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LABOR COST OPTIMIZATION THROUGH GEOGRAPHIC ARBITRAGE

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Abstract: Labor costs are in European companies one of the largest block of expenditures. With ever-increasing minimum wages in many European countries, it is necessary to find cost-optimization solutions that do not put employees at a disadvantage but still help the company advance. The present article analyses labor costs in Europe and the effects of minimum wage laws, while also highlighting the paradigm shift toward home office considering the Covid-19 pandemic restrictions. The case study analyses the costs of personnel leasing in Georgia and the costs of employment through an employer of record in Bulgaria against the costs incurred by the enlistment of the same employee in Germany, showing that the two analyzed options bear notable advantages for all involved stakeholders, especially against the background of the recent increase in minimum wage in Germany.

Keywords: geographic arbitrage, labor cost, personnel leasing, outsourcing, cost optimization

1 INTRODUCTION AND RESEARCH METHODOLOGY

Profitable businesses have always followed a simple, but successful motto: maximize revenue while minimizing costs. And while the strategies for maximizing the intake are highly dependent on the company's industry and sector of operation, cost reductions are usually conducted in the same manner: by identifying cost categories with optimization potential and finding the superior alternative. These could be fixed costs such as rental costs for the office spaces, insurance costs or software subscriptions, or variable costs like travel expenses.

For example, insurance or software costs can be reduced by negotiating better rates with current suppliers or hiring another provider. Travel expenses can be reduced through different means: through a general reduction of the number of travels (if the company should replace some on-site meetings with online appointments) or by optimizing the travel costs for the trips that are unavoidable. To this avail, all cost components must be considered, be it accommodation, transportation, or protocol costs.

Other tactics are needed when cost reduction is aimed at the production process. Here every cost reduction must be carefully considered, planned, and implemented, as in this case every change can also have negative results on the revenue of the company. If, for example, management decides to cut costs by purchasing inferior raw materials, this would probably affect the quality of the company’s products negatively. A strategic approach – such as the PDCA (Plan-Do-Check-Act with the variation Plan-Do-Check-Adjust) cycle – is the better option – as shown in several studies: (Amaral et al., 2022), (Kurnia et al., 2022) or (Chen et al., 2022).

Cost reductions are an important instrument for the management of a company: not only do they raise the economic profit, but they allow the firm to invest (e.g., in new technologies or in marketing to acquire new customers), thus laying the foundation for further development and financial growth.

This paper examines options for labor cost reductions of a company through geographic arbitrage. To do so, we employed a quantitative research methodology in order to establish the costs incurred by a German small business when hiring an assistant to be tasked with basic tasks in Germany, Bulgaria (as the EU nation with the lowest hourly labor costs), and outside the EU (in Georgia). In addition, we conducted an interview with a Georgian personnel leasing company to establish the feasibility of hiring German-speaking staff in the Georgian space and to determine the necessary wage level to be paid for a suitable candidate, as Georgia does not have a legally enforced minimum wage. We also analyzed the procedure for selecting a suitable applicant to gain a better understanding of the company's ability to ensure that the assigned activities are completed with the same level of proficiency expected from an employee on the firm's home market.

2 LITERATURE REVIEW

One of the main cost categories of any company is the total labor costs – these can be defined as “the total expenditure borne by employers to employ staff” (Eurostat, 2022) and include the wages and salaries of personnel on the one hand and all taxes and contributions (non-wage components) on the other. However, it is important to note that labor costs can be safely approximated at 30% of the total costs of the respective economy, as shown in (Beran, 2018). In addition to the recruitment of native workers, companies also use recruiting among the migrant population and outsourcing as other successful instruments.

Immigration has been a valuable source of human resources input for companies over the years. While usually immigration takes place from developing towards developed countries, there are of course also inverse cases – see (Hayes, 2014). Also notable is the effect immigration has on the native population: natives tend to migrate to safer jobs (Dillender & McInerney, 2020) and upgrade their skills through higher education (Hunt, 2017), thus creating new recruitment opportunities for hiring companies.

Outsourcing is among the common reactions of firms seeking to optimize labor costs and is a useful tool against the scarcity of competent personnel. Outsourcing can be defined as delegating non-core activities to external specialized providers. As a 2013 study (Kicova & Kramarova, 2013) shows, in the beginnings of the outsourcing concept, only peripheral activities of a company (such as cleaning or security) were delegated outside its own ranks. Today, companies resort to outsourcing for many non-core activities, sometimes even for parts of the core activities (depending on the firm’s field of activity).

The majority of articles recognize two main factors in the motivation of outsourcing and/or geographic arbitrage: lower costs incurred for highly skilled individuals (Mahnke et al., 2008; Pfannenstein & Tsai, 2004; Vagadia, 2012). This is confirmed by the market: A study conducted by PriceWaterhouseCoopers (PwC) in 2008 concluded that 76% of companies use outsourcing as a cost-cutting instrument, while the next most given argument was the simplified access to specialized skills not available in-house (PriceWaterhouseCoopers, 2008). While the first argument surely still holds, nowadays it is not only specialized tasks that are assigned externally.

The minimum wage imposed in some developed countries, as a major impact factor in the cost structure of businesses, has been extensively treated in the relevant literature. Our research has identified both articles regarding the effect of the minimum wage on workers and articles highlighting the consequences for the companies.

Back in 2015 when Germany first introduced a minimum wage, approximately 5 million employees were directly affected (Lesch et al., 2014) - however, this led only to higher hourly labor costs, without it also meaning higher monthly wages for the employees or higher total costs for the companies, as there was a concurrent reduction in the total number of working hours (Caliendo et al., 2022). As one of the grounds for instituting the minimum wage, the German government mentioned the battle against poverty – this instrument does not seem to be effective to this avail, as people directly affected by the minimum wage increase are dispersed over the income distribution, as opposed to largely residing in low-income households (Backhaus & Müller, 2022). Another study has concluded that minimum wage inhibits employment growth over several years (Meer & West, 2016) – thus being a detrimental political instrument regarding unemployment rates in a country. However, the implementation of a minimum wage level in a country usually reaches its primary goal of minimizing the wage gap between men and women (Caliendo & Wittbrodt, 2022; Ferraro et al., 2018)

Several papers analyze the effects of minimum wage on companies. For example, a new study suggests that the imposition of a minimum wage harms the financial health of small firms in countries where it is implemented (Chava et al., 2023). Unfortunately, this raises the incidence of subminimum employee compensation, a form of wage theft, in certain instances (Clemens & Strain, 2022).

In developed nations, tasks that do not necessarily require a high level of technical expertise, but are labor-intensive are also frequently delegated. This has resulted in a new business model: companies based abroad have specialized in hiring virtual assistants with various skills for companies from developed countries and then leasing them to the paying customer. This concept has been discussed in papers - see (Mahnke et al., 2008) as a reference.

As taxes and contributions differ from country to country, there is a broad spectrum of absolute values for total labor costs in the EU. These range from as low as € 7 in Bulgaria to nearly 47 € in Denmark. (Eurostat, 2022) There is no direct correlation between the hourly labor costs and the non-wage percentage – as Ireland for instance has non-wage costs amounting to just 8,7% and still has higher hourly labor costs as Italy with non-wage costs of 28,3%. As a side note: Romania is one of the countries where the direct correlation is given: the low hourly labor costs (about €8,5) are reflected in the low non-wage costs of just 4,9%.

Most of the countries in Europe enforce a minimum wage. While in most cases, an enforced minimum wage leads to generally higher hourly labor costs, the opposite does not apply. All countries which do not have a minimum wage policy now (Iceland, Norway, Sweden, Denmark, Austria, Finland, and Italy – see (Wikipedia, 2023)), still find themselves in the upper part of the ranking by hourly labor costs.

3 CASE STUDY – LABOR COST ARBITRAGE

In 2022, the minimum wage in Germany increased significantly, by 25% from 9,60€ to 12€ (Deutscher Gewerkschaftsbund, 2022). In June 2022, a survey of 6,900 companies on the planned response to this increased minimum wage revealed that most companies wanted to pass these costs on to customers by increasing the selling prices of the products offered. However, more than 21% of the respondents wanted to reduce investments, while 18% had decided to decrease the number of hours worked by their personnel. 12% of companies could also envision reducing the total number of employees, while 18% of them would have to cut costs by not offering bonus payments (ifo Institut, 2022). These numbers clearly show that there is a rising preoccupation in firms with managing labor costs – as these directly impact the profit margin.

Another important factor in this avail is the rising rate of employees working from home. With the world coming to a complete halt in 2020 with the start of the Corona pandemic, many companies had to rethink their processes so that they were functional even with personnel not physically working together any longer. In 2021, approximately one quarter of German workers were working predominantly or exclusively in the home office (Hans-Böckler-Stiftung, 2021). A valid question is whether this development in the home office has also led to a decrease in productivity. This does not seem to be the case, as studies reveal that employees working from home achieved results comparable to those working in individual offices, and even greater compared to those in open-plan offices (Aidla et al., 2022).

The paradigm shift regarding working from home has also brought monetary benefits for the employer. While the wage and nonwage costs remain constant, the company can obtain a positive financial effect on usage-based costs such as heating, water, or power. Other potential savings are a decrease in the frequency of office cleaning or lower travel and/or protocol expenses through the replacement of in-person appointments with online meetings.

For the case study in this paper, we have chosen the next scenario: a company in Germany requires an assistant for basic tasks, such as email communication with clients, data processing or research via the Internet. The requirements are good knowledge of the German language and basic knowledge of the English language (both written and spoken), knowledge of data processing programs (for instance, Microsoft Word and Microsoft Excel). It is easy to see that these tasks can be successfully managed at the company's headquarters or at the home office. According to the job description, the monthly workload is eighty hours. To form a comparative basis, we assumed that a suitable employee with the necessary language and technical skills can be hired for the minimum wage in the respective countries to be investigated.

The first option is to employ a German resident. With the minimum wage increasing to 12 € per hour in 2022, this places the monthly wage of the German employee at 960 €. The nonwage costs of the employer for employees residing in Germany include pension insurance (9.3%), health insurance (approximately 8% depending on the additional contribution required by the individual health insurance company), long-term care insurance (1.525%), unemployment insurance (1.2%), as well as the surcharge procedure U1 (2,2% on average, only for companies with fewer than 30 employees, to compensate for expenses with sick leaves) and U2 (0,47%, compensation for expenses with maternity leave). This amounts to 22,7% non-wage costs incurred, leading to a total monthly cost of 1177,92€.

The next option in our analysis is the employment of the assistant in Bulgaria– the country in the EU with the lowest labor costs per hour according to Eurostat. As the small German company does not have a branch office in Bulgaria, employment can only be realized if a personnel leasing firm is involved or if an employer of record is contracted. As the legal employer of the workers, the employer of record assumes all administrative responsibilities related to the employment relationship, such as the social insurance registration of the worker and the payment of the salary. For countries in the EU, the costs for an employer of record amount to about 250€ per month.

Bulgaria's minimum hourly wage is 4,72 BGN, which leads to a monthly salary of 378 BGN for the employee (Bulgarian Lev, approximately 195€). The non-wage costs of the employer for employees in Bulgaria are approximately 19% (health insurance, pension, unemployment, maternity, supplementary pension, labor accident insurance). Adding the administrative costs for the employer of record brings the total costs for this solution to 482,05€.

The third solution to be taken into consideration is the outsourcing outside the European Union. As the company needs someone who speaks fluent German, it cannot resort to one of the usual reasonably priced providers in China or the Philippines, as these companies cannot usually satisfy the language requirement. There are, however, specialized personnel leasing companies in countries such as Georgia or Armenia, which can recruit suitable candidates. Georgia has, for instance, no minimum wage and an extremely favourable taxation with just 2% non-wage components for the company (pension contribution). The employee must also contribute 2% to the pension fund and pay a flat income tax of 20% on his gains.

Our findings from an interview conducted with a Georgian personnel leasing company were that the minimum level of wage required for a suitable candidate is the equivalent in Georgian lari (GEL) of 4,00€ per hour or 320€ per month with 185€ per month leasing costs of the Georgian lessor. Non-wage costs of only 2% (6,40€) apply, leading to a total of 511,40€. The leasing cost includes administrative costs, payroll accounting costs and the costs of currency conversion from € to GEL. The lessor pays the monthly agreed salary to the Georgian employee, after its invoice has been paid by the lessee, while only retaining the lease tax mentioned before of 185 €.

The Georgian personnel leasing company provides a list of suitable candidates that match the required profile, in this case with German and English language skills and with basic IT skills. From this list, the German client company selects the candidates who should be interviewed. The interviews then take place online or, if required by the client, in person in Georgia. This essentially provides the same opportunities as conducting an interview in Germany with a native employee; the employer can thus ensure that the candidate possesses the appropriate language and technical skills.

Figure 1 shows a comparison between the monthly labor costs incurred by the company with an employee residing in Germany, with an employee working in Bulgaria through an employer of record and with an employee residing and working from Georgia and being leased through a specialized temporary agency. The arbitrage gain is also highlighted (in yellow color) for the second and third options analyzed.

The difference in costs between the employment in Germany (including all taxes) and the personnel leasing in Bulgaria (including wage, nonwage and leasing tax) is 695,87€ per month, while the cost reduction compared to the employment in Georgia is 666,52€ – this is the arbitrage gain of the small German company in our case study. The arbitrage gain is slightly higher in the case of the Bulgarian employee - however, in this case the finding of a suitable candidate with regard to language skills at a minimum wage level is not guaranteed, as opposed to the employment in Germany (native speaker) or in Georgia (recruitment through lessor in accordance with the requested profile).

If the performance of the leased Georgian employee is inadequate, there is a convenient option to terminate the contract with a 14-day notice period - in this case, the personnel leasing firm will submit additional, already screened CVs that have been deemed suitable. In Bulgaria, the notice period is usually 30 days long; however, in the EU there are legal hurdles with regard to justifying a termination that must be observed.

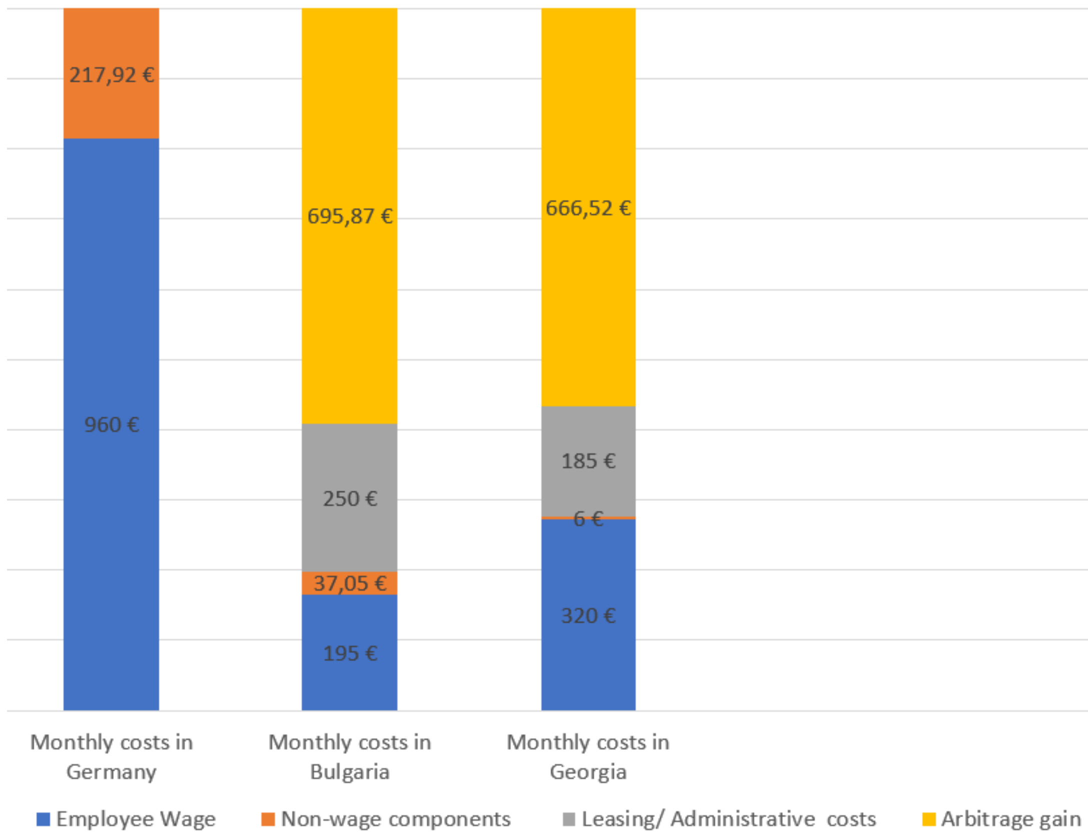

Figure 1. Arbitrage gain – Employment in Germany vs personnel leasing in Georgia

4 CONCLUSIONS

The case study in this paper shows that hourly or monthly labor costs can be managed by European companies not only by reducing work hours or cutting the incentive payments of the employees, but also by delegating basic, time-consuming tasks from the local personnel to employees abroad, residing in countries with lower fiscality. This solution can mean a reduction of labor costs through arbitrage gain of up to 60%. If the solution is implemented consistently to eligible entry-level positions in the company of interest, it has a measurable beneficial impact on the company's annual financial statements, allowing for additional investments that can lead to economic growth and, by extension, the creation of new jobs.

A legitimate concern is the quality of the recruited employees outside the company's native market. As the candidates are being recruited according to the employer's criteria and the employer conducts the interviews, there should ultimately be no difference in the subsequent quality of work of foreign employees. With higher requirements for the applicant, the risk of not finding a suitable candidate also increases, and it becomes essential to evaluate the applicant's quality more thoroughly by using a variety of methods available (such as trial work, simulation game, or a relevant case study - depending on the particularities of the job) in order to confirm a level of quality comparable to that of a native applicant.

The primary benefit for the German organization in our case study is the cost optimization achieved while activities continue to be satisfactorily completed. In contrast to the classical outsourcing to an independent contractor, with personnel leasing or the hiring through an employer of record in another European country, the communication and relationship with the employee is more direct and familiar.

From an ethical point of view, this option presents advantages to employees in Bulgaria or Georgia, who are being paid a wage higher than the usual salary in their countries, while still retaining the residency and lower living expenses. For the internal employees, this strategy means a refinement of the field of action without reducing their hours (and their income implicitly) so that the available working time is devoted to fulfilling meaningful, relevant tasks, which require either an on-site presence (thus rendering the option of virtual work from abroad impossible) or special knowledge, skills, or experience. The company profits from this reprioritization of tasks directly, as internal employees can focus on their (perhaps strategically extended) core tasks, thus creating economic growth.

While it may appear that the employment of workers outside of the home market can be detrimental to the native workers, we believe that the situation is analogous to that of migrants occupying jobs from which the native employees evolve to more complex jobs that offer them the potential for higher earnings; this ultimately benefits the international and native workforce in a company alike.

In conclusion, the options presented are valid alternatives for cost reduction decisions in European companies affected by continuous minimum wage adjustments, as they do not negatively affect the firm's own trusted long-term employees, while bringing considerable financial advantages to the business. In the pursuit of cost reduction, the evaluated solutions will become standard operating procedures for businesses, in our opinion.

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