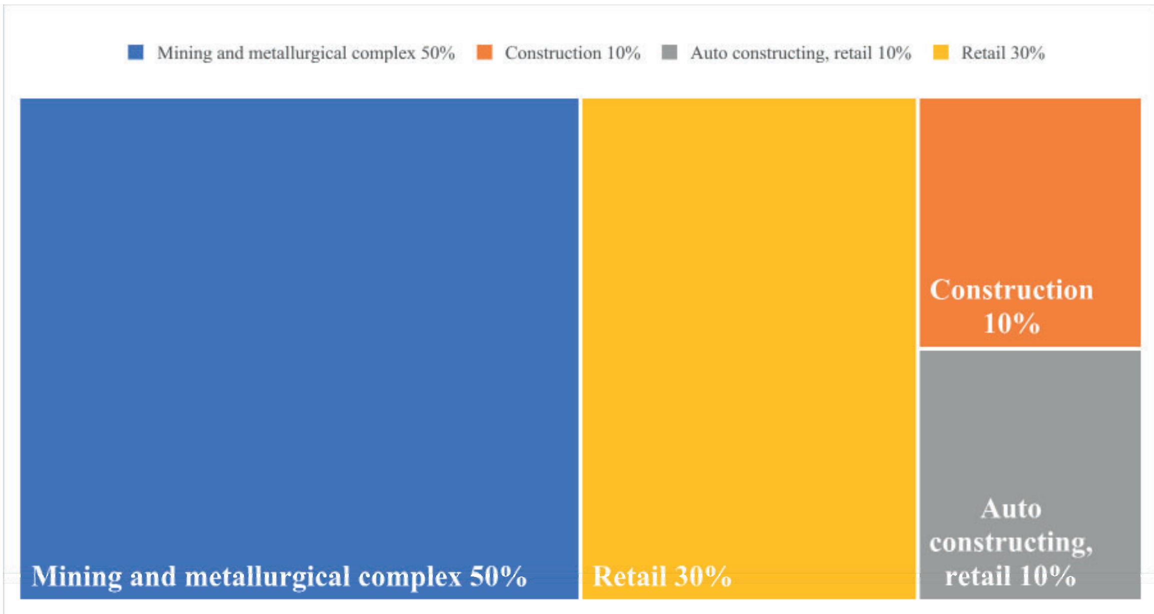

Figure 4 – Operating industry of the largest companies
Note – Compiled by the author based on the source [12]

Before, analyzing them in details, let's look through some companies and the way of treating their employees.

Kazakhmys prioritizes the well-being of its employees by providing excellent facilities. Buildings in factories, factories and mines are fully equipped. In addition, there are medical centers, canteens and places for processing, storing and issuing workwear. For enterprises with shift workers, separate administrative and household complexes are being constructed. These complexes include not only the facilities mentioned earlier but also dormitories to accommodate workers during their shifts [13].

In turn, KazMinerals aims to attract and retain talented employees by providing a safe working environment, competitive salaries that align with market standards, and comprehensive social benefits packages for both employees and their families. The company regularly assesses the terms and conditions of employment within its own operations to ensure strict adherence to the Code of Fair Employment. Additionally, thorough due diligence is carried out on potential recruits before they are employed by the company [14].

Kazchrome recognizes that its employees are its most valuable asset, and it prioritizes creating a conducive environment for their professional growth and realization of potential. Kazkhrome provides a wide range of social benefits for its employees, including recreational facilities, free special meals for core professions, support for motherhood and childhood, housing construction, assistance for veterans, and continuous staff development and training. A significant aspect of the company's social policy is focused on enhancing living conditions for its employees and developing necessary infrastructure. Since 2006, the company has been implementing a housing program that not only addresses the housing needs of its staff but also ensures the retention of talented young professionals within the production workforce [15].

Sample and data analysis. To increase the level of certainty, the researchers conducted a linear regression analysis to investigate the relationship between performance indicators and human capital investments. Two hypotheses were considered:

• Null hypothesis: Human capital has no effect on the firm's financial growth and perspectives.

• Alternative hypothesis: There exists a strong relationship between the dependent variables and independent variables.

We use a simple panel regression model to analyze human capital for financial measures, but still assume implied variables, especially for a measure that shows investment in human capital, which refers to the number of employees in a company.

$$YPerf = b1EMPL + b2Trains + b3logWages + \mathrm{b4Size} + E \tag{1}$$

where,

$YPerf$ – company performance

b1EMPL– number of employees;

b2 Trains – trainees, qualifications in the company;

b3 Wages – wages paid to employees;

b4 Size – Firm's size

E – error.

Table 1 – Impact of the effects of total revenue of the companies (Fixed Effect model)

	Coefficient	St.Error	T-statistics	P-value
Const	-454,505	309,294	-1,469	0,216
Number of employees	0,0433077	0,0126914	3,412	0,0190**
Average wages	0,00124197	0,000973658	1,276	0,2582
Trainings, qualifications (yes/no)	279,959	205,787	1,360	0,2318
Note – Compiled by the author in Gretl based on the source [12; 13; 14; 15]				

The constant term represents the intercept of the model when all other independent variables are zero. In this case, the constant is -454.505. The p-value (0.216) exceeds the generally accepted significance level of 0.05, indicating that the constant term is not statistically significant. High frequency factor 0.0433077, number of cases where a certain increase in the number of cases occurs in each case, 0.0433077 (assuming all other variable cases occur). The p-value (0.0190) is less than 0.05. A coefficient greater than 0.00124197 suggests that, on average, each average increase in the average wage requires an estimated increase in income of 0.00124197 (while holding other cases). However, the p (0.2582) value is greater than 0.05, which is a risk that the average wage may not be statistically significant when income is verified. The coefficient of 279.959 implies that, on average, businesses with trainings and qualifications have an estimated increase of 279.959 in revenue compared to those without. However, the p-value (0.2318) is greater than 0.05, suggesting that this variable may not be statistically significant in explaining revenue.

RESULTS AND CONCLUSION

We support the alternative hypothesis: There exists a strong relationship between the dependent variables and independent variables. To summarize, based on the results of the fixed effect model:

Average wages do not seem to have a statistically significant impact on revenue. The presence of trainings and qualifications does not appear to have a statistically significant impact on revenue.

The number of employees significantly influences a company's effectiveness. More employees increase productivity, operational efficiency, and innovation. Adequate staffing improves customer service and market reach. Specialized teams enhance expertise, flexibility, and adaptability. However, effective management and a positive work culture are essential for maximizing these benefits.

Proper management, effective leadership, and a positive work culture are equally vital factors for maximizing the potential benefits of a larger workforce. In addition, the optimal number of employees for a company may vary depending on its size, industry, business model, and specific goals.

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АДАМИ КАПИТАЛҒА ИНВЕСТИЦИЯЛАРДЫҢ КОМПАНИЯНЫҢ ҚАРЖЫЛЫҚ ТҰРАҚТЫЛЫҒЫНА ӘСЕРІ

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АҢДАТПА

Зерттеудің мақсаты – адами капиталға инвестициялардың Қазақстан Республикасының ірі жеке компанияларының қаржылық жағдайына әсерін анықтау, сондай-ақ компаниялар үшін қызметкерлер үшін ең жақсы қаржылық ынталандыруды құру бойынша ұсыныстар әзірлеу.

Зерттеу әдістемесі – он компанияның 2022 жылғы панельдік деректері қолданылды. Деректерді талдау қызметкерлердің саны, компанияның мөлшері, кірісі, оқуы, біліктілігі және компаниялар ұсынған басқа ұқсас курстар сияқты айнымалыларды қамтиды.

Зерттеудің бірегейлігі / құндылығы – қызметкерлердің компанияға қалай әсер ететінін талдайтын көптеген зерттеулер бар, бірақ олардың көпшілігі сапалы зерттеу сипатына ие. Авторлар өз кезегінде сандық модельдеуді қолданады және Қазақстандағы ірі компанияларды талдайды.

Нәтижелер. Біздің нәтижелеріміз қызметкерлер санының статистикалық маңызды екенін көрсетеді оң кіріске әсер ету. Қызметкерлердің көп болуы жоғары кірістермен байланысты.

Түйін сөздер: адами капитал, қаржылық тұрақтылық, қызметкерлер, тағылымдамадан өтушілер, салым, нәтиже.

ВЛИЯНИЕ ИНВЕСТИЦИЙ В ЧЕЛОВЕЧЕСКИЙ КАПИТАЛ НА ФИНАНСОВУЮ УСТОЙЧИВОСТЬ КОМПАНИИ

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АННОТАЦИЯ

Цель исследования заключается в определении влияния инвестиций в человеческий капитал на финансовое состояние крупнейших частных компаний Республики Казахстан, а также разработке рекомендаций для компаний по созданию лучших финансовых стимулов для сотрудников.

Методология исследования – использовались панельные данные десяти компаний за 2022 год. Анализ данных включает переменные, такие как количество сотрудников, размер компании, выручка, обучение, квалификация и другие подобные курсы, предоставленные компаниями.

Оригинальность / ценность исследования – существует множество исследований, анализирующих, как сотрудники влияют на компанию, однако большинство из них имеют качественный характер исследования. Авторы, в свою очередь, применяют количественное моделирование и анализируют крупные компании в Казахстане.

Результаты. Наши результаты показывают, что количество сотрудников имеет статистически значимый положительный влияние на выручку. Большее количество сотрудников ассоциируется с более высокой выручкой.

Ключевые слова: человеческий капитал, финансовая устойчивость, сотрудники, стажеры, вклад, результат.

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