

Louvain School of Management

What are the most significant effects of the Employee Stock Option Plan (ESOP) on the Belgian entrepreneurial landscape?

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Introduction

Have you already heard of the success story of Facebook, now renamed Meta? During his college years at the world-renowned Harvard University, Mark Zuckerberg developed his company and founded Facebook in 2004 (Sraders, 2018). Being a high-tech startup growing in the new social network industry, the founder created an equity plan to reward the early believers due to the lack of financial resources. As it evolved, Zuckerberg continued giving away some equity to retain key employees, as well as to attract rockstars to make Facebook the great success it is today. Although at times they decided to distribute only to managers and above, equity has continued to be a key point in the compensation package (Daily Mail Reporter, 2011). When Facebook decided to go public on May 18th 2012 (Sraders, 2018), the small startup turned into an American giant created around 1.000 millionaires. Several Facebook employees woke up on that very day and realized that they were millionaires owing to their implication and involvement in this social network journey (Daily Mail Reporter, 2011). While this story may seem farfetched and almost too good to be true, it is not the only one. In 2007, it has been estimated that Google created over 1.000 employees holding more than \$5 million each through their participation in employee stock options (Murphy, 2021).

This employee participation in an equity plan is an attractive remuneration scheme developed in the United States of America (U.S.), and more specifically in the Silicon Valley area – the hotspot for high-tech companies (Startup Genome & Global Entrepreneurship Network, 2021, p. 192). In the U.S., it was estimated that two-thirds of team members working for fast-growing startups were held equity in 2018 (Clarke, 2018). Hiring people willing to create value in a specific startup and ready to take the risks of the entrepreneurial journey, are the employees who would make the difference in the venture. Therefore, the employee stock options plan (ESOP) is a way to create a certain corporate culture through the feeling of ownership. Indeed, experts are even referring to the concept as a new business model (Clarke, 2018).

As with many American innovations, this scheme has been exported worldwide. Although the “hype” around European success stories is not as loud as that around American giants, some European firms are also sharing value with their employees. In 2021, Klarna, a Swedish FinTech company offering retailing services (Tepper, 2022), made over 75 employees millionaires thanks to equity sharing. Furthermore, most of the employees have already founded

their startups in order to boost the national entrepreneurial ecosystem (Woodford & Billing, 2021).

Nevertheless, a large discrepancy in terms of scope between the U.S. and the European continent must be noted and may lead us to wonder whether it is the culture that plays a major role in the lack of awareness and the limited expansion in Europe. In the U.S., it was found that thanking people for their involvement and the value created due to their talents is part of the American culture. As a result, employees are savvier about stock options and talents are usually expected to be granted stock as part of their benefits package. In Europe, this award culture is not yet in place, and employees are not properly informed about the pros and cons of stock options and equity grants (Murphy, 2021).

As such, a major question can be raised about Europe, and more specifically Belgium. Where does this ESOP stand in the Belgian Entrepreneurial landscape? As mentioned earlier, there is a lack of knowledge about this plan. Firstly, the law framing this scheme dates from 1999 (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999). Secondly, there are no official figures regarding the number of ESOP in the country, which leads to a lack of promotion and visibility. Accordingly, this Master thesis will attempt to assess the added value behind this strategy through the following question: *What are the most significant impacts of the Employee Stock Option Plan on the Belgian entrepreneurial landscape?*

In order to acknowledge the sheer depth of the research question, the paper is divided into three sections. Firstly, the theoretical framework reviews the different concepts around the ESOP as well as the genesis from the US to its expansion in Europe. In addition, a full dive into Belgium is provided to appreciate the current taxation and the entrepreneurial environment of the country. Lastly, a literature review provides an overview of the discussions that have been built up over the past decades. Secondly, the practical section consists of a quantitative and qualitative studies. Both methods were used to balance the scientific figures with the reality of the professional field to obtain a comprehensive picture. Thirdly, this paper concludes with the main limitations faced during this year of research and some findings suggesting potential future scopes of research fields in the Belgian startup ecosystem.

PART I: Theoretical framework

Chapter 1: General approach to the Employee Stock Option Plan

Section 1: General principles

1.1. Definitions

Through years of study in the HR field, several remuneration methods have been developed to satisfy human needs, such as salaries, bonuses, flexible packages of rewards, and stock options (Z. Zhang, 2009, p. 209). Recently, an innovative method of sharing company wealth with employees has been identified and is named the Employee Stock Option Plan (ESOP) (Balderton Capital, 2017). As its name suggests, the company creates a pool of stock options dedicated to employees in order to retain them within the company and/or to reward them for their involvement in the long-term value creation (PWC, 2020).

With the booming of startups in Silicon Valley (Startup Genome & Global Entrepreneurship Network, 2021, p. 192) and the development of an entrepreneurial ecosystem around the world (Startup Genome & Global Entrepreneurship Network, 2021, p. 14), this ESOP concept has started to be exceedingly popular among startups. Consequently, some major consulting groups, known as the Big Four, have started to scrutinize this principle (Deloitte, n.d.; KPMG, 2019; PWC, 2020). In addition, some guides have also been created to provide definitions and some guidance in order to give a first overview of the purposes and, also the specific legislation applied to this project (Balderton, Capital, 2017; ACCION, 2018).

On Deloitte's web page, these profit-sharing strategies are defined as "*employee benefit plans that enable participating employees to accrue a beneficial interest in the equity ownership of their companies over time*" (n.d.). In 2019, KMPG published a SharePoint that synthetically characterized the employee stock options as a "*security-based compensation*". Furthermore, the full definition reads "*option of owning shares without having to contribute capital to the company*". Lastly, PWC published a guide on US stock-based compensation in September 2020 and wrote that "*An employee stock ownership plan is a qualified stock plan, or a combination stock bonus and money purchase pension plan (essentially a defined contribution plan), that is designed to invest primarily in employer stock*" (PWC, 2020).

On the basis of these three generic definitions, two main characteristics can be highlighted to provide a first perspective on this employee-oriented program.

Firstly, it is a project designed by the company for its employees (PWC, 2020). The venture sets up a strategy to reward its workers, which comes on top of the traditional fixed salary. Although it creates some benefits for the company, the plan is entirely designed to add value to the team members (Deloitte, n.d.).

Secondly, it provides the opportunity for employees to own a share of the organization without investing money in the capital of the venture such as traditional shareholders (KPMG Enterprise, 2019). It induces that the employee has the right to turn stock options into actual shares at a fixed price – called *strike price* – at a potential significantly lower value than the actual share price (KPMG Enterprise, 2019). Clearly, once employees have converted the stock options into shares, they become real actors in the company's equity landscape with some specific conditions on voting right, usually unallocated (Balderton Capital, 2017).

1.2. The tool used behind the employee stock option

Behind this HR remuneration tool, there lies a whole financial scheme that enables the startup to link the venture's needs with employee benefits (Balderton Capital, 2017).

From the outset, several financial instruments can be traded to make a positive revenue on it. Behind the materialization of the deal through a real or virtual legal contract (Kenton, 2021), a choice has to be made between two different categories of financial instruments: cash and derivative instruments. The former fluctuates directly based on markets' behavior, the latter evolves in line with the vehicle's underlying components (i.e. assets, indices, or interest rates) (Kenton, 2021). In the case of the stock option, the instrument is a derivative because the financial value of the contract is immediately linked to an underlying asset, namely the venture's stock (Fernando, 2021). *In fine*, the employee stock option (ESO) functions in the same way as any option, except that it is directly related to the stock (Chen, 2022). For instance, it can be defined as “*An allocation of shares that will be granted to employees in the future in the form of stock options*” (ACCION, 2018). To elaborate further, the stock option is more precisely a call option as the employee has obtained the promise to buy a certain proportion of the stock at a fixed price after a certain period (Commission des Normes Comptables, 2012)

In summary, we can highlight some of the main features that have emerged from the concept of employees dedicated stock options.

First and foremost, it is an effective form of equity ownership (ACCION, 2018). Whilst the employer offers the opportunity to hold some stocks at a predefined price in the future, the worker might become an effective shareholder after a certain period (ACCION, 2018). This period is characterized by a cliff period and gradual vesting, where the employee does not instantly become a shareholder. This specific timeframe is crucial for the perennity of the plan as it ensures the involvement of the employee in company's mission (Balderton Capital, 2017). Moreover, it is also an easy way to get involved in the equity of a venture, as it is not as common as for listed companies (Giudici et al., 2020, pp. 31–35).

The second reason is that the contract is established at a predefined locked-in price at the grant day, which is commonly referred to as the strike price or exercise price (Balderton Capital, 2017). This is “*the price (determined at the time of grant) at which an employee can purchase the shares of the grant*” (Balderton Capital, 2017).

And thirdly, the concept revolves around the principle of right. Exercising the option when the vesting is complete is a real right, but not an obligation. In case the exercise price is higher than the current stock price, the employee has the right to refuse the offer. This situation implies that they would pay some extras for a venture that does not perform as expected, hence the refusal is understandable. Nonetheless, the acceptance can still occur if the laborer has a strong relationship with the venture or a feeling that good performances can be achieved and that he cannot let this opportunity pass (Brandes et al., 2003, p. 78).

1.3. Fundamentals behind the implementation of the ESOP

Implementing an ESOP inside a startup or a venture is not a short-term decision. Indeed, long-term thinking is required, and several concepts need to be discussed in depth as they will challenge parts of the business in the future.

1.3.1. Employee stock option pool

According to an ESOP guide called Balderton capital, an employee option pool is defined as “*the percentage of a company's total shares outstanding set aside to be offered to employees as a tool for recruitment and/or retention*” (Balderton Capital, 2017).

This pool is created at the implementation of the ESOP and will evolve over funding rounds to follow the company's strategic decisions (Brandes et al., 2003, p. 81). Due to potential growth, it is required to keep it under control to avoid giving an overly large share of the equity to employees. Consequently, some advice has been developed based on the funding rounds.

Between the seed and the series A – first round in early VC – the size should be around 7.5% to 10%, as it is the launch of the pool. For the next rounds, the pool should evolve around 9% to 12%, but keeping 7.5% unallocated for further expansions and strategic decisions (Balderton Capital, 2017). The latter is a way to keep a certain percentage for new comings and to attract talents while avoiding employees ending up with a larger chunk than expected (Balderton Capital, 2017). Lastly, the recommended percentage is about 12% to 15% during the series-c, and 15% thereafter. Subsequently, the unallocated pool should be represented by 5% (Balderton Capital, 2017). At that point, most of the employee stock options should be gone, inducing that the most valuables remain for an important purpose such as highly-desired talents (ACCION, 2018).

1.3.2. Appropriate periods to implement an ESOP

Since the employee stock option plan seems to be as much about attracting new talents as it is about keeping enthusiasm over the years, one main question can be raised: What is the ideal time to implement an ESOP? For this purpose, let us navigate through the different stages of business growth.

1.3.2.1. Pre-seed

The pre-seed stage is part of the “*Valley of Death*” where the outflows are massive compared to the inflows (Giudici et al., 2020, p. 29). Because of the critical financial situation and the nonexistence of a minimum viable product, banks do not usually invest in these projects, which is called credit rationing (Giudici et al., 2020, p. 313) Therefore, the fundings come from the 3Fs, namely founder, family, and friends (University Lab Partners, 2021).

Accordingly, the ACCION guide does not recommend already setting up an ESOP as it is time-consuming and, an important sanity check has to be done (2018). Firstly, the pre-seed round focuses mainly on tractions to launch a viable, desirable, and feasible product (Porch, 2019). This makes it complex to develop a full employee stock option plan without knowing the future scope of the venture. Secondly, as mentioned, a strong sanity check is required to avoid losing control of the company. By distributing shares to employees, the founder loses some power in case the stock options are linked with a voting right. This may start with a low percentage being given away, but it can end up with a pool growing faster than expected. The founder can rapidly lose power compared to the percentage allocated to the shareholders (Fattoum-Guedri et al., 2018, p. 3384). This mind-tension results in the founder dilemma, developed by Wasserman, standing between “*being rich or being the king?*” (2008). Due to the

uncertain ecosystem of startups, financial resources are necessary to make the concept evolve and conquer the competitive market. However, gaining money is directly related to the loss of power as issuing shares has a dilutive influence on the ownership ratio. This is where the dilemma lies (Wasserman, 2008). Back to the pre-seed stage, some equities are sometimes given on an ad hoc basis to reward the risk taken in joining a start-up. This is more of a way of thanking the employees involved without following the full scheme of an ESOP (ACCION, 2018).

1.3.2.2. Seed

The seed round is usually seen as the first official round of funding, as the pre-seed was aimed at people close to the founder. Now, a minimum viable product needs to be produced to convince potential external investors to join the adventure (Ruhnka & Young, 1987, pp. 171–172). At this stage, financial resources are devoted to marketing research and product development (University Lab Partners, 2021), but economic feasibility is still scrutinized with the elaboration of a comprehensive business plan (Ruhnka & Young, 1987, pp. 171–172).

External investors convinced by the concept will come forward and start investing in the venture, more often business angels (Giudici et al., 2020, p. 313). At this stage, the ACCION guide recommends that the founder develops an ESOP inside the company in order to attract talents, retain high-efficient employees and compensate those present since day one. Nevertheless, it is not an obligation, but it can be beneficial for the start-up as the dilution will be shared with seed investors, if shares were issued earlier (ACCION, 2018).

1.3.2.3. Second stage

Also called “start-up” or “early stage”, this cycle is dedicated to the sign of optimization of the young company (University Lab Partners, 2021). Ventures start to define the technological and economic feasibility of the product and also focus on beta testing to be ready to market (Ruhnka & Young, 1987, pp. 173–174).

In terms of financing, this second stage can be perceived as the series-A, where venture capitalists decide to invest in the start-up in exchange of preferred stocks to distinguish themselves from the rights of previous investors (Giudici et al., 2020, p. 32). Venture capitalists are significant players in the entrepreneurial ecosystem because they are professional investors and enjoy investing into risky projects. In addition to injecting money, they are also great advisors to make the concept thrive and provide an excellent network (Giudici et al., 2020, pp.

33-35). At this point, the ESOP will be needed if it is not already in place through to the seed round. Its creation will be a way to appease investors and also create a guideline for the size of options grants for new hires (ACCION, 2018).

1.3.2.4. Third stage

The third stage is usually related to a stage of net growth. However, the main conclusions are complicated to draw because not all companies are evolving at the same pace. Technology companies are usually thriving at a slower pace due to a burning high investment rate, whereas others are evolving rapidly due to the ease of product definition and beta testing (Giudici et al., 2020, p. 32). Moreover, the risks are now external-driven, as ventures are subject to the competitive market and need to develop a sustainable advantage to distinguish themselves (Ruhnka & Young, 1987, pp. 174–176).

At this point, the venture is finally producing some inflow of cash, although it does not induce a positive cash balance (Giudici et al., 2020, p. 32) due to outflows towards marketing, management, and manufacturing (Ruhnka & Young, 1987, pp. 174–176). In terms of ESOP, the project is usually already well-established in the company. Nonetheless, a standardized plan needs to be established to keep the percentage of shares allocated to employees under a certain level (ACCION, 2018). As the venture seeks to develop a sustainable advantage and employees are key for that (Collings & Mellahi, 2009, p. 2), the ESOP ought to run properly.

1.3.2.5. Growth

Growth refers to the continuation of the series before the maturity stage or the possible Initial Public Offering (IPO). Various names are used, such as expansion phase and pre-public. As with the previous phase, conclusions are difficult to draw because one venture's journey is very different from another due to the particularities developed to win the market. Globally, the growth stage is about significant sales and orders, as well as activities to broaden the market (Ruhnka & Young, 1987, pp. 176–178). It implies that the company is growing faster (University Lab Partners, 2021), and resources are crucial to keep it running even though the cash position is, in most cases, ultimately positive.

With regard to the ESOP, most of the shares have been distributed to valued employees. The leftovers are the most valuable and should be used for real added value for the company such as new highly-qualified hires (ACCION, 2018).

1.3.2.6. Conclusion

The implementation of an ESOP is highly correlated with the stage of the business, its funding, and its strategy. In essence, there is no perfect answer to the question because it is mainly a combination of multiple variables (Brandes et al., 2003, pp. 81–82).

Although the seed period seems to be the most efficient (ACCION, 2018), some considerations are necessary. Firstly, joining a startup at the seed level can be seen as a risk for employees. Quitting a stable job in a corporate for a riskier startup is a bet, and the ESOP is supposed to justify this choice (Balderton Capital, 2017). Secondly, establishing an ESOP early on implies that the financial dilution will be mainly supported by the founder and the potential business angles. By waiting longer before developing the ESOP, more actors would contribute to this financing, and a lower financial dilution will be faced by the early believers. Thus once again, it is a balance, in this case, between dilution carefulness and expansion (Fattoum-Guedri et al., 2018, pp. 3384–3386)

1.3.3. Company valuation

In order to successfully value each funding rounds, a complete business valuation is needed to assess the real financial value of the future shares. This process can be done based on two different concepts: pre-money and post-money valuation (Example provided in the *Appendix 1.1.*) (Colmant, 2020). The former evaluates the prior shares at the price of the current funding round, and the latter assesses the value of the whole business, i.e. old and new shares, at the price at which recent ones are sold (Berk & DeMarzo, 2017, p. 1124). The founders have to define which method they will use and stick to it, as it will differently impact the dilution of the whole shareholder base.

The creation of an ESOP on the condition of a pre-money method is also called investor's friendly. As it is demonstrated in the first part of the *Appendix 1.1.*, the value of the venture is based on the pre-money valuation minus the value of the pool shares. As the new shareholders enter the company at the same time as the ESOP is set up, they will not be impacted by the financial dilution (Majaski, 2020). The latter will only impact the previous shareholders and the founders. However, in many cases, the creation of an ESOP occurs right after the first funding round. It suggests that the founder may be the only one affected by the pre-money valuation, leading to a lower relative percentage for himself in the company's shares and no impact on these new investors (Majaski, 2020).

Conversely, the post-money valuation will have a different impact on both participants, previous and new money holders. As the new round impacts all actors, the dilution is smoother and supported by everyone. This is where comes the term “*founder’s friendly*” stems from (Majaski, 2020). In this case, the valuation of the venture is calculated based on the number of current shares added to the new ones issued. By taking the new equity ecosystem, the founder, the current and new shareholders will be impacted by the implementation of the ESOP as it will lead to a dilution for all in terms of relative percentage to create the employee stock pool (Majaski, 2020).

In addition to the consequences on actors based on the type of valuation, there are also some signals given depending on the evolution of the venture across rounds. If there is a positive evolution between the post-money of the last round and the pre-money of the next round, it implies that the company is making an up-round, whereas the negative difference leads to a down-round (Berk & DeMarzo, 2017, p. 869). First, it provides a piece of valuable information about the evolution of the company across rounds. Second, down-rounds can be detrimental for the venture due to some conditions in the term sheets, such as anti-dilution rights (Berk & DeMarzo, 2017, p. 869).

1.3.4. Strike price

The strike price reveals the price at which the employee is authorized to purchase the shares during the exercise period (Balderton Capital, 2017). The price is said to be locked, as it is defined on the grant day, even before the vesting. To lock this price, two different methods have been created depending on whether the stock is listed or not.

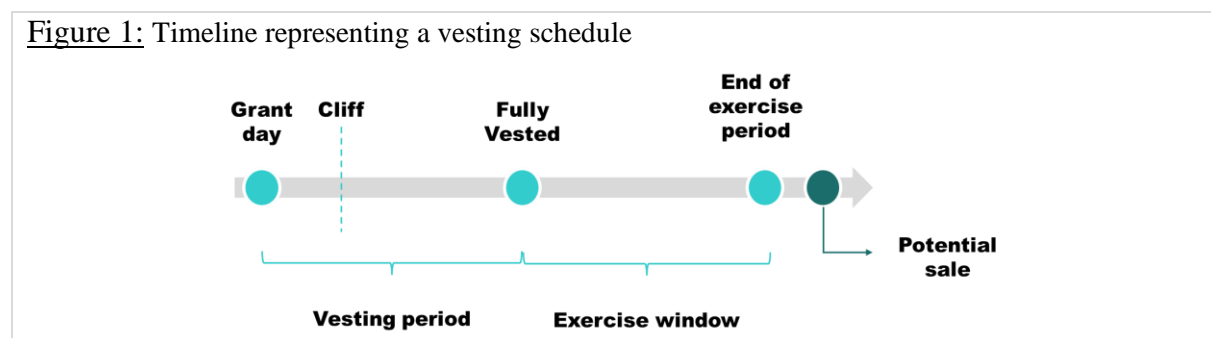
As a general rule, the strike price of listed companies is evaluated based on the average price of the stock 30 days before the granting of the last stock price on the previous closing day. If this option is not suitable, the founder can always use the last closing price of the day before the day of the offer (Donnay de Casteau et al., 2019, p. 27).

In the context of non-listed ventures, the alternative valuation is based on the real value of the share, determined by the person offering the employee stock options, and advised by the commissioner-auditor of the company issuing the shares. In the absence of an auditor, an appointed auditor or expert accountant may sell the deal (Donnay de Casteau et al., 2019, p. 27).

The main feature of the strike price is that it is set at a discounted price compared to any other share price. This reduced price can be explained by the type of shares offered. Employees usually get common stocks without voting rights whereas investors can enjoy preferred shares. The latter offers some special benefits to the holders such as special voting rights, seniority in case of liquidation, or even preferential dividends (Berk & DeMarzo, 2017, p. 1124). In opposition, the value reduction is explained under the concept of premium. The premium is the price difference between the offered reduced stock price and the current price during the exercise window (ACCION, 2018). Thus, one of the benefits of this scheme for the employees is this premium.

1.3.5. The vesting schedule

What makes the employee stock option plan effective is the delay between the offer of stock and the actual moment of exercising the right. This time difference is explained by the different steps the process is going through to fully deliver all benefits to employees and employers (ACCION, 2018).



Source: Balderton Capital, 2017

1.3.5.1. Grant day

Based on different motivations, the founder of a startup may decide to create an employee stock option plan. At this point, several parameters need to be set to fully initiate the process such as choosing the receivers, and whether to go for a broad-firm plan or only for exclusive employees to promote talents who can have a direct impact on the company's revenues (Brandes et al., 2003, pp. 81–83), and so on.

Once parameters are defined, the moment when the employee obtains the promise of exercising a stock option at a predefined price after a predefined period is called the grant day (Balderton Capital, 2017). This promise must be in writing in the sense of a legal contract that has to be signed by both parties. The employee has a delay of 60 days to accept or reject the

contract (Balderton Capital, 2017). This delay is a standard in the industry, and is the official period in the Belgian legal framework (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999). Once both parties have signed it, the deal is settled and the stock option is considered granted (Balderton Capital, 2017).

1.3.5.2. Vesting period

Following the grant day, there is a period over which the employee needs to wait before he can exercise the right and become an actual shareholder (Balderton Capital, 2017). This timelapse is a protection for the company, not for the employee. As the latter already receives a benefit from the company, the founder needs to mitigate the risk of any departure within a short period (ACCION, 2018). If the vesting period did not exist, the employee would directly become a shareholder with no loyalty towards the company on the sole condition that he pays to convert the stock options into actual shares. It could be damaging as these workers would take the benefits from the ESOP without adding any positive value to the organization. Alongside this idea of retention, a vesting period is also crucial to incentivize laborers in their daily work and, hence increase the value of the company which would have a direct positive impact at the moment of exercise (Brandes et al., 2003, p. 86). This protection method is composed of two phases: the cliff period and the gradual vesting.

Generally, the standard vesting period is over 4 years, but there is usually a window from 3 to 5 years (ACCION, 2018). This is not a time requirement, but simply a benchmark in comparison with the average. These years are the delay to expand the company's revenues, and therefore the stock price would create a premium which would make the employee exert his right.

1.3.5.3. Cliff

Although the vesting period is designed to protect the employer, there is an additional component before vesting, called the cliff. During this first period, no vesting occurs, and it usually lasts for one to two years. Even if the employees are performing very well or the company's revenues are above expectations, there is no way that employees can enjoy part of the stock options. As noted above, it is a way to protect the company (ACCION, 2018). At this point, if the employee decides to leave the company, nothing will be vested. In an alternative scenario, if the employer decides to fire him, again nothing will be given. For the latter, there is a question of ethics that can pop up (ACCION, 2018).

1.3.5.4. Vesting period after the cliff

Once the cliff is passed, the employee will start to receive stock options gradually. Only after the whole exercise period, he or she will receive the full amount promised by the employer. However, the situation is not entirely black and white. After the cliff, a percentage of the pool will be distributed to the employee to encourage them in their effort. Each year, the percentage will increase until the full vesting, on a linear or non-linear basis (ACCION, 2018). At that point, if the employee decides to resign, he will receive the certain acquired percentage. The vesting basis can be monthly or yearly, depending on the terms of the contract (ACCION, 2018).

1.3.5.5. Exercise window

Once the vesting is over, it is concluded with the potential exercise period. During this time, the grantee gets the right to exercise the stock option at the strike price predefined on the grant day (Balderton Capital, 2017). It is important to note that the exercise does not need to occur directly after the vesting period. The employee can wait a certain time before exercising his right (Balderton Capital, 2017). For instance, if the current stock price is lower than the strike price, the employee may wait until there is an increase in stock value to be sure to enjoy a premium while exercising. At the end of the exercise window, the employee has to decide whether to exercise his right or not. If the company is still not performing well, he can refuse or exercise anyway to avoid losing his right, but also to show support and belief in a more positive future for the company (Balderton Capital, 2017).

Regarding the length of the period, it is predefined in the contract (Balderton Capital, 2017) and is usually over 10 years. In Belgium, the general rule is about 10 years in order to have the opportunity to enjoy the tax benefits offered by the Authorities (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999).

With the respect to an employee who desires to leave the venture after the vesting, they must exercise all vested stock options in a certain exercise timelapse. Typically, this window is estimated at 90 days in the industry standards, but it depends on the terms of the contract (Balderton Capital, 2017). This resumes in an appropriate time for both, employee and employer. The former has enough time to exercise his right based on the stock price fluctuations across months, while the latter can estimate a reasonable expiry date. Moreover, the employer has also the ability to start hiring new people, and is able to reconsider taking back expired options into the employee stock option pool (Balderton Capital, 2017). Keep in mind that this timing is a standard in the industry. A shorter time can seem unethical for employees leaving

the company, whereas a longer window creates uncertainties for the venture's owners concerning unexercised stock options (Balderton Capital, 2017).

1.3.5.6. After the exercise period

Once the employee becomes the owner of a company's equities, he has the right to keep the shares or to sell them. Therefore, the post-exercise period can be very short – directly reselling the shares – or longer if he desires to hold (Balderton Capital, 2017). For this purpose, two different schools are competing against each other: the impacts of the Black-Scholes model and the diversification principle.

Several models have been invented to value options in order to help investors make the right decisions in a constantly changing environment. In 1973, a famous model was published and that modified the perception of pricing in modern financial theory (Hayes, 2021). The Black-Scholes-Merton model was a new way to value an option by taking into account five factors: strike price, current stock price, time to expiration, risk-free rate, and volatility (Hayes, 2021). However, some strong assumptions are enforced, such as the necessity of European options¹ and the no-dividend policy. Behind these various assumptions, the holding position assumption is based on the idea that the employee is the more rational person. Indeed, as rational person, the worker will make optimal decisions based on the available information and the timelapse (Copeland & Tufano, 2004). The model predicts that the value is supposed to keep rising over time, therefore the employee will not exercise his right until the very last day of the exercise period to extract the maximal gain (Black & Scholes, 1973, p. 646). From a psychological perspective, we can stand that the laborer is working for a company he believes in. Hence, the venture should keep growing overtimes and improving its profitability. This explains why he will hold the shares until the end of the exercise period; to capture the entire value of the stock options (Black & Scholes, 1973, p. 646).

In contrast, there is a key principle in finance named “*diversification*”. Before linking this concept with the ESOP, it is important to define some key principles. The notion of diversification involves different risks, namely the unique and systematic ones. The unique risk, also called firm-specific, idiosyncratic, and diversifiable risk is an independent risk directly related to the venture. For instance, if there is an event that is negatively impacting the company,

¹“The European options allow their holders to exercise the option only on the expiration date” (Berk and DeMarzo, 2017, p. 757) compared to the American options that “allow their holders to exercise the option on any date up to and including a final date called the expiration date” (Berk and DeMarzo, 2017, p. 757).

it will have a direct impact on its performance and/or its stock. It does not involve the whole market because it is directly associated with the company (Berk & DeMarzo, 2017, p. 370). On the other hand, there is a risk touching the entire market, which is called systematic, undiversifiable, and market risk. As the name suggests, the risk is not linked with a specific company anymore. When something happens, it will have a positive or negative impact on the whole industry (Berk & DeMarzo, 2017, p. 370).

The concept of diversification has emerged from these definitions. Mixing the earnings from different companies is a way to secure a portfolio and reduce risks. Indeed, by including different companies in the portfolio, the unique risk will decrease. The more diversified your portfolio is, the lower unique risk. Consequently, only the systematic risk remains. Uncorrelated stock is a way to weaken the risk taken in your investment (Berk & DeMarzo, 2017, p. 370).

It therefore seems logical that this school is opposed to the School of Black-Scholes-Merton. In fact, if the employee gets monthly revenues and shares from the same company, the diversification principle does not apply due to a high unique risk. Hence, the employee is taking some risks by betting his whole future capital on the same player. In practice, if the company goes bankrupt, the employee is losing his job, his monthly revenues, and any revenues from the shares (Freeman, 2007, p. 9). As a result, employees usually resell directly in order to build a more rational portfolio. The aim is to create a long-term return higher and decrease the risk, despite the fact that the risk zero does not exist (Segal, 2021).

Section 2: The purposes of the ESOP

2.1. Compensation

When launching a start-up, every founder starts by facing a challenging period called the “*Valley of Death*”. As the name suggest, the cash outflows are generally colossal as the founder has to deal with capital expenditures, pay back funds, start commercializing his products, and spend on marketing to build awareness. Consequently, even if inflows exist, they are so small that they cannot compensate for the outflows (Giudici et al., 2020, p. 28-29).

However, even when facing some financial issues with the “*Valley of Death*”, employees still need to be paid as well as debtors. Some financial sacrifices can be made by the founder, but not by the other people invested in the project. Accordingly, the founder faced with a dilemma: while there is a low percentage of company wealth dedicated to employees’ salaries as money is invested in the development of the new concept, salaries still need to be paid every month to motivate them. As a result, offering the opportunity to become a shareholder through a system of ESOP is a way to compensate for the lack of revenue. As a successful startup is supposed to exponentially grow in the future, the employee should enjoy a large compensation in the short and/or long-term future in addition to his monthly salary (Rachleff, 2013). Furthermore, this concept is also linked with the idea of early believers. As the first employees have taken risks to leave a current job and invest time into an unproven company, the opportunity to become a shareholder is a reward for the risk taken (Rachleff, 2013).

2.2. Recruiting rockstars

In 1997, McKinsey was the first company to coin the concept of “*War of Talent*”. Since then, the concept of talent has become a hot topic. Indeed, a whole practice has developed under the name of Talent Strategic Management. The aim is to offer certain advantages to attract and retain talents, as they are usually at the heart of the competitive advantage (Collings & Mellahi, 2009). Although attracting talent seems complex enough for any company, it becomes even more difficult for a startup as financial resources remain limited. Two main reasons can explain the issue: high risk-low compensation (ACCION, 2018).

Firstly, talents willing to work for a startup are exposed to a higher career risk than those who decide to be employed in a mature company. Consequently, some compensation needs to be developed to balance risks and benefits. This balance is represented by a negative correlation between both variables, as a startup is usually exposed to higher risks but future higher-growth

potential than mature companies. If the concept succeeds, the high-growth potential can lead to interesting yield from the company's stocks. Therefore, talents interested to work for a startup are taking more risks but should be rewarded financially more rapidly thanks to potential positive returns (Brandes et al., 2003, p. 85).

Secondly, the benefits package offered by a new venture cannot compete with those of multinationals. Consequently, offering an ESOP enables employers to attract some talents that they could not have been able to get into their teams. This strategy offsets the potential lower revenues by offering venture stocks (ACCION, 2018).

2.3. Retention

As the beginning of a company is usually linked with a lack of available liquidity, some employees may want to leave the company for better pay. Therefore, developing an ESOP is a way to incentivize them to remain within the company. Whilst the company's stock may not be worth millions at the beginning of the cycle, it may be worth more in several years' time due to a higher growth potential (Brandes et al., 2003, p. 85). This compensation allows the business to thank employees for their commitment at the beginning of the risky project, whereas sometimes there is not even a prototype. It is also a way to keep enthusiasm during the ups and downs of the venture journey (Balderton Capital, 2017).

In addition to the compensation for the lack of resources, the retention of talents is highly convenient thanks to an ESOP. As explained above, high-quality-knowledge employees are usually a core element of any sustainable competitive advantage, so it is determinant to keep them inside the venture (Z. Zhang, 2009, p. 215). Losing a good element is also linked with a potential influence on the upcoming expertise of competitors, and some additional costs of hiring. Indeed, the venture will need to spend money to replace the talent, but it is also a question of time and effort invested into recruiting sessions, vacancies for a certain period for the workstation, training sessions, and so on (Brandes et al., 2003, p. 82).

One method developed to keep talents as long as possible is vesting options over several years. It should increase the retention rate as employees will remain until the acquisition of all shares. Concretely, if there is a new contract for ESOP each year, employees will need to wait an additional year to have the opportunity to fully exercise their rights and will need to go each time through the cliff and vesting periods (ACCION, 2018).

2.4. Incentivizing and aligning incentives

Distributing stock options is also a way to increase employees' participation and involvement. As the employee participates in future profit-sharing, he needs to think about the business's holistic success (Rachleff, 2013). *In fine*, it will create some extra motivation as employees are now driven by an additional financial benefit. In conclusion, it is a way to align employees' behaviors with the long-term goals decided by the board of directors.

This situation can be illustrated by the "Agency" principle. A company is mainly composed of two groups of actors: employees and shareholders. Both can be characterized by opposite risk profiles. The former is more risk-averse as risky decisions can jeopardize employment and remuneration, whereas the latter seeks riskier strategies to improve the venture's revenues. If shareholders think that the company's performances are not meeting their expectations, they can always resell their shares and invest elsewhere. Therefore, offering the opportunity to become a shareholder while remaining employed is a good way to reconcile both ambitions (Brandes et al., 2003, p. 83).

In the same vein, Lawler developed the principle of "New Pay" in 1990. In reward management, "New Pay" is the creation of a culture of commitment thanks to a unification of the organization's objectives with those of the employees. Implicitly, it shows the necessity of cooperation and unified stakeholders in the current competitive environment. Ultimately, reward management is crucial to drive effort from both sides to achieve company's goals (Z. Zhang, 2009, p. 217).

2.5. Rewarding

As we are currently in an ever-changing and highly competitive environment, organizations are faced with the importance of establishing an efficient reward management system (Z. Zhang, 2009, p. 213). Compared to other rewards, the ESOP offers both extrinsic and intrinsic value, which is highly sought after. On the one hand, shares offer extrinsic value through the value that will be created in the future if the venture prospers exponentially. On the other hand, they give intrinsic value such as consideration and recognition. Offering the opportunity to participate in the ownership of the company during the early stages means that the founder truly believes in his employees and thinks that they are necessary for the future success of the organization. The sum of these two elements is essential according to Herzberg. Naturally, providing intrinsic value linked with financial compensation results in positive job satisfaction (Z. Zhang, 2009, pp. 211–212).

2.6. Create a company culture

Behind this plan lies the willingness to create a certain mentality within the venture. If the plan is offered regardless of performance or the position, it can help create a single, unified team (Balderton Capital, 2017).

This process can be explained thanks to a process theory called “*Equity Theory*”, developed by Adams in 1965. His study focused on the feeling of inequity regarding the pay in the organization. According to him, every employee generally compare himself to others, this is a common human behavior. If they feel an unfair treatment, it may result in a reduced cooperation, withdrawal, restricting output, and effort retention (Z. Zhang, 2009, p. 212). In conclusion, having a standardized plan creating fairness among employees seems to be beneficial for developing a company culture and motivating team members. It is important to stress the fact that giving shares to all employees does not mean that the distribution is equal in terms of percentage (Balderton Capital, 2017).

2.7. Positive taxation effects

Implementing an ESOP within a venture results in positive spillovers for both stakeholders, employees and employers. Around the world, taxation frameworks have been established in order to reduce taxation and encourage entrepreneurship (*Appendix 1.2.*). This has been done though to a reduced tax rate such as in Belgium (Loi relative au plan d’action belge pour l’emploi 1999 et portant des dispositions diverses, 1999), tax benefits for employers on National Insurance and income tax in the United Kingdom (Breeze, 2015), or even no taxation on the plan in case the startup never thrives for French companies (Rudelle, 2018).

Section 3: Criticism of the ESOP

3.1. Undiversified wealth for the recipient

Following the renowned financial concept of diversification previously explained in depth in the concepts section, the ESOP can negatively impact the portfolio of employees. Concretely, if the worker is putting all his eggs in the same basket, the diversification principle does not work anymore. Therefore, if the startup goes bankrupt, the holder loses both financial inflows, including salary and stock options (Brandes et al., 2003, p. 80).

3.2. Impact on employees' morale and commitment

Introducing employees to the shareholding, stock price and company performances can significantly influence their motivation and commitment. Although ESOP can positively impact commitment (Z. Zhang, 2009, p. 214), there are usually drawbacks to each argument.

Firstly, if the company is not doing well despite the staff's hard work, employees can feel discouraged. Moreover, it can create disputes among employees by trying to find the culprit for the low performance and the unpromised benefits (Brandes et al., 2003, p. 81).

Secondly, in a growth environment, it is advisable to give employee stock options to everyone as they directly impact the venture's performance. If employees can take responsibility and act strategically, broad-based options make most sense. However, if a selective distribution strategy is followed by the company, it can have a negative effect on employees' motivation. Indeed, employees may not feel rewarded for their efforts which may lead to less involvement in the future (Brandes et al., 2003, p. 81).

Thirdly, employees may feel more accountable to the business because of the offered stock options. After exercising this right, a new bond is created between the employee and the venture. Therefore, workers may be less likely to desire to leave the venture and seek another job, which can be harmful for employees' professional growth (Bryson & Freeman, 2019).

3.3. Falling stock price can negatively impact business's attraction

Attracting talents through the use of stock options seems to be the primary objective of this plan for startups due to their financial situation. As stated above, ESOP is a way to compensate for the risk taken and the low salary for the coming high-skilled employees (ACCION, 2018). However, this goal can lead to negative consequences. If the startup is going

through a rough patch with lackluster performance, no talent would agree to be employed in this new venture. The reason is that if the company is not doing well, employees may not be able to exercise their rights in the future as it is better to have a positive evolution to transform stocks into shares. Therefore, the ESOP is no longer a good attraction to potential future laborers in their remuneration package (Brandes et al., 2003, p. 81).

3.4. Negative impacts on the current shareholders

With the employee stock options, a major focus is on the workers. However, another category of stakeholders is affected by this scheme, the shareholders. By generating an ESOP, the company is issuing new shares and therefore the general stock pool increases as the number of shares rises for the same enterprise value. The consequence is a direct drop in the relative percentage of ownership (Berk & DeMarzo, 2017, p. 64).

The decrease in the percentage of ownership is illustrated by the principle of dilution. As the venture decides to implement an ESOP, it has to issue new shares. Forthwith, if the number of shares increases, the owners are owing a lower percentage of the venture. Consequently, the relative ownership declines for the previous shareholders.

Nonetheless, the principle can be split into two categories: financial and voting dilution. The financial dilution is the result of an increase in the number of shares based on the same venture's valuation. In order to generate of the same amount of cash flows, shareholders will have to distribute among a large number, meaning attributing a lower percentage per person (Berk & DeMarzo, 2017, p. 540). The second dilution is more about power. If all shares are linked with voting rights, shareholders will lose some power because they will not have as much relative percentage of voting right as before. However, if the common stock is not offering voting rights – which usually is the case with the ESOP (Balderton Capital, 2017) – shareholders will enjoy the same level of power while taking decisions. In conclusion, the addition of certain shareholders to the whole pool has different implications based on the type of shares given away (Brandes et al., 2003, pp. 80–81).

In addition to this concept, dilution can have a different impact on shareholders depending on the timing. Issuing stock options before or after fundraising has a completely different effect on the current shareholders. On the one hand, issuing before fundraising only impacts current shareholders and not new ones. Accordingly, the dilution will be higher in percentage. On the other hand, the dilution will have a larger extension if it is done after the fundraising because it will affect more people, meaning the current and new shareholders. The

dilution will touch more people, and so they will lose a lower percentage (Brandes et al., 2003, pp. 80–81).

3.5. Inequity between employees

Historically, stock options have been established as a complement to top management's salaries. It is a way to reward them as they are the ones taking strategic risks and responsibilities. However, the situation has evolved and it now affects many more employees though of broad-based plans (Brandes et al., 2003, pp. 84–85).

Together with Adam's "*Equity Theory*" developed in the company culture section, the conclusion states that a global distribution has more benefits for the entire company (Z. Zhang, 2009, p. 212). However, some still believe that the founder should only distribute to employees who excel, linked with talent management (Balderton Capital, 2017). This raises some debates between developing of a global culture and improving talent management.

3.6. Lack of liquidity

After exercising his right, the employee has ordinary shares in his hands. If one day he wishes to have more liquidity by selling those shares, this step can become an issue in the framework of startups. As young ventures are usually not on the stock exchange, it is complex for investors to leave the company on demand (Giudici et al., 2020, pp. 77–129). A liquidity event is therefore necessary to get rid of the shares.

In the case of a startup, those liquidity events are usually organized by the company, as the founder does not desire to open the doors of the venture to anybody. Firstly, there is the trade sale, which consists of negotiations between investors willing to go into the current shareholding, and the shareholders willing to take their money back. The incoming people could be other financial investors or even the founder himself who wants to grow its percentage of detention by buying back shares (Giudici et al., 2020, pp. 77–129). Secondly, at the end of the funding phases, the founder may engage in an IPO (Initial Public Offering). At that stage, the venture is going public and so shares can be easily traded in the stock exchange framework. From that point, shareholders are totally free to trade how they desire (Giudici et al., 2020, pp. 77–129). Nevertheless, as IPO happens at the end of the development, the employees joining the startup at the beginning of its journey may wait years before they are allowed to trade through the stock exchange. The only opportunity remains liquidity events, which depend entirely on the founder and the shareholders' mindset.

Chapter 2: The spread of the Employee Stock Option Plan

Section 1: The American perspective

1.1. The genesis

When one thinks about successful stories of ESOP creating millionaires, the examples of Google and Meta come directly to mind (Murphy, 2021). Both of these state-of-art companies decided to share their wealth with their employees, providing additional financial support for those early believers (Murphy, 2021).

Unsurprisingly the genesis of the ESOP is usually referred to in the United States of America, and more specifically in the region of Palo Alto in the well-known area of Silicon Valley. In 2002², a study revealed that Silicon Valley was a cluster of more than 22.000 high-tech firms, with around 500.000 employees (Adams, 2005, p. 30). This place rapidly became the first global hub for high-tech entrepreneurs, with the examples of Cisco Systems, Silicon Graphics, Sun Microsystems, Google, and even Yahoo! (Adams, 2005, p. 26) but also famous ones such as Apple, Alphabet Inc, Meta, and even HP Inc (Bloomberg Law & Fenwick, 2020). The early development of the entrepreneurial landscape at that place favored the high growth potential and the activities related to venture capitalists (Adams, 2005, p. 33), two main characteristics favorable to the establishment of an ESOP.

1.2. How did the U.S. become the best producer of startups?

According to a report written by Zuckerman in 2020, the US and China appear to be the place where there was the largest number of high-valued startups during the year 2020. In addition, the United States came sixth in the ranking of economies that make it easy of doing business with a score of 84 out of 100. In the scope of 190 economies, sixth place is impressive, especially since the leader, New Zealand, scored 86.8 out of 100, which is only a 2.8 difference out of 100 from the US (Zuckerman, 2020). Therefore, we could wonder how is it possible?

² Study realized by Junfu Zhang, and published by Policy Institute of California under the name “High-Tech Start-Ups and Industry Dynamics in Silicon Valley” in 2003. (J. Zhang, 2003)

1.2.1. The US entrepreneurial ecosystem

In order to have a more comprehensive picture of the U.S. economic ecosystem, we can dive into a well-known report called “Global Startup Ecosystem Report – GSER 2021”.

The first observation highlights that North America continues to dominate the Global Rankings by having 50% of the Top 30 ecosystems, way ahead of Asia (27%) and Europe (17%). Moreover, the U.S. leads the production of unicorns according to Crunchbase (Startup Genome & Global Entrepreneurship Network, 2021, p. 14,18).

Regarding thriving industries for early-stage startups and growing ventures, high-tech companies have been leading the path over the past five years (Agtech & New Food, Blockchain, Advanced Manufacturing & Robotics, AI & Big Data, FinTech) (Startup Genome & Global Entrepreneurship Network, 2021, p. 37-38).

Based on the two previous statements, there is no doubt that the hot spot is then located in Silicon Valley, rewarded the first place in the Global Startup Ecosystem Ranking. With an estimation of 40,000 startups and over 1000 VC firms, it is not surprising that it has once again been ranked first, followed by New York City and London. It has also been awarded the title of Pole Star for tech entrepreneurs. In 2021, it attracted more than a third of the US-based VC money during the first quarter of the year, according to Pitchbook (Startup Genome & Global Entrepreneurship Network, 2021, p. 14, 18). On top of the tremendous advantages brought by Stanford Universities and local communities, Silicon Valley also offers the best worldwide network for entrepreneurs, by attracting talents and other organizations like corporations and incubators from foreign governments. The combination of all these components makes it a vibrant ecosystem, enable to leverage startups through a strong community (Startup Genome & Global Entrepreneurship Network, 2021, p. 192).

1.2.2. The innovative character of the US

As mentioned above, large High-Tech multinationals have emerged from Silicon Valley, for example, Google and HP (Bloomberg Law & Fenwick, 2020). As a result, the innovative parameter seems to be a large pattern of the American continent itself. To prove this, we can refer to an index³ created in 2007 by the World Intellectual Property Organization

³ The index is computed based on seven criteria, which are composed of institutions, human capital, and research, infrastructure, market sophistication, business sophistication, knowledge and technology outputs, creative outputs (World Intellectual Property Organization, n.d.).

(WIPO) that ranks nations based on 80 indicators divided between education, politics, environment, infrastructure, and economy (World Intellectual Property Organization, n.d.).

Undoubtedly, the U.S. has been in the top 10 since the index's inception in 2007. They were even the world leader from 2007 to 2009. Subsequently, the nation lost some points and fell to the eleventh place in 2010 (Dutta & Insead, 2011). The country remained in the top 10 until 2018 and continued to climb level after level (Dutta et al., 2015). Since 2019, the US are staying in the third place with a score of 61.2 out of 100 and are dominating the world innovative landscape with two other European nations, Switzerland (66.5) and Sweden (63.1). In 2021, the United Kingdom comes fourth with 59.8, France eleventh with 55 and later Belgium with 49.2 out of 100 for the 22nd place (Soumitra et al., 2021).

1.3. The spread of the ESOP in the current US landscape

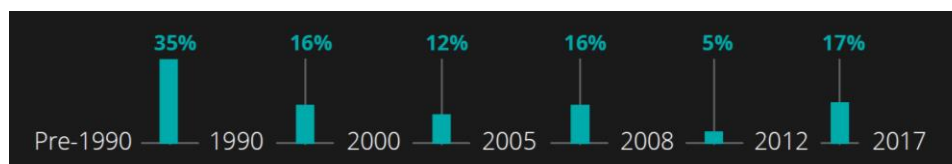
As the U.S. has been recognized as a startup-friendly ecosystem by the report GSRE (Startup Genome & Global Entrepreneurship Network, 2021) and has been considered an innovative world region for decades by the WIPO (Soumitra et al., 2021), it does not seem illogical that almost 7.000 employee stock option plans have been registered in the US in 2019. From this figure derives more than 14 million employees involved in this type of plan, and about \$1.4 trillion in assets (Deloitte, 2020). Although a slight decrease has been perceived in the number of plans since the beginning of the 21st century, there is a remarkable surge in the number of grantees (National Center for Employee Ownership, 2022)

Two main references will be used to understand the spread across the American continent: a survey conducted by Deloitte in 2019 concerning the Employee Stock Ownership Plan on 60 ESOP groups, and the stats made by the National Center for Employee Ownership on the spread of the plan across the country (NCEO, 2021).

First, Deloitte designed a graph representing the diffusion of ESOPs based on different timing range. Among the studied companies, one-third of the ESOP have been established pre-1990 and over half of them were created before the 21st century (Deloitte, 2020). The trend of implementing this type of compensation started over than 30 years ago, which is directly linked with the stats highlighted earlier on the development of high-tech companies at the end of the 20th century. Only 17% of the studied American ESOPs have been adopted after 2017, although it remains an increase compared to the year 2012 (5%) (Deloitte, 2020). In conclusion, even though 17% of 2017 composed half of the stats pre-1990, it remains a positive trend (Deloitte, 2020).

It is important to bear in mind that the pre-1990 period does not give any insight into its duration. Therefore, the 35% should be taken carefully due to the lack of time markers for the comparison.

Figure 2: Relative spread of the US ESOP across years



Source: Screenshot from Deloitte report, 2020

In contrast to the positive increase of 12% between 2012 and 2017 (Deloitte, 2020), the number of active US ESOPs appears to be more on a negative slope when looking more closely at the period between 2014 and 2019 (*Appendix n°1.3.*). There is a minimal insignificant average decrease of 0,71% between 2014 and 2019 (NCEO, 2021).

In addition to this global view, a sectorial perspective is needed to analyze if high-tech companies are really key players in the widespread of ESOPs. According to official data from the National Center of Employee Ownership (*Appendix n°1.4.*), the two leading industries offering ESOPs are manufacturing (21%) and professional/Scientific/Technic services (21%) (NCEO, 2021). Together they account for over 42% of the 6.482 active ESOPs in the US, meaning 2.722 ventures. In conclusion, it appears that, as expected, the services linked to technology companies are in the top 3 of the actual ESOPs in the States.

1.4. Conclusion on the US landscape

Putting the three sections studied above in perspective, a major link starts to emerge between startups, innovation, and ESOPs in the US framework. The U.S. has been elected as the top innovative country in the world for several years in a row by the WIPO organization (Soumitra et al., 2021). Moreover, the report “Global Startup Ecosystem Report” highlights the most promising sub-sectors for early-stage and growth companies, which directly refer to the distribution of the ESOPs into sectors (NCEO, 2021). Despite the non-significant reduction of ESOP during the period between 2012 and 2017, the ideal landscape seems to come from the United States with all these gathered components, explaining the development there and the lack of knowledge here (Murphy, 2021).

Section 2: From the US to Europe

For the reasons listed above, the U.S. appears as the father of the ESOP. After the creation of a law in 1974 to frame this scheme (The Menke Group, n.d.), the number of plans boomed and their diffusion over the world started. In order to visualize how the U.S. culture has influenced the creation of a new type of remuneration in Europe, a comparative table (*Appendix 1.5.*) was created between the U.S. and two European leading countries, namely France and the United Kingdom. Some major differences can be outlined.

First, the establishment of the American ESOP started mid-19th century with a law in 1974 (The Menke Group, n.d.) whereas the European framework is more recent with a legal framework established around the end of the 20th century (Collin, 2016; Wilson, 2013). This time difference can explain the low European knowledge about ESOP, but also the poor visibility in terms of figures (Murphy, 2021).

A second difference lies in the purpose behind the establishment. With the exception of the retain, reward, and motivate employees plan (Balderton Capital, 2017), the U.S. were looking for a system enabling a smooth ownership transition for the companies privately held (NCEO, 2021). In contrast, the European countries seek to promote and support entrepreneurship as the essence of the plan (Breeze, 2015; Collin, 2016). The latter point explains the stricter conditions established in Europe to avoid any abuses. Albeit the different conditions and methods of taxation, all three nations offer a beneficial framework for both stakeholders.

Thirdly, the American ESOP system is not a black box like the European countries (NCEO, 2021). This is linked with the transparent national framework advocated by the country, leading to a global developed culture around the employee stock options. This scheme is a standard in the American labor market because of their culture, while the situation is the complete opposite in Europe. European workers may not properly assess the value behind these financial instruments because of the lack of visibility created by the country (Murphy, 2021).

Although the US are known for their innovative qualities and their advanced entrepreneurial ecosystem, the United Kingdom ranks just behind the U.S. in terms of innovation at the 4th place, followed by France at the 11th place in 2021 (Soumitra et al., 2021, p. 4). Despite a time lag, Europe has evolved and has numerous opportunities in different fields to develop the entrepreneurial landscape and, perhaps, through the ESOP tool.

Section 3: The Belgian framework related to the ESOP

With the expansion of the employee stock options in Europe, Belgium was no exempt and the government therefore created a specific framework to regulate this new type of remuneration through the law of 1999 named “Loi relative au plan d’action belge pour l’emploi 1999 et portant des dispositions diverses”.

3.1. Definition of a stock option from a legal perspective

In Article 42 of the law of March 26th 1999, there is a highly detailed framework that highlights the different conditions for being recognized as a stock option.

Firstly, it is defined as a “benefit of any kind”. By definition, this is a benefit granted from a company to its employees and managers, meaning a professional income. In the case of the ESOP, it is materialized by stock options given to employees to attract, motivate and build loyalty with them (Donnay de Casteau et al., 2019, p. 23).

Secondly, the stock options must be directly or indirectly related to a professional activity. Indeed, the deal needs to be settled with any employee working for the company (Wynant, 2005). As for the type of company, it can be of any kind – even a non-profit association. Furthermore, the law also covers foreign companies employing people in a Belgian company (Donnay de Casteau et al., 2019, p. 24). In conclusion, many relationships can be hidden by this law because the real purpose is to allow employees to participate in the financial performance of any company (AvC, 2012).

Thirdly, several conditions must be met to seal the deal. Indeed, the employer must notify the employee by a contract including all specific information related to the employee stock option plan, such as the date of the offer, the strike price, conditions of acquisition of those stocks, and so on. The main information is defined in the individual or collective offer, and the specific ones can be written directly in the official employee stock option plan (Donnay de Casteau et al., 2019, p. 25). Regarding the timeframe, the employee has 60 days to accept the deal, and sign the paper. When both agree, the deal is considered settled and the stock option is allocated (Vandeveldt & Co, n.d.). If no response is submitted at the end of the 60 days period, the offer is considered rejected from a fiscal point of view (Donnay de Casteau et al., 2019, p. 26).

3.2. The Belgian entrepreneurial landscape

In addition to having a legal framework to define the stock options, it is important to have an entrepreneurial landscape that offers large opportunities to national startups. To assess the quality of this, we can take into account the report around the Global Startup Ecosystem – GSER 2021. There, we can observe the presence of two Belgian cities in the ranking of the top 10 emerging ecosystems (Startup Genome & Global Entrepreneurship Network, 2021, pp. 32–34). First, Brussels is ranked in the 12th place with a 9 in performance, 9 in funding, 10 in market reach but a low 6 in talent. Overall, this is an interesting place for the size of the city and the competition out there. The only black spot is represented by the level of talent. One may wonder whether the Belgian talents aspire to leave the country for some international positions. Most notably, from a European perspective, Brussels was ranked 6th place (Startup Genome & Global Entrepreneurship Network, 2021, pp. 32–34). The second Belgian city to appear in the ranking is Antwerpen in the range 71-80 (Startup Genome & Global Entrepreneurship Network, 2021, pp. 32–34).

Additionally, in the top 10 ecosystems of emerging leaders with total early-stage funding, Brussels appears once again in fifth place for an amount of \$777.6M. Above the city are Nanjing (China), Guangzhou (China), Zurich (Switzerland), and Mumbai (India). Brussels is therefore the first from the European Union (Startup Genome & Global Entrepreneurship Network, 2021, pp. 32–34).

In terms of its innovative side, Belgium is ranked in the 22nd place in the GII of 2021 (Soumitra et al., 2021, p. 53) according to the Global Innovation Index published in 2021. The country ranks well in terms of human capital and research (8th place), business sophistication (16th place) and knowledge and technology outputs (17th place). Where Belgium loses some points is in institutions (23rd place), infrastructures (35th place), market sophistication (33rd place), and creative outputs (36th place) (Soumitra et al., 2021, p. 53).

In conclusion, Belgium has achieved an interesting position in both rankings, GSER 2021 and the GII of 2021. Given the size of the country and its population, it seems that the country has some specific conditions relevant to the development of the entrepreneurial landscape. As it has been studied for the United States of America, innovation and startups are key to the development of an ESOP. Therefore, Belgium appears to have the perfect fertile ground for the development of this tool.

3.3. The Belgian black box around ESOP

Despite a well-detailed legislation in favor of employee stock options (Wynant, 2005) and an entrepreneurial landscape in development with already Brussels at the 12th place (Startup Genome & Global Entrepreneurship Network, 2021, pp. 32–34), the ESOP concept is not well-known by the population. This is due to a lack of promotion around this scheme by the Belgian government as well as a lack of official figures demonstrating the efficiency of this tool.

3.4. The fiscal framework of Belgian stock options

The Belgian taxation offered a clear and legal environment for the use of stock options following the conditions of article 43 (Wynant, 2005). It is also little known to provide compelling tax advantages to both parties, employees, and employers (Deloitte, n.d.).

When the offer is accepted by the employee, the stock option is seen as granted from a fiscal point of view, even if the options are not irrevocable or vested due to suspensive or resolutive conditions. As a result, they become taxable as a benefit in kind on a grant day. The taxation is definitive and prompts regardless of whether the employee will exercise or not his right in the future. Because of the required vesting period, the exercise right is postponed to a further period. This implies that the employee is taking some risk concerning the probability of exercise, also depending on the future success of the venture. The latter can be highly risky due to the innovative character of start-ups. This is called the real economic risk, and it is worth the Belgian taxation on the attribution of the stock (Donnay de Casteau et al., 2019, p. 26).

3.4.1. Employee's taxation

Through Article 43, the taxation related to the employee is heavily detailed.

Firstly, the tax is imposed on the strike price on a grant day, and not on the premium received while the stock option is exercised several years after. It is seen as a professional income that is taxable at the moment of the acquisition of the stock options (Wynant, 2005). If the stock price increases in the coming years, it implies that the employee will enjoy paying a tax rate on the strike price rather than on the new high stock price (Wynant, 2005).

Secondly, the taxable benefit is set at a flat rate of 18% on the strike price of stock options lasting for a period of 5 years maximum. In case the exercise window is over 5, the tax rate is enhanced by a 1% markup for each additional year (Vandeveldel & Co, n.d.).

Last but not least, the legislator has defined five specific conditions that have to be met to reduce by half the tax base. First, the strike price is fixed on the grant day. Second, the options are subject to the following conditions: (i) the option cannot be exercised before the expiration of the third first year following the year of the offer, or after the tenth year following the offer; (ii) the stock option cannot be transferred *inter vivos*. Third, the risk of value diminution in the underlying options cannot be directly or indirectly covered neither by the concerned employee, nor the person being included in the stock through interdependencies. Fourth, the options are related to shares from the company employing the concerned worker, or a company having some interdependent links with this one (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999). Based on those conditions, the employee can benefit from a lower taxation on the stock option because it is calculated on the basis of on an upfront taxation and not on the value of the capital gains. Therefore, for a stock option of 10 years not following the requirements, the tax rate is 23%, whereas, if the conditions are met, the new rate is diminished to 11.5% (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999). In return, the legislator has provided a clause for any employee that did not follow the five conditions. After 10 years, there will be a control of the well-utilization of the stock option legislation. If it is not the case, the difference between the flat-rate estimation and the reduced one will be additionally imposed (Wynant, 2005).

In practice, the offer is qualified under the status of "Benefit in Kind" in the company throughout the form 281.10 for employees and 281.20 for administrators (Service Public Fédéral finances, 2015). The percentage on the benefit in kind is computed as followed:

$$\text{Number of stock options} * \text{Market value/Fair value} * 11.5\%.$$

On top of the value resulting from this formula, the fiscal taxation of the physical person is calculated. This amount is then directly withheld by the employer on the monthly net professional salary of the beneficiary (Donnay de Casteau et al., 2019, p. 26). Furthermore, this benefit in kind is also subject to a derogatory regime concerning employees' social security, which is detailed in article 44 (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999).

However, there is a peculiarity in the Belgian law, which changes the whole taxation of the employee stock option. In article 42, it is mentioned that if the employee does not accept the stock option in a delay of 60 days, the stock option is considered as refused from a fiscal point of view (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions

diverses, 1999). Nevertheless, from a legal point of view, the employee can still accept the offer after the 60th day following the offer if the venture scheme allows it. Therefore, the ESO is considered as accepted by the employee, but cannot follow the rule of the law of 1999 (Donnay de Casteau et al., 2019, p.48). Therefore, the implication of this time discrepancy results in a different taxation framework. As the upfront taxation on the price on the grant day is no longer possible, the employee has to pay the capital gains earned between the strike price and the market value of the share at the moment of exercise. This taxation will follow the traditional rules related to social contribution. It will therefore be added of the income, and taxed following the income taxation rule (Donnay de Casteau et al., 2019, p.48).

This choice is up to the employee as it can drastically change the perspective of the ESOP. On one side, the taxation upfront can reduce the amount, but the probability of exercise is unknown. On the other hand, the taxation afterward is computed based on effective gains, but can be high in the case of a high-value multiple startups (Donnay de Casteau et al., 2019, p.48). As with many financial dilemmas, the balance between the risk appetite and gains is back.

3.4.2. Venture taxation

When the employee exercises his right because the current price is higher than the strike price, the employee enjoys a premium while the company needs to make provision for its capital loss (Engeleen, 2012, p. 15). With regard to the taxation of this capital loss, the venture needs to follow the Belgian Income Tax Code of 1992. Based on article 198, the capital loss is not recognized as a professional cost for the company according to the section 7 in the first paragraph, and therefore cannot be deducted at the end of the exercise as other professional costs (SPF Finances, 2022). Additionally, value reduction and capital loss on shares or stocks are defined as non-deductible in the Corporate Tax Code (Didier, n.d.). Nonetheless, the Belgian legal doctrine advocates that capital loss should be considered deductible. In this case, stock options are not defined as a capital loss, but as remuneration granted to option holders, which is deductible by companies (Engeleen, 2012, p. 15). In conclusion, the deduction of ESOP is not clearly defined in the Belgian law, but the doctrine reviews the law to offer this benefit to ventures.

Chapter 3: Review of the past studies on the impacts of ESOP on ventures

Nowadays, the recognition of the impact of the ESOP is still limited. Although it is not a completely unknown subject, the main focus has generally been on the relationship between the implementation of this plan and the resulting venture's performances. Consequently, most papers have been published on the effects of ESOPs on the financial aspect.

In 2000, two American students decided to extend the previous research on the relationship between ESOP and growth to firm's performance. Several scholars had already analyzed it before them, such as Park and Song in 1995, Rosen and Klein in 1983, the U.S. General Accounting Office in 1988, and others. All of them have concluded a positive link between those two parameters (Iqbal & Hamid, 2000, p. 25). Not surprisingly, they also observed that the ESOP creates an increase in stock prices, resulting in enhancement in terms of operating performances. They determined that there exists an important link between ownership and the firm's performances (Iqbal & Hamid, 2000, p. 25).

In 2015, another study was done on the effects of the ESOP on operating performances, but on the Chinese level (Fang et al., pp. 141–159). They also found a significantly higher change in the Return on Equity (ROE) for the option-granting firms compared to the matching firms. This finding is even stronger for the firms that are likely to take more benefits from incentivized employees, such as privately owned firms, smaller firms, and those with a higher level of independence concerning the board (Fang et al., 2015, p.157).

A few years later, Ding and Chea conducted the same type of study, but on the New-Zealand framework. They perceived a significant and positive effect as well on the performances of firms offering ESOP compared to their counterparts not offering this benefit. This conclusion is true within a year from the first announcement, and in the second to fourth year after the announcement. The new information was that this plan improved corporate performances by 10 times its costs during the first year (Ding & Chea, 2021, p. 1).

Although most of the findings lead to a significant positive relationship, some scholars also found some unclear points leading to more discussions.

Pugh, Oswald and Jahera published a report in 2000 that went in the opposite direction to previous studies. Based on accounting measures, they found that ESOPs have a small positive effect in the short-term of firm performances, but there is no evidence of permanent improvement in the performances of the company. This is also sustained by Rubin in 1990, that

people establishing an ESOP inside their company should not expect significant positive long-term influence on the performances (Pugh et al., 2000, pp. 178–179). Moreover, Bulan and al. published a study proving that ESO grants do not systematically create a higher level of productivity and may negatively affect accounting performance (Triki & Ureche-Rangau, 2012, p. 160).

In the French market, Triki and Ureche-Rangau also investigated the short and long-term impacts of the ESOP, but on the performance of French. In the long run, they found that the company's accounting and market performance are not influenced by either the size or the value of the grant. According to them, there is no relationship between corporate performances and option-based compensation (Triki & Ureche-Rangau, 2012, p. 154).

Therefore, most of the literature points to a positive impact of the ESOP on the company's performances, but the conclusion is not universal. Furthermore, the impact has been largely studied, but the process by which this is directly positively impacting financial performances is not well understood (Coyle-Shapiro et al., 2002, p. 424).

Nevertheless, in the context of this study, analyzing the potential positive relationship between these two parameters is not possible for two reasons. Firstly, the type of companies targeted is completely different. The previous literature studies mature companies that are already listed, whereas I am trying to understand the impact of the ESOP on the Belgian entrepreneurial landscape. Therefore, the two new parameters are, for this case, the status of non-listed startup (possible exceptions as some startups can be listed, but it remains rare) and the Belgian origin. Secondly, it has been explained that the main purpose of ESOP was to help startups in their "*Valley of Death*" (Giudici et al., 2020, p. 29). Therefore, the point of view that should be adopted is that of an entrepreneurial perspective. The issue is that making the same kind of research that the one made previously on Belgian startups is quite complex. On the one hand, most startups are not listed, which makes it difficult to extract financial information to perform a regression between ESOP and performances. On the other hand, the parameters of success are defined in a more individualistic way based on the startup's preferences.

As a result, the practical framework was constructed to assess how grantees are valuing it. To this end, five axes, arising from the benefits set up in the general approach, have been built: taxation and financial behavior, retention, compensation, well-being and company culture. The aim is to provide scientific evidence of these potential positive impacts on startups.

Section 1: Taxation and financial behavior

Logically, taxation should largely influence the framework of establishing a new program in a venture. In the case of an ESOP, if the legal conditions are most favorable for both stakeholders, the incentive of developing this scheme should push up the number of plans up. Nevertheless, no literature review can be carried out here for two major reasons.

First, no study has been realized to understand how the taxation framework can impact the ESOPs' valuation for employees and employers. Although the legislation changes from one country to another, no research has yet been done to find out how people react to it.

Second, despite the creation of the Belgian law on stock options in 1999, nobody has taken the time to analyze how staff is reacting in front of this framework. In the paper, numerous benefits seem relevant, but the valuation from the direct users has not been studied during the past 23 years. Most importantly, in the case of Belgium, no figures are published concerning the number of active ESOP in the country and how many people are impacted by them. This is certainly an additional brake for more research.

Even though tax benefits are highly convenient for both stakeholders, some critics have emerged concerning the employee stock options, mainly concerning the Belgian taxation. For instance, there are some protests against a taxation on stock options that the employee is not certain at 100% to exercise. If the strike price remains higher than the current stock price, the employee may never exercise his right. It implies that the employee will pay a tax on a supposed "benefit" that he may never enjoy. According to Mrs Diane Ectors, the tax percentage can seem low, but it is because there is no certainty of having a premium at the end (AvC, 2012). Employees of companies that went bankrupt in 2008 never exercised their right of becoming a shareholder, but they paid a tax on the grant day (AvC, 2012). This situation is dividing the political landscape. Furthermore, a question has been brought to light about the type of performance required to exercise the option. Once again, the evaluation is based on quantitative financial performances, and there is no focus on qualitative ones such as the type of social responsibilities (AvC, 2012).

Based on the discussion, I would suggest as a first hypothesis that the Belgian tax framework of 1999 is considered as a high-valued benefit for the employees holding employee stock options/shares due to the reduced tax rate offered by the Belgian Authorities.

H₁ = Belgian tax framework of 1999 is perceived as a high-valued benefit by grantees

Section 2: Retention

Retention is one of the leading reasons for the establishment of an ESOP according to several guides (ACCION, 2018; Balderton Capital, 2017). Let us see if a direct link has been already established between those two variables.

By comparing US public companies offering broad-based ESO and counterparts not playing with this benefit, Blair and al. discovered greater employment stability (2000) (Freeman, 2007, p. 7). Several years later, Schaefer and Oyer studied the empirical reasons why employers are giving stock options to all employees (2004). Among three economic justifications, they found out that sorting and retention are potential explanations for broad-based stock option plans although they cannot stand on their own. The cross-sectional method provided additional evidence concerning the attraction and retention benefits created thanks to employee stock options. Some assumptions stand behind the conclusion and need to be taken into account, such as the fact that broad-based plans are most significant in smaller firms, with stock returns more volatile and ventures with negative cash flows (Oyer & Schaefer, 2005, p. 101).

Similarly, Buchko (1992), and also Sleverajan and al. (2006) identified the ESOP as a variable that can have an effect on the employee turnover (Athar, 2020, p.104). Furthermore, the concept of ESOP as a tool to reduce employee turnover has been emphasized by Livingston and Henry (1980), Klein (1987), and Aitken and Wood (1989). The reason according to Livingston and Henry is the creation of psychological contracts between the employee and the venture, under the principle of “*a sense of ownership*” (2006) (Athar, 2020, p.104). Furthermore, Blasi and al. are aligned as they also found out a positive impact on employee loyalty (2008) (Athar, 2020, p.104).

Another key study on retention has been done on ESPP, meaning Employee Share Purchase Plan. It is different from the ESOP because the stock option is not offered to the employee and the company offering is usually already listed, but the pros of both plans can be intertwined. According to Bryson and Freeman, offering employees the opportunity to hold a company's shares has a direct positive impact on their work involvement (2019). In their study, they proved that those employees worked harder, for longer hours, and pushed the employees' turnover intention down. Holding shares increased their loyalty as they define themselves as co-owners of the company (Bryson & Freeman, 2019).

Additionally, it has been pointed out that the “*Feelings of ownership*” developed by the participation in the shareholding positively influence certain attitudes such as commitment, involvement, and integration (Pendleton et al., 1998, pp. 115–116). This is confirmed by the idea of Beggan, Florkowski and Schuster. Beggan (1992) stated that the employee increases his identification with the organization (Bryson & Freeman, 2019, p. 89). Florkowski and Schuster found a positive relationship between profit sharing and organizational commitment (Coyle-Shapiro et al., 2002, p. 424).

However, the conclusions need to be taken with caution as previous literature from Kurse (1993), and Weitzman and Kruse (1990) defined small-to-negligible effects on incentive and retention for the profit-sharing plans (Oyer & Schaefer, 2005, p. 102). In 2008, Blasi advocated that ESOP cannot be the reason for retaining employees and therefore reducing employee turnover (Athar, 2020). Similarly, Carmelli and Carberry did not find any relationship between employee turnover and the establishment of an ESOP (2014) (Athar, 2020, p.104).

Due to the mitigated landscape, the second hypothesis would favor a positive and significant influence of the ESOP on the retention effect as well as on loyalty and accountability.

H₂ = There exists a positive and significant influence of the ESOP on the retention effect as well as on loyalty and accountability.

Section 3: Reward

In 1982, Akerlof developed a theory called “*Sentiment for the firm*”, which directly explains the special relationship between the grantee and the employer. As the company is offering a “gift” by the means of employee stock options, and this gift is offering a greater compensation than the standard, the reciprocal gift from the employees should be a greater dedication to work (Akerlof, 1982, pp. 543–544). Moreover, the rewarding feeling is directly linked with the context in which the plan is settled according to Cable and Wilson (1989). If employees can easily understand the conditions of the plan, how it is working and the forecasting related to it, they place more value on the plan. On the other hand, if there are several factors that they do not get and can affect the profitability outside their actions, their expectations are largely decreasing (Coyle-Shapiro et al., 2002, pp. 425–426).

However, two main American studies conducted by Scharf and Mackin (2000) and Kardas and al. (1998) stressed the idea that ESOP is offering an added value to employees if it is seen as an addition to the worker pay. Indeed, it comes on top of it and cannot be used to replace the remuneration (Freeman, 2007, pp. 6–7). It is directly related to the finding of Klein inducing that there is a high level of commitment to the venture if the stock options are as financial gains (1987) (Athar, 2020, p.104). Furthermore, the overall pay of workers taking part in an ESOP is usually higher than the other workers. The underlying reason can be a higher productivity level due to employees' participation or the influence on the discussions about wages (Freeman, 2007, pp. 6–7).

Because this concept seems to be appreciated if conditions are properly stated, the third hypothesis will test the concept of ESOP as a tool that is perceived as an efficient and highly valued reward system by employees.

H₃ = ESOP is a tool perceived as an efficient and highly valued reward system by employees.

Section 4: Well-being

Until now, the well-being of employees towards the ESOP has not been directly studied. Nonetheless, it is possible to make an indirect conclusion based on past studies.

First, several scholars (Azfar & Danninger, 2001; Brown, Fakhfakh & Sessions, 1999; Wilson & Peel, 1991) found direct evidence that the implementation of an ESOP is lowering absenteeism and the quit rate (Coyle-Shapiro et al., 2002, pp. 424–425). Such parameters are directly linked with a more positive work environment, where employees want to grow for a longer period.

Secondly, as explained in the point above about rewards, “*Feelings of ownership*” impacts employees' commitment, involvement, and integration in a positive way (Pendleton et al., 1998, pp. 115–116). Therefore, if those parameters increase, it implies that it is positively influencing the well-being of the employees in the venture.

Thirdly, Klein and Hall have studied the correlation between stock ownership and employees' satisfaction. They found that there are 5 factors⁴ influencing employees' satisfaction at a level of explanation of 58% (Klein & Hall, 1988, p. 630). The general variable used to define the employees' satisfaction globally was organizational commitment, and they found a strong and positive relationship with a level of explanation of 51% (Klein & Hall, 1988, p. 635). By taking these conditions into account, employees' satisfaction is expanding, and then their well-being is as well.

Fourthly, a positive relationship between ESOs and job satisfaction, esteem and organization commitment was found by Van dyne and Pierce in 2004 (Athar, 2020, p.105). Those three factors can highly impact the well-being at work.

As four deductions concern a positive impact on the well-being, the fourth hypothesis implies that the use of an ESOP is positively impacting the well-being of employees.

$$H_4 = \text{ESOP is positively impacting employees' well-being}$$

Section 5: Company culture

Company culture has usually been pointed out as the key element for a strong competitive advantage (Maldonado et al., 2018, p. 747). Several scholars looked into the subject such as Koberg and Chusmir (1987), O'Reilly, Chatman and Caldwell (1991), and Steiber and Alänge (2015), and defined the concept as “*systems of shared beliefs, cognitions, and values that produce norms of behavior*” (Maldonado et al., 2018, p. 747). Owing to its particularities, it is a strong intangible asset for the company, which is complex and costly to reproduce for competitors. This strength generally leads to an increase in employee attraction and retention, but also innovation, productivity, reputation and crisis management (Maldonado et al., 2018, p. 747). Linking previous research to the new ones, it seems that company culture is strongly correlated with retention and well-being, which appears to be also linked with the presence of ESOP inside a company.

Several studies have been conducted to understand under what conditions the ESOP can excel. One major conclusion that has emerged is the idea of having a company culture that legitimizes the ESOP, and therefore creates a successful ESOP (Kruse and al., 2004). The context in which the ESOP is implemented is as important as other parameters (Shipper and al.,

⁴ The 5 factors are the characteristics behind the ESOP, the status given to the employees in the plan, the values vehiculated by the employees, the relationship between the ESOP characteristics and the employees, and the general attitude of the employees towards the business (Klein & Hall, 1988, p. 630).

2013). Last but not least, Douglas and al. mentioned that incentives, employees' participation and the company culture are the three main parameters that make an ESOP successful (2004) (Athar, 2020, p.105). Despite the scholarship, numerous guides that help to understand how to implement an ESOP, promote the benefits that arise from it. Offering employee stock options to the entirety of your employees is supposed to create a company culture and strengthen people (Balderton Capital, 2017). However, no study has been made to assess the correlation between the company-broad plan and the development of strong company culture.

Therefore, the last hypothesis on this entrepreneurial subject would imply that the implementation of a company-broad ESOP creates a stronger corporate culture.

H₅ = The set-up of a company-broad ESOP creates a stronger company culture

Chapter 4: General conclusion

Through the theoretical framework, a common has been created to connect all the dots around this little-known concept. Nevertheless, all these studies have been carried out in the U.S., China or, New-Zealand. The European landscape seems to fall by the wayside, and the impacts on the Belgian landscape have never been mentioned anywhere.

To this extent, this Master thesis is going to focus on the impact of the ESOP on the Belgian entrepreneurial landscape. As the financial aspect of a startup is not the best option to comprehend the efficiency of this strategy, the practical framework will focus on the influence of several variables which are the taxation, the retention, the compensation, the well-being and finally the company culture. As these parameters are key in the development of a company, the ESOP should, in one way or another, be interrelated with them.

PART II: Practical framework

Chapter 1: Methodology

1.1. Methodology

In the framework of this paper, two methods were used to complement each other: quantitative and qualitative studies.

Firstly, I created a Google Form (*Appendix 2.*) to conduct the quantitative analysis. This questionnaire was available from March 17th to May 8th 2022. At the end of the period, I collected the data from the Google Form into Excel. Globally, I studied the trend for each question based on the leading opinion.

Secondly, based on previously analyzed the trends, I created a series of questions to conduct three interviews with three entrepreneurs (Valentin Haarscher, Michaël Grandfils and Nicolas Quarré). The same list of questions was used for each interview in order to have the possibility to compare the perspectives with each other and to complement the data with some expertise from the field (*Appendix 3.1.*).

Thirdly, I used the tool “*Studio R*” to provide a deeper analysis of the quantitative results (*Appendix 4.1.*). For this purpose, the data was cleaned and translated into some code to facilitate the analysis (see the table of conversion in *Appendix 4.2.*). In addition, for the creation of a correlation matrix, dummy variables were created for nationality and language. The former is translated into 1 for Belgian and 0 for others, the latter means 1 for French and 0 for others. As the correlation matrix only works with numeric data, the use of dummy variables was necessary. However, for the purpose of linear regression, the different nationalities and languages were not modified to keep the diversity. Once the data was ready to be used, various analysis methods were applied: the histogram package to display the opinions with additional criteria inside the bars (*function histogram*), correlation matrix to see how variables interact with each other (*function corrplot*), and finally some linear regressions (*function lm*).

Fourthly, I took the findings from the previous three steps in order to draw some conclusions based on the five different axes.

1.2. The questionnaire

The questionnaire is composed of a series of multiple-choice questions, divided into two main sections: identification and deep dives based on five axes to quantify the impacts of the ESOP (*Appendix 2.*).

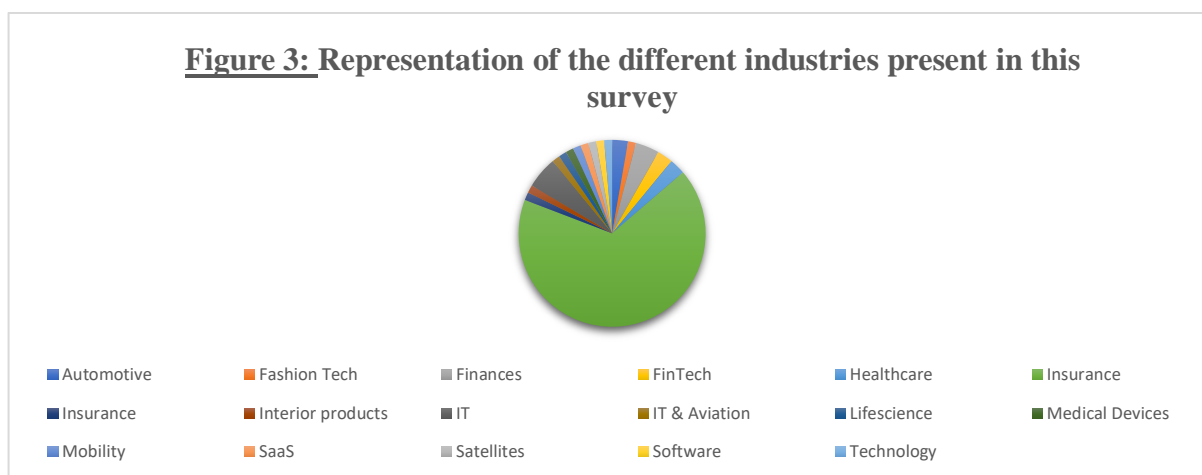
The first part is designed to identify the profile of the interviewee. Based on 14 questions, it gives an overview of the personal and professional background. These characteristics are key to better understand how the person is more or less influenced by the ESOP based on financial criteria, industry type, or family composition. Indeed, these questions will be used as independent variables to discuss a possible explanation for a certain behavior.

With these 25 other questions, the second section dives directly into the experience of the interviewees towards the establishment of the ESOP in the company that they are working for. Based on the pros and cons stated in the literature review, the questions were divided into five buckets to better handle each facet of the process. Thus, the five axes are, as already mentioned, taxation and financial behavior, rewards, retention, well-being, and finally company culture. Each axis was studied to see the real added value of the ESOP, and to analyze whether the ESOP appears as attractive as it looks on the paper. Ultimately, the aim is to analyze if the Belgian landscape is favorable for the establishment of more ESOP at the entrepreneurial level. The second objective is to give some clues on how we can change the culture and inform around the ESOP.

Participants were targeted through the launch of the questionnaire on LinkedIn or via direct messages to the founder(s) of the venture for internal communication.

1.3. The database from the questionnaire

To the extent of the questionnaire, the sample consists of 73 participants from 19 different companies. Among these companies, I had the opportunity to touch on different sectors ranging from Insurance to Technology, HealthCare, Mobility, Finances and so on. Overall, most companies are related to the idea of technology.



Source: Google Form (Employee Stock Option Plan), 2022

The quality of this database is rich thanks to the participation of ventures that go through different stages of development, meaning from startup to expansion stage. Moreover, the funding stages are also diverse. The strength therefore comes from the versatility of companies. The only negative side is the fact that 68,49% of the ventures are composed of Qover, which is my promoter's company. This is directly linked to the high proportion of the "Insurance" type in the graph above.

With regard to the participant's profile, two conditions were required for the interviewee to complete the questionnaire. Firstly, the interviewee had to work for a Belgian company. It was a pre-requisite as the master thesis is focusing on the implementation of ESOP in the Belgian entrepreneurial landscape. Therefore, by focusing on Belgian employees, it offsets the differences in terms of culture, and also ensures the same tax framework for all. Secondly, he had to actively take part in this plan, meaning have stock options or actual shares in his possession. From this last condition, the questionnaire counts a rate of 87,7% of employees touched by a company-broad plan, meaning that the ESOP is offered to everyone in the company.

Globally, the database is composed of 64,4% of men. Regarding the age category, the main range is 24-34 for 60,3% of the respondents, followed by 27,4% between 35 and 44 years old. 69,86% have Belgian nationality, and the other 30% are composed of American, Brazilian, French, British, German, Indian, Italian, and Polish. The majority, meaning 58,9% have no children, which is linked with the low average age category. Half of the group (49,3%) received this opportunity in less than 6 months after entering the startup, 30,1% was between 6 months and 1 year and 17,8% after 2 years. It implies that only 2,8% (2 people) received it after a period longer than 2 years.

1.4. The interviews

On the basis of results collected from the questionnaire, three interviews were conducted in order to obtain the perspectives of professionals concerned by this subject (*Appendix 3.1.*).

The first interview was conducted with Valentin Haarscher, the CEO of EASOP. He is the founder of a SaaS B2B company that advises international ventures on the appropriate allocation of shares to their team members. Two main characteristics of his profile created the perfect match for his participation. Firstly, he offers stock options to all his employees. Secondly, he works daily with companies willing to implement ESOP. This implies that he has great knowledge on the subject and a perspective on several companies as well as different industries (*Appendix 3.2.*).

Afterwards, Michaël Grandfils was my second guest. He worked at different places before becoming an associate of the group D'Ieteren. He is now the co-founder of Lab-Box, an entrepreneurial arm of D'Ieteren that wants to invest time and money into the creation of new startups linked with the new mobility. Lab-Box creates startups from scratch and owns them 100%, but still give a lot of freedom to the co-founders in terms of salary and remuneration policies. By leading this entrepreneurial arm, he is involved in the discussions around the establishment of an ESOP. Most importantly, he has the opportunity to compare projects either with or without ESOP in order to explain the pros and cons linked to this scheme (*Appendix 3.3.*).

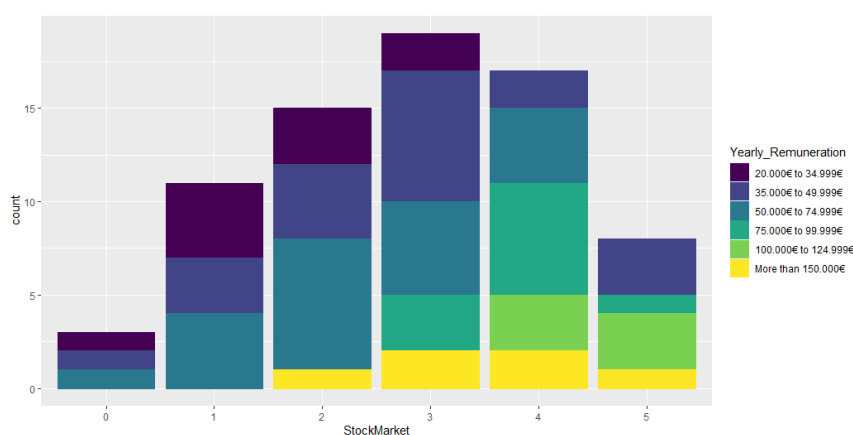
Last but not least, Nicolas Quarré is the co-founder of Accountable, a firm that helps independents to automatize taxes. Behind this financial project, they developed an app to give in real-time how much taxes the user will pay. During his previous job, he had the opportunity to participate in the equity of the venture. That is why he decided to implement an ESOP in his own company now. Therefore, he has the ability to compare the position of the person being rewarded versus the person running the stock option plan (*Appendix 3.4.*).

Chapter 2: Results

2.1. Required knowledge about the stock market

Once the stock option is finally in the exercise window, the employee has the right to pay the strike price to convert it into a real share (ACCION, 2018). This raises the question of whether a certain level of knowledge about the stock market is required to properly manage future shares?

Figure 4: On a scale from 0 to 5, where do you position your knowledge about the stock market?



Note: This histogram represents the relationship between the level of knowledge in the stock market with the yearly remuneration as additional component.

Source: Google Form (Employee Stock Option Plan), 2022

Two conclusions emerge from this histogram.

Firstly, only 3 people out of 73 position their knowledge as equal to zero. Globally, the average knowledge revolves around 2,8 out of 5, which is part of the high average of the scale. Therefore, it seems that most of grantees have some basic knowledge on this subject.

Secondly, the higher the remuneration range, the higher the level in terms of knowledge about the stock market. For instance, we can see that the range “75.000€ to 99.999€” is only displayed from level 3 to 5. Additionally, the range “20.000€ to 34.999€” completely disappears after level 3. Consequently, a relationship can be identified between these two variables. Based on a linear regression performed on different identification variables where the stock market stands as the dependent variable (*Appendix 4.3.*), the gender and the yearly remuneration are shown to have a positive impact on this knowledge at a significant level. Regarding the yearly remuneration, if the range increases by 1 point, the level of knowledge should also rise by 0,255 points at a level of confidence of 95%. As a result, the salary has a positive and significant influence on the level of knowledge of the stock market, as estimated from the histogram.

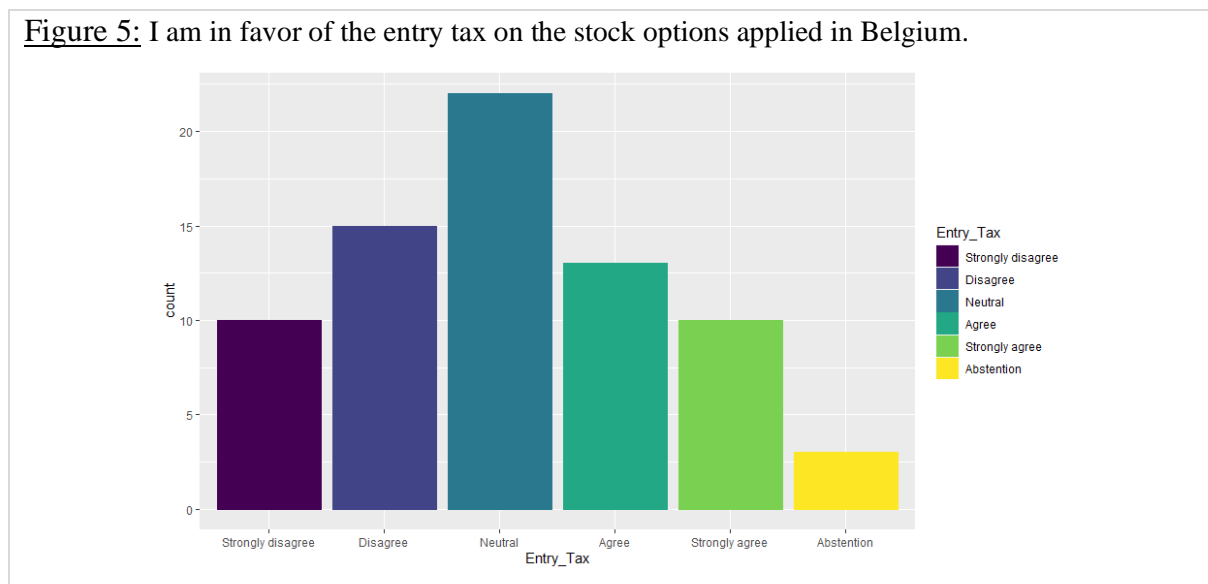
This scientific analysis admits a positive impact, but it is questionable whether it is useful to be aware of the mechanism behind the stock market. To understand this perspective, some practical experiences around ESOP are necessary. According to the three founders, being an expert in the stock market is not mandatory. What makes the differences is to acquire the basics around the employee stock options. Being aware of the different options on the table offered by the Belgian taxation framework is vital to optimize the taxation, but also the way it works and what the implications are when you accept this plan (Haarscher, 2022). As it is a scheme offered by the venture, it is the duty of the founder to explain the real implications on the daily life of the grantees (Quarré, 2022).

The reality is that ESOP sometimes seems to be a low-risk asset, but it is actually quite the opposite. As a startup is not as established as a multinational, the concept can still fail. If the remuneration is low and the amount of ESOP given accounts for a large chunk of the compensation package, the employee can end up with stock options/shares that are worth nothing and a low amount of cash in his pocket if the concept goes down (Quarré, 2022). Therefore, sensibilization and in-depth explanations of stock options are more important than actual knowledge of the stock market.

2.2. Taxation and financial behavior

As explained in detail in chapter 2 section 3, the Belgian law of 1999 guarantees taxation upfront if the deal is accepted by the employee during the time-lapse of 60 days (Loi relative au plan d'action belge pour l'emploi 1999 et portant des dispositions diverses, 1999). Nevertheless, an acceptance after the 60th day is considered as rejected from a fiscal standpoint but can still be legally accepted afterward. At that point, the taxation falls into the category of tradition incomes (Donnay de Casteau et al., 2019, p.48). Therefore, the grantee needs to decide based on his risk appetite: either a risky upfront taxation with tax benefits or a taxation on certain gains without fiscal advantages.

Figure 5: I am in favor of the entry tax on the stock options applied in Belgium.

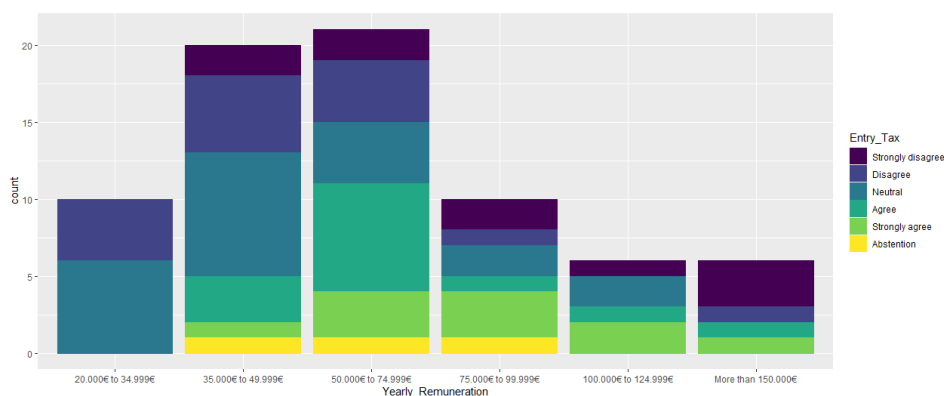


Source: Google Form (Employee Stock Option Plan), 2022

Regarding the opinions on upfront taxation, no real trend emerges from the survey. Globally, 30% of the respondents feel neutral towards the tax at the entry, whereas 31.5% react positively and 34,25% do not agree. After “*Neutral*”, the second leading answer tends through a “*Disagree*” position with 16 answers out of 73, implying that the tax at the entry is mainly not perceived positively by the participants. Nicolas Quarré, the co-founder of Accountable, is completely in line with this tendency. For him, it is unacceptable to ask employees to pay for something uncertain. Not everyone appreciates a high salary that leaves room to gamble with the upfront taxation. As there is a 90% probability that the employee is never getting his money back, it is unfair to ask to pay upfront for something that is uncontrollable (Quarré, 2022).

To go further in the analysis of the entry tax, I established one main assumption to model the impacts of the risk appetite on the behavior towards this type of tax. The model states that the higher the salary range, the more inclined to favor the entry tax due to a risk-lover characteristic. This belief is also supported by the different statements received during interviews. It is therefore questionable whether this assumption is true and does explain the answers.

Figure 6: Relationship between the yearly remuneration and the opinions towards the entry tax.



Note: This histogram displays the relationship between the ranges in the yearly remuneration and the different opinions received with the question “I am in favor of the entry tax on the stock options applied in Belgium.”. Another perspective can be found in *Appendix 4.4.* and the table with the proportions in *Appendix 4.5.*

Source: Google Form (Employee Stock Option Plan), 2022

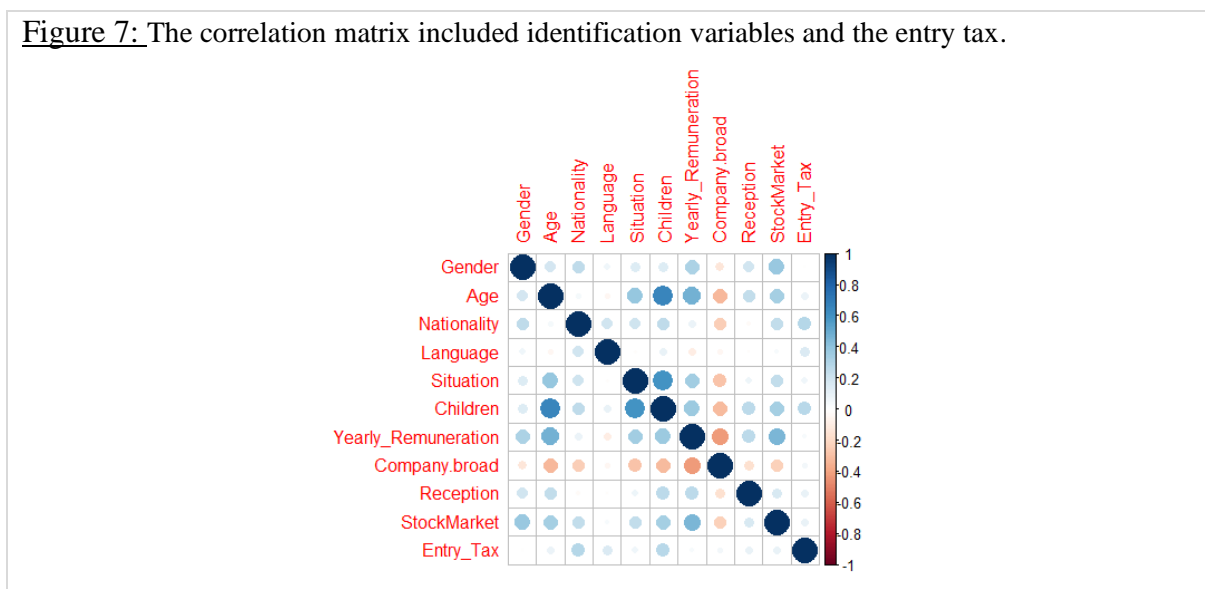
Firstly, the two lower ranges of salary seem more “*Neutral*” or with a negative position. For instance, the revenue string “20.000€ to 34.999€” is only feeling “*Neutral*” or “*Disagree*” towards the entry tax. This trend follows the hypothesis: lower salaries are less inclined to bet with an entry tax than larger salaries. This first conclusion goes along with a thought shared by Michaël that even well-educated people with a reasonable remuneration may not afford a tax at the entry and may not be willing to take as much risk (Grandfils, 2022). Furthermore, paying an upfront tax on something that is not 100% sure may scare off the team members (Quarré, 2022). This would explain why these two groups are less in favor of a tax upfront.

Secondly, the three following ranges have a behavior that tends towards a slight preference for the entry tax but keeping a high percentage of “*Neutral*”. As this second group is characterized by a higher yearly salary, it induces more money available to finance an entry tax. Therefore, they might be more inclined to bet on an entry tax rather than spending more with a tax on capital gains later on (Grandfils, 2022).

So far, results are in line with our assumption. However, the last group responds with “*Strongly disagree*” at 50%. This is surprising as it goes in an entirely different direction than expected. Based on our presumption, it was expected from them to favor the entry tax rather than the tax on capital gains. One explanation could be that this set of salaries may represent more startup founders. Within their role, they are more prone to think about their employees before their own benefits. As mentioned by Michaël, regarding his current situation, he would prefer the upfront taxation. However, he believes that the afterward taxation is a solution to reach more people and expand this method of remuneration (Grandfils, 2022).

This non-significance can be controlled through to a more scientific method.

Figure 7: The correlation matrix included identification variables and the entry tax.



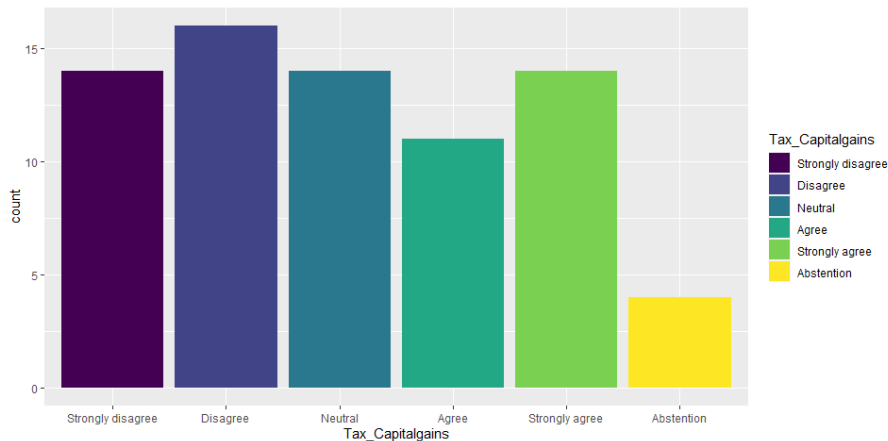
Source: Google Form (Employee Stock Option Plan), 2022

In terms of general correlation, some variables seem slightly correlated with the entry tax, such as the age, the situation, a company-broad plan, the delay of reception, and finally the knowledge about the stock market assessed by the grantees. However, the level of correlation is too weak to draw any conclusions. On the next level with a correlation around +0,2, there is only the language, meaning the French speakers in this case (use of dummy variable), that is correlated with being in favor of an entry tax. Finally, stronger relationship around +0.3 appears with the number of children and the nationality. The latter is also defined via a dummy variable, implying that there is a positive correlation between the Belgian characteristic and a favor for the entry tax. As a result, there are some connections with the entry tax, but they remain small and insignificant. Furthermore, the remuneration does not seem to play a role in the appreciation of the upfront taxation. This last information is confirmed via the linear regression (*Appendix 4.6.*) which shows that the range of the yearly remuneration does not significantly impact the opinion towards the entry tax due to a higher-than-expected p-value.

To conclude on the entry tax, the entrepreneurial landscape is mitigated concerning this option despite the tax benefits. Moreover, the assumption of a positive bond between remunerations and upfront taxation has to be refuted as no significant correlation has been found.

Because the upfront taxation is not unanimously supported, one could wonder if the other option is preferred. For that purpose, the same methodology has been applied.

Figure 8: I would prefer a tax on the capital gains like the one established in the USA, rather than the Belgian entry tax

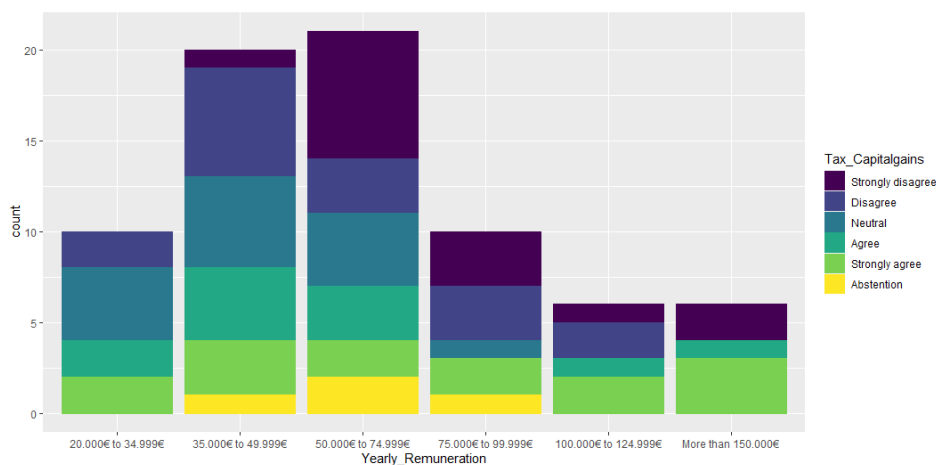


Source: Google Form (Employee Stock Option Plan), 2022

Based on the reading of the graph, the direct answer is a “No” because the taxation on capital gains divides the ESOP scene even more. In terms of figures, 41,1% stand in a negative position toward this type of tax, 34,25% would prefer it, and 19,18% remain “Neutral”. In aggregate, the trend tends to be more against a taxation on capital gains with maximum answers going in the “Disagree” bucket with 16 participants out of 73.

Adding the assumption that higher revenues are more likely to bet on an upfront taxation, a negative correlation should appear here between salary and tax on capital gains.

Figure 9: Relationship between the yearly remuneration and the opinions towards the tax afterward

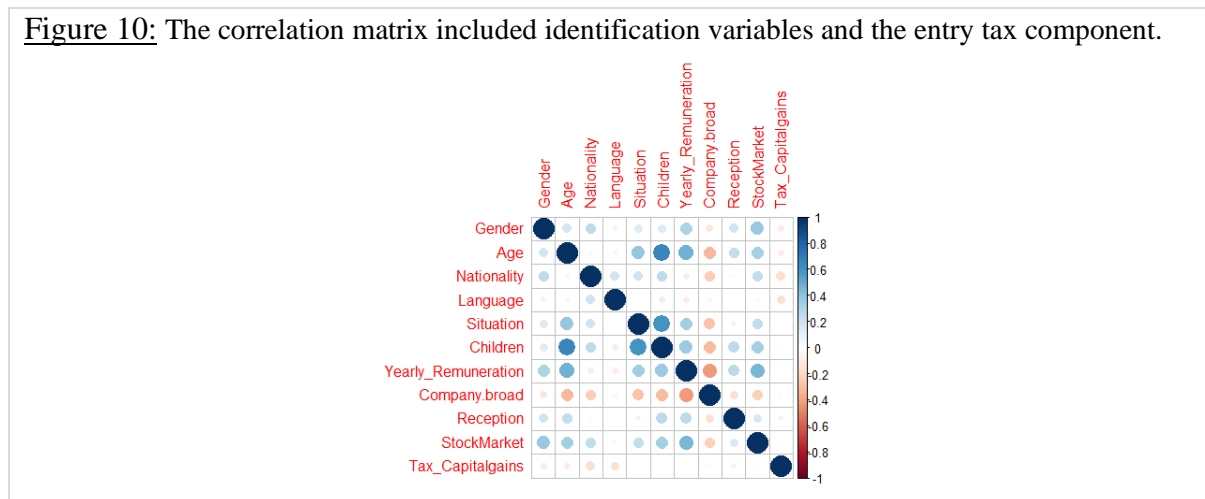


Note: This histogram displays the relationship between the ranges in the yearly remuneration and the different opinions received on the question “I would prefer a tax on the capital gains liked the one established in the USA, rather than the Belgian entry tax.” Another perspective can be found in Appendix 4.7. and the table of the proportions in Appendix 4.8.

Source: Google Form (Employee Stock Option Plan), 2022

Even with the remuneration component, the landscape remains mitigated. The positive feeling is present in each category to different degrees, as well as the more negative mood. The only difference appears in the “*Neutral*” and “*Abstention*” answers that do not appear in the two higher salary strings. Globally, the “*Strongly agree*” towards taxation afterward seems to affect all ranges of remuneration, whereas a negative opinion touch all expected the “More than 150.000€”.

Figure 10: The correlation matrix included identification variables and the entry tax component.



Source: Google Form (Employee Stock Option Plan), 2022

With the scientific correlation matrix, four negligible negative correlations towards the tax on capital gains are standing out in this graph: gender, age, language, and situation. The only positive correlation occurs with the reception delay, but the coefficient is close to 0. Once again, nothing occurs with the respect to the influence of the remuneration out of this graph. However, in complement of this matrix, the linear correlation (*Appendix 4.9.*) was performed and it enforces a non-significant relationship between the remuneration and the tax afterward.

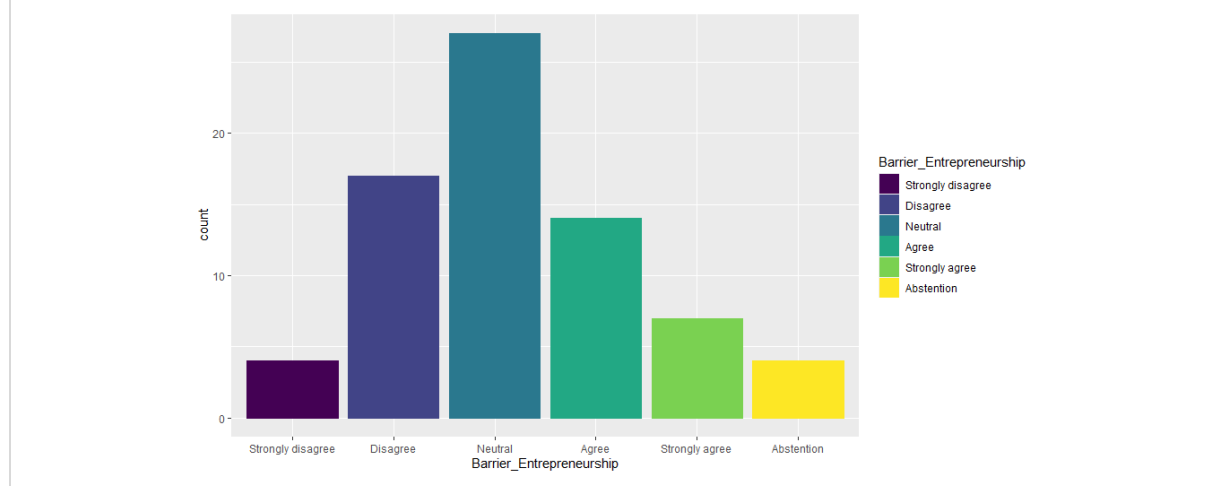
Therefore, taking both options together, there is no preferred situation with a distinct choice, no matter the salary range. With the entry tax, grantees feel mostly neutral towards this scheme, but without any significant results. On the other hand, the tax on capital gains does not receive more support from the participants. Besides the highest number of answers goes for a “*Disagree*” position, it exists a fair distribution among all propositions.

Valentin Haarscher, CEO of EASOP, gave a potential answer to this scattered landscape by stating: “*The more options, the better*” (2022). As the current Belgian taxation offers two different approaches, we should use them. The taxation upfront offers an interesting reduction of the tax amount, but you will probably never get the opportunity to exercise your right. On the other side, if the employee is more risk-averse, he can delay the payment on something

100% sure but with a taxation that will be higher. For him, it is a matter of explaining the pros and cons of each method to let the employee decide which one better fits his risk profile and available cash. It is a balance of risk versus reward. In conclusion, the Belgian tax authority has left some room for best practices, and we should use it wisely (Haarscher, 2022).

Notwithstanding, deciding between one option or another is not always possible. As it has been explained in the theoretical section, the scheme offered by the venture needs to be aligned with an acceptance after the 60th day (Donnay de Casteau et al., 2019, p.48). Therefore, we could wonder whether the law of 1999 promoting upfront taxation could be a barrier to the emulation of entrepreneurship in Belgium.

Figure 11: I think that the current Belgian taxation framework on stock options is a barrier to the emulation of entrepreneurship in Belgium.



Source: Google Form (Employee Stock Option Plan), 2022

Although 28,77% react positively to this statement, the mitigation is still present without any surprise. 27 people out of 73 are feeling “Neutral” towards this idea, meaning that the current Belgian taxation framework is neither judged as effective regarding the current startup ecosystem, nor negatively impacting the expansion of the entrepreneurship.

Owing to a linear regression of both tax options on the potential barrier of entrepreneurship as a dependent variable (*Appendix 4.10.*), it seems that the feeling of barrier is linked to the way workers prefer one option over another. If the grantee is in favor of the entry tax, he does not believe that the current taxation is a brake to entrepreneurship at a level of confidence of 90%. For the other scenario, if he would prefer a tax on capital gains, he strongly stands for a potential barrier to the Belgian entrepreneurial landscape at a level of confidence of 99%. In conclusion, the vision of the taxation on the startup ecosystem is directly correlated with the preferences. Finally, Valentin argues that if paying the upfront taxation was

compulsory, it would be an obstacle. As there are two options available, there is still room for convenience (Haarscher, 2022).

One of the consequences of why the entry tax is perceived as a brake to entrepreneurship can be materialized by the refusal of some employee stock options. In fact, 7 people out of 73 (*Appendix 4.11.*) have already refused due to a too heavy tax burden at the entry. This rejection can be linked with the fear of team members to pay for something that is not sure to realize in the future, and ultimately not guaranteed to be a good investment (Quarré, 2022). Another reason can be the lack of financing. Having money available to finance the upfront taxation can be complicated, even for well-educated employees working for a decent salary (Grandfils, 2022). Finally, past experiences in startups can modify the perspective on ESOP. If in the previous job the employee had a remuneration package composed of stock options and the startup failed at some point, this experience can affect his current judgment and develop remuneration preferences for only cash to avoid repeating the same story (Grandfils, 2022).

On the other hand, according to Valentin, there is more to the acceptance of the employee stock options. It is not only a matter of taxation, employees eager to have more ESOP are usually the ones who share the venture's mentality. When the stock option opportunity is refused and the only desire is to maximize the cash today, it implies that the employee is not projecting himself in the long run. It gives an insight into its future involvement in the company (Haarscher, 2022).

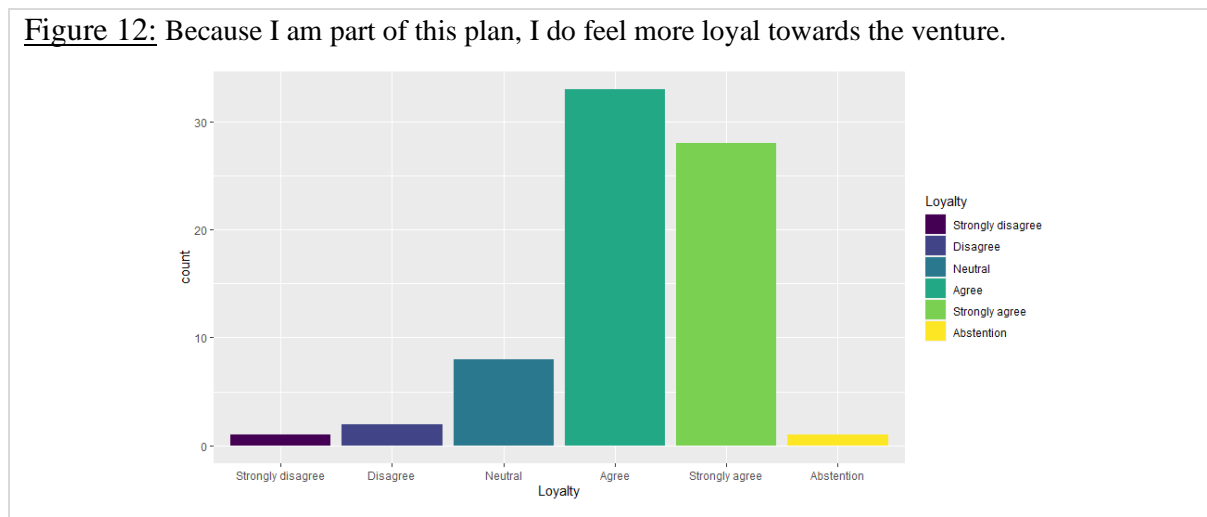
A proposition to scale up the notoriety of the ESOP and avoid this disincentive would be to offer taxation after the fact for everyone. By eliminating the risky part of the remuneration, the situation could suit more people. The main idea according to Michaël is *"If you have taxation afterwards, then you know you're not taking the risk. If it works, it works. If it doesn't work, you won't be wasting any money"* (Grandfils, 2022). By making this concept more realistic and easier to ingest, more employees would be convinced by this type of remuneration. When employees are mentioned, it is not only about universities, but also about everyone in the chain of value from the bottom to the top.

In fine, the first hypothesis must be refuted as no significant impact was found. Neither the entry tax nor the tax on capital gains is creating a well-defined answer. Even by adding the remuneration component to explain the risk profile, no added evidence could explain the way grantees react towards the taxation. In the end, those opposed to the upfront taxation will see it as a barrier to entrepreneurship, while others will not.

2.3. Retention

According to Michaël, ESOP is converting into a must-do in the offers from the current labor market. This standard is becoming more and more sought after in any job (Grandfils, 2022). Therefore, offering stock options is not only a way to attract talent, but also to retain it (ACCION, 2018; Balderton Capital, 2017; Brandes and al., 2003, Z. Zhand, 2009).

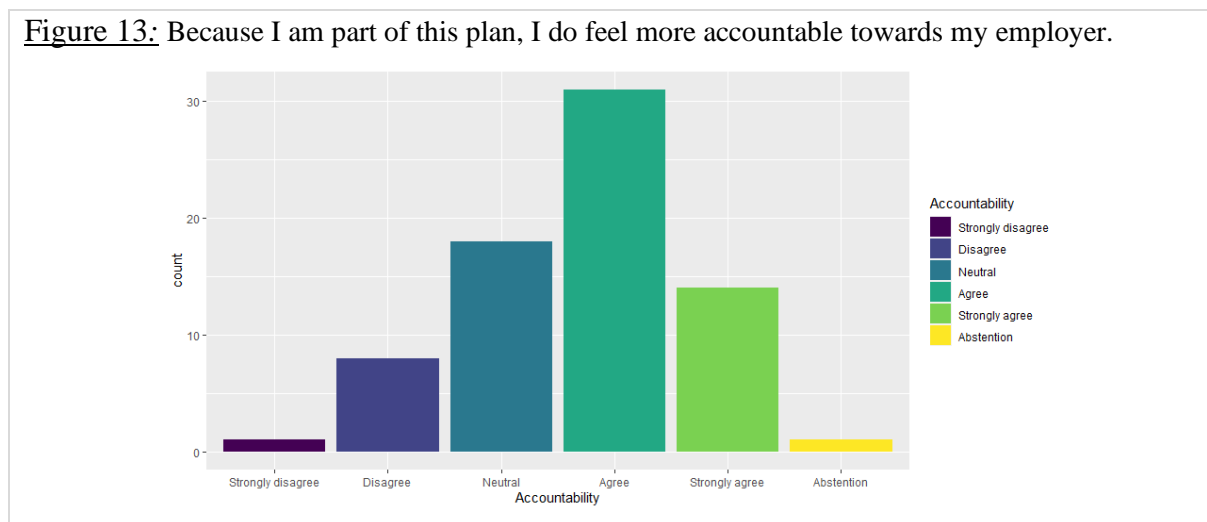
Figure 12: Because I am part of this plan, I do feel more loyal towards the venture.



Source: Google Form (Employee Stock Option Plan), 2022

Assuming that this strategy is supposed to positively inflate the retention effect, grantees should therefore feel more loyal towards the venture. In the survey, this expectation proves to be true as 83,56% react positively. Only 10,96% disagree with this sentence and 1 out of 73 do strongly disagree. As a result, I can confirm the positive correlation between ESOP and loyalty, previously defined by Blasi and al. (2008) (Athar, 2020, p.104) and also Bryson and Freeman (2019).

Figure 13: Because I am part of this plan, I do feel more accountable towards my employer.

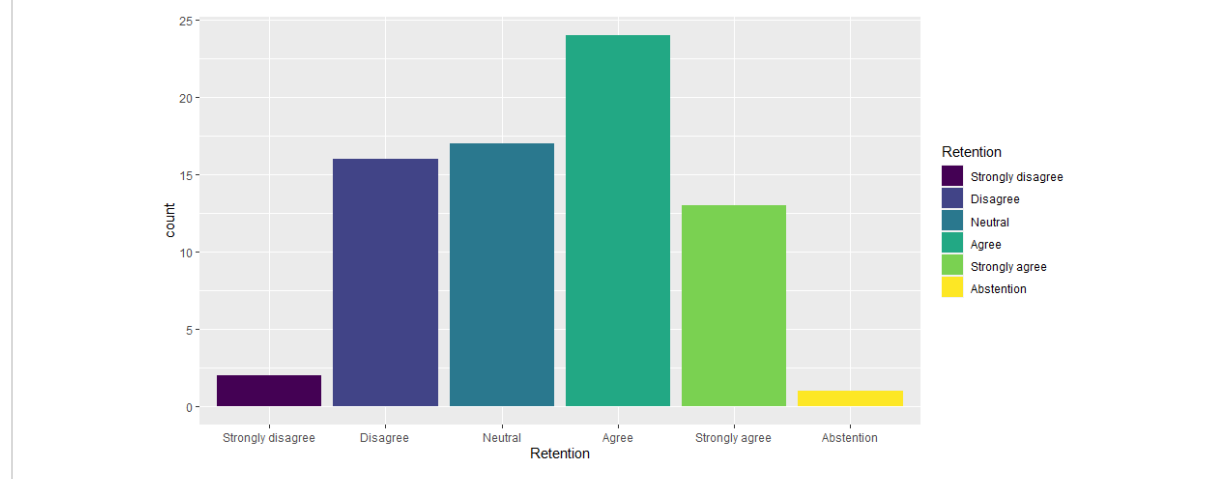


Source: Google Form (Employee Stock Option Plan), 2022

Here, in addition to the increase of loyalty, employees seem to be also more accountable. The most answers go to the “*Agree*” option at 42,27%, creating a positive behavior for 61 grantees. Even if the result is not as significant as for loyalty, I can conclude that ESOP has a positive impact on the accountability of employees.

Consequently, this prominence of loyalty and accountability rise suggests that the ESOP creates a stronger bond between the venture and the employees, and hence a potential reduction of employee turnover should be identified.

Figure 14: Because I have received some employee stock options, I would not leave the company before the full vesting period.



Source: Google Form (Employee Stock Option Plan), 2022

Nevertheless, this affirmation is a somewhat challenged with the third question. Most answers still go to the “*Agree*” bucket with a percentage level of 32,88%. However, the neutral proportion is more prominent with 17 answers and 16 out of 73 did completely disagree with this idea. Despite a maximum of answers in the “*Agree*” behavior, employees may consider leaving the venture even though the acquisition of stock.

To understand the mechanism behind the retention effect, I create a model to link loyalty, accountability and the company-broad plan criterion with the retention effect as the dependent variable (*Appendix 4.12.*). The result is that loyalty has a positive impact on retention, which is significant at a level of confidence of 95%. In fact, if employees feel more loyal by 1 point, the retention effect rises by 0,374 point. Therefore, by setting up the ESOP, the company significantly increases the loyalty of the employees, which positively affects the retention effect. In conclusion, the ESOP can be seen as a tool that indirectly influence the retention of the ones feeling more loyal, as a domino effect.

Practically, the retaining effect has been experienced by Valentin. According to him, establishing a proper plan with a cliff after one year and gradual vesting is a manner to keep employees incentivized and inside the company. This tool can be set up to reduce the employee turnover by keeping them longer in the venture (Haarscher, 2022). In addition, the co-founder of Lab-Box, Micheal, perceived this phenomenon of rising in loyalty and accountability of his employees, but he cannot attest to a reduction of the employee turnover. Due to the lack of time hindsight in his own company, it is complex to evaluate. Much like Valentin, he mentions that the schedule linked to the ESOP is crucial. If all vesting schemes start the same day and then finish at the same period, the venture is taking the risk of receiving several resignations at the same time. Employees may decide to wait until the end of the vesting to cash in, and then decide to quit the job (Grandfils, 2022).

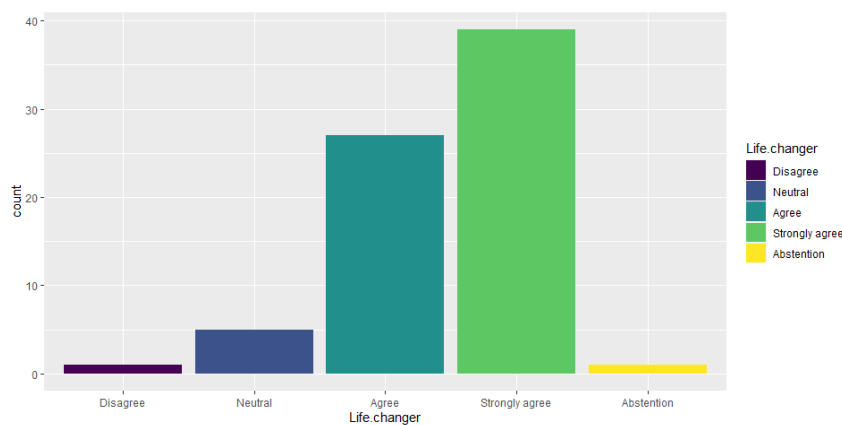
Nevertheless, these affirmations were highly controverted during the interview of Nicolas Quarré. Based on his experience, he believes that ESOP should not be seen as a tool to improve the retention but rather as *“a system that indicates that the company cares about making their team members rewarded”* (Quarré, 2022). The reason augmenting the retention effect is the company culture, not the ESOP itself. The ESOP can indeed be used as an indicator of the company culture, but it is not the only parameter impacting the retention rate (Quarré, 2022). Moreover, everything that is compensation-related is usually short-term. The cliff may keep them one more year inside the company, but the employee will quit at some point if he does not feel well due to non-matching company culture (Quarré, 2022).

Accordingly, two conclusions can be drawn from this section. Firstly, the distribution of ESOP in a venture positively impacts the loyalty and accountability of the employees. Secondly, it looks significant at 95% that the loyalty created by the ESOP is positively impacting the retention effect. Therefore, I can confirm the second hypothesis standing that the ESOP can have a slight positive impact on employees' retention. However, additional parameters need to be considered to fully assess the retention effect such as the schedule and, most importantly, the company culture. ESOP is playing its part in the retention effect, but it should not be seen as the ultimate tool.

2.4. Compensation

In the remuneration package, the stock options can take on more or less importance based on the risk profile, the personal valuation of this method, the mentality of company and so on.

Figure 15: In 2007, more than 1.000 Google employees had earned more than \$5 million each from their Employee Stock options. So, I believe that taking part in the equity of start-ups can be a life-changer.



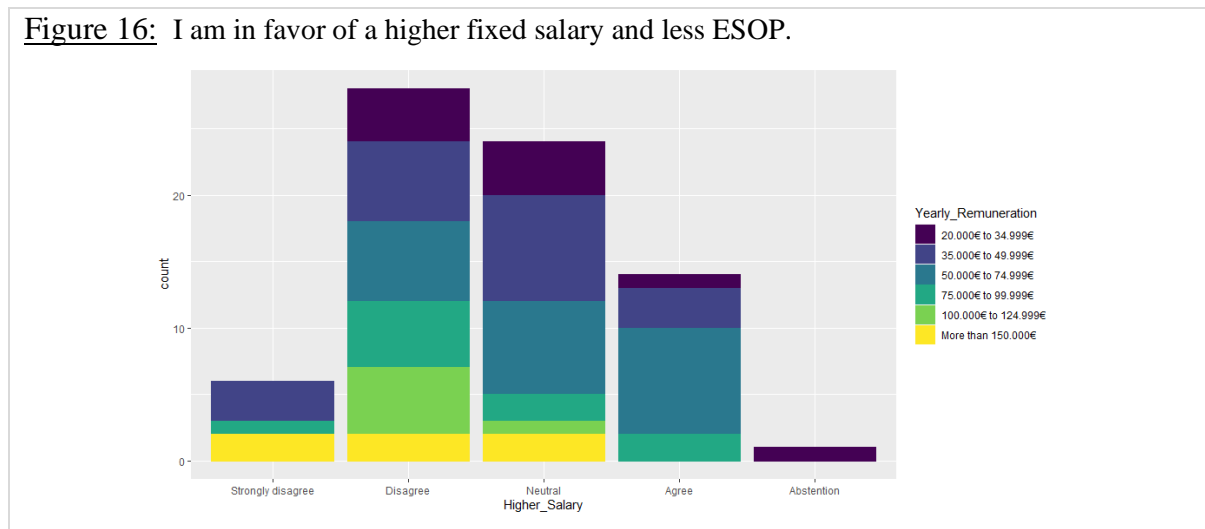
Source: Google Form (Employee Stock Option Plan), 2022

Despite the divided landscape related to the taxation framework, ESOP is still seen as a real life-changer according to 90,41% of the questioned people. However, some caution is required at this stage. The case of Meta and Google creating hundreds of millionaires appeals to the imagination, but we must remain realistic. There are some success stories (Haarscher, 2022), but the probability of never getting anything is still close to 90% (Quarré, 2022). Additionally, it depends on the amount received. If the company is valued by high multiples, it is a win-win. However, it is not always an exciting growth making everyone millionaires (Grandfils, 2022).

Financial conception is not the only way to change one's life. According to Valentin, taking part in a stock options scheme is also a way to develop a certain mentality. Receiving a portion of the created value can play a role in the mentality of the team members. The perspective about entrepreneurship may evolve until the development of a founder mentality (Haarscher, 2022). For instance, the reasons behind the establishment of an ESOP for the startup Accountable is, first and foremost, the founders' past experience in a company that granted stock options (Quarré, 2022). Additionally, in the case of Klarna explained in the introduction, some employees that became millionaires have decided to launch their own startups (Woodford & Billing, 2021). In conclusion, ESOP is about changing lives, but this is not always about money, it can also be about mentality and values around entrepreneurship.

Due to this finding regarding the life-changing conception, the following dilemma about the balance between fixed salary and ESOP can be addressed.

Figure 16: I am in favor of a higher fixed salary and less ESOP.



Source: Google Form (Employee Stock Option Plan), 2022

As can be seen on the graph, 38,36% disagree with the idea of going for a higher salary and a lower amount of ESOP. This trend is directly linked with the idea of ESOP as a life-changer. However, the neutral behavior towards the remuneration package scores at 32,88%. This indifferent position is related to the matter of negotiation and discussion strongly advocated by Valentin and Michaël. The founder of EASOP symbolizes the balance with the idea of “*communicating vessel*” (Haarscher, 2022). You can offer the opportunity to your employees, but the discussion still needs to be up to them (Quarré, 2022). Based on the risk profile and the real implication on their financial resources, the amount of ESOP can be reviewed or even canceled in the case of traumas from past experiences (Grandfils, 2022).

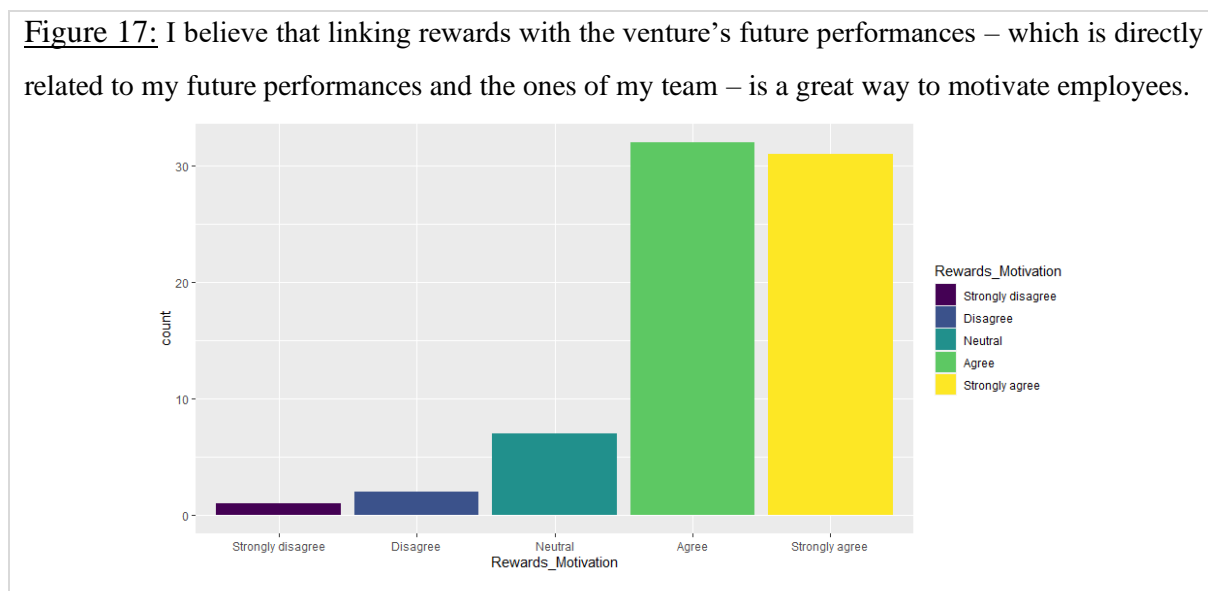
Adding a financial component, higher revenues appear to favor more ESOP over bigger fixed salary. This results in the following conclusion: the lower the remuneration range, the more indecision towards the question. Furthermore, one interesting conclusion is the non-presence of the “*Strongly agree*” answer related to this affirmation. It implies that no one is standing in an extreme position. 14 would prefer cash over ESOP, but no one would overwhelmingly prefer this arrangement. In conclusion, there is no unanimity in ESOP.

Among the other types of remuneration (Appendix 4.13.), about half of the respondents (49,32%) would prefer stock options rather than bonuses. As the current Belgian fiscal framework taxes simple bonuses at a higher rate than regular salaries (Grandfils, 2022), the preference seems apparent. On the other hand, ESOP does not seem to take a step over all types of benefits in kind (Appendix 4.14.). To the question “*Among all benefits in kind (e.g. regular*

bonus, car, phone subscription, ...) having the opportunity to participate in the ESOP is the best one.”, 32 participants feel neutral, meaning that ESOP is not perceived as the most efficient one. Nevertheless, it is still valued as 32 grantees have preferences for ESOP over other benefits in kind if both positive reactions are combined.

In addition to the compensation concept, assessing the link between rewards with the venture’s future performances can help to better handle grantees’ appreciations.

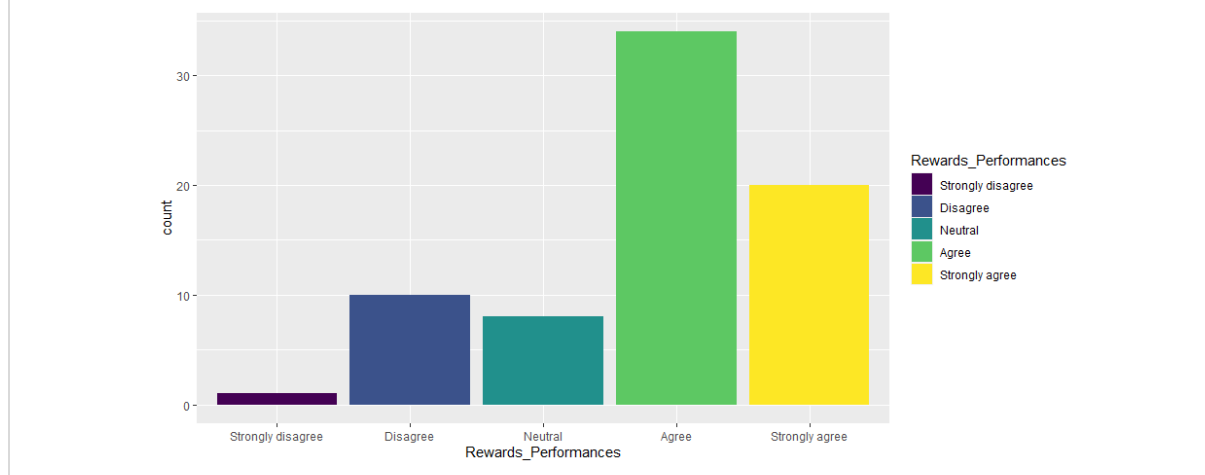
Figure 17: I believe that linking rewards with the venture’s future performances – which is directly related to my future performances and the ones of my team – is a great way to motivate employees.



Source: Google Form (Employee Stock Option Plan), 2022

In most guides (ACCION, 2018; Baderton Capital, 2017), it is stated that becoming a potential shareholder of the company is supposed to motivate employees. In the graph, 86,3% mention a positive feeling towards this intersection. Therefore, the “*Sentiment for the firm*” developed by Akerlof (1982, pp. 543-544) and “*Feeling of ownership*” (Pendleton et al., 1998, pp. 115–116), have been translated in this survey. By receiving a proportion of venture’s equity, the employee is significantly more motivated to work harder to increase the stock price in order to enjoy the premium.

Figure 18: I believe that linking rewards with the venture’s future performances – which is directly related to my future performances and the ones of my team – is a great way to reward for past performance.



Source: Google Form (Employee Stock Option Plan), 2022

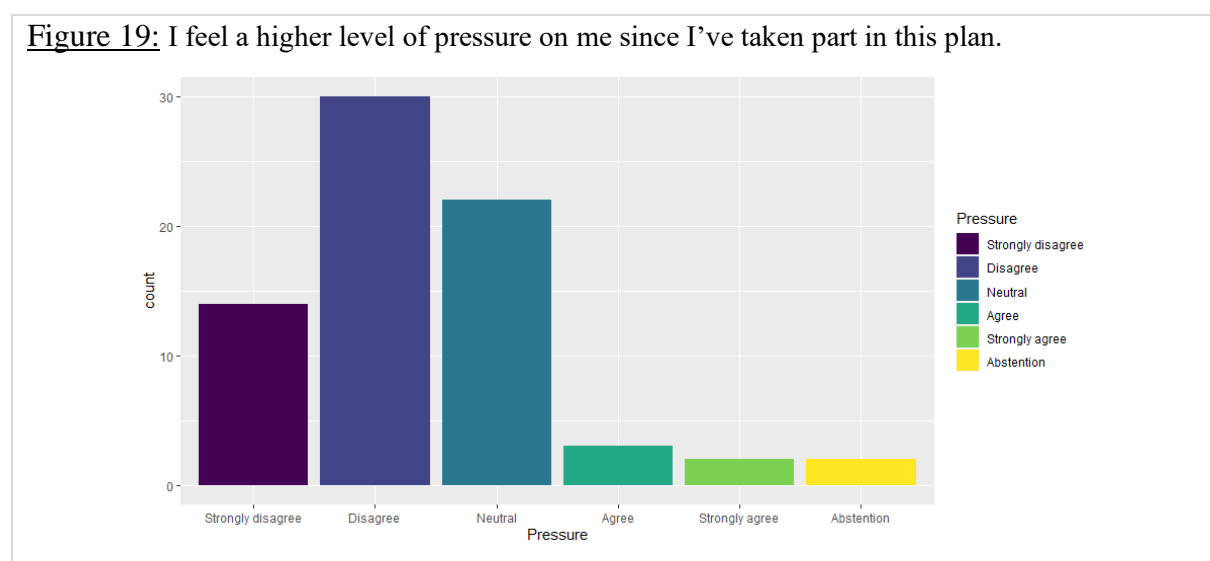
A main credo defended by Michaël was the desire to share the value with team members to thank them for their efforts (Grandfils, 2022). With this histogram, this statement proves to be true as 73,97% of grantees believe that this scheme is a great way to reward for the performances and the efforts.

Notwithstanding, linking reward with the work intensity has been sometimes controversial during the past few years. Therefore, we can wonder if the ESOP is ethical from employees’ point of view (Appendix 4.15.). The graph displays that 69,86% “Disagree” and “Strongly disagree” with this statement. It implies that this way of remuneration is seen to be fair by the employees. Behind the HR reasons of setting up an ESOP, the most important one remains that “it feels good to make sure that people are rewarded for the value they are creating” (Grandfils, 2022). This comment is common to all three interviews, meaning the desire to share with the employees because they deserve it. Consequently, the bond between performances and reward is perceived fair because of the justification. Nevertheless, this sharing seems to be part of the company culture, making the justification even stronger. The culture can be a pattern that offsets the negative effect of the linking.

In conclusion, stock options seem to be favored by employees in general, and the relationship is even stronger when the yearly salary is over 100,000€. Although stock options are valued over other bonuses, they cannot be designated as the best benefit in kind. Moreover, this plan is also seen as a good way to motivate and reward employees, as it has been demonstrated in the past with the “*Sentiment of the firm*” and the greater dedication to work (Akerlof, 1982, pp. 543-544). Therefore, those results confirm the third hypothesis.

2.5. Well-being

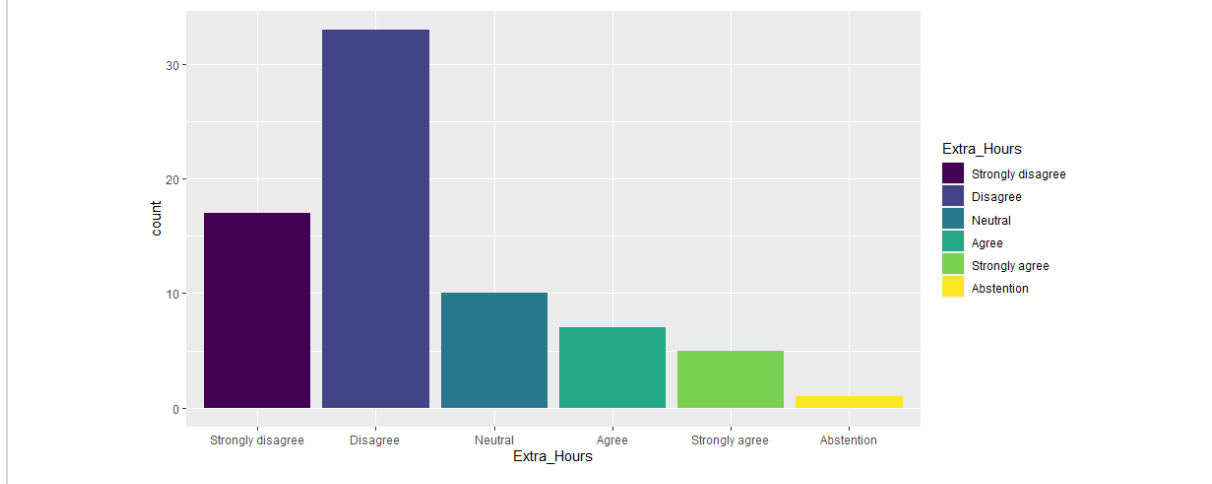
An idea repeated at each interview for the setup of an ESOP concerns the development of a certain mentality in the venture and also the envy to reward for the value created. Behind these assumptions, there is an idea of improving well-being at work. As the concept of well-being is complex, different parameters were tested.



Source: Google Form (Employee Stock Option Plan), 2022

Concerning the level of pressure in the business environment, 41,1% disagree with a potential rise since they took part in the plan. Going even further, 19,18% strongly disagree with this affirmation and, on the other hand, only 6,85% react positively to the idea of pressure. Consequently, for this specific feature, we can conclude that holding employee stock options do not extend the level of pressure on the holder.

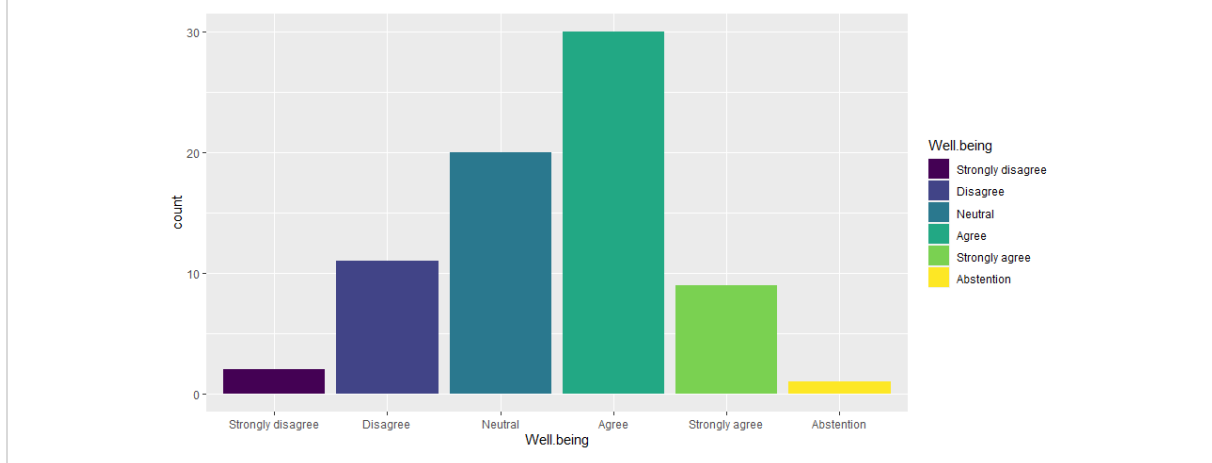
Figure 20: I would not work as much as I currently do if I haven't taken part in the ESOP.



Source: Google Form (Employee Stock Option Plan), 2022

As a positive difference is expected by the employee between the strike price and the stock price during the exercise window to enjoy the premium (Brandes et al., 2003, p. 83), laborers may work longer to boost the venture's value. However, the histogram does not positively respond to the hypothesis. Indeed, answerers mainly react negatively to a potential surge with a level of 45,2% who disagree and 23,29% who strongly disagree. Only 12 people out of 73 believe that they are currently working harder because of the added pressure that the ESOP could represent. As a result, the ESOP does not intensify work according to 68,49% of the grantees with a level of neutrality equals to 17,81%.

Figure 21: I believe that the ESOP is an added value to my well-being at work.



Source: Google Form (Employee Stock Option Plan), 2022

Globally, more than half (53,42%) consider that the ESOP is an added value to their well-being at work. But this last sentence needs to be put in perspective with the reality of the field.

Firstly, other parameters need to be considered to assess the real well-being at work. ESOP may play a role, but it does not fully depict the picture. If the management does not fit the employee's expectations or the job is not interesting, the ESOP is not going to be the reason for not quitting the job (Haarscher, 2022).

Secondly, and linked with the previous point, the company culture is the main element that can influence professional well-being (Quarré, 2022). Having employees that accept the stock options induces that they want to join the journey for the long-run and it is a sign that everyone is aligned with the venture's goals. Consequently, ESOP can be seen as an indicator of the company culture, which is inflating the well-being (Haarscher, 2022).

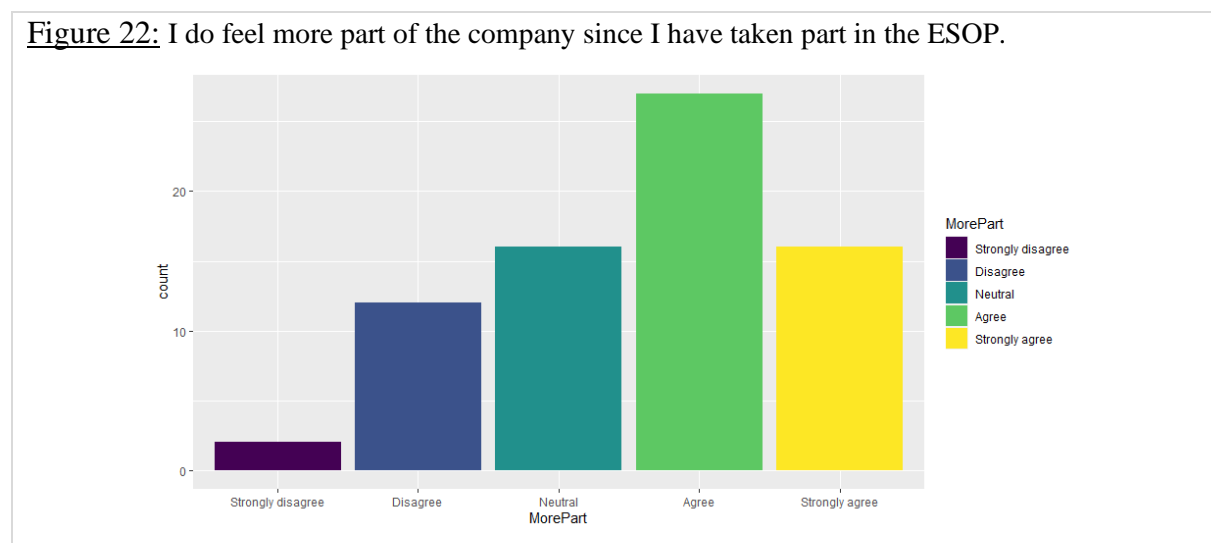
One additional suggested parameter to better capture the effect of well-being is transparency (Grandfils, 2022). Giving a transparent perspective in terms of salary and ESOP evolution is positively affecting professional well-being on a basis of fairness. Once again, transparency is a matter of mentality, directly linked with the company culture the founder wants to establish in his company (Grandfils, 2022).

In conclusion, the stock option plan does not significantly impact the level of pressure and extra hours, and therefore positively influences well-being. No unethical feeling was felt by connecting rewards and work responsibilities (*Appendix 4.15.*). Consequently, this section seems to support the research made previously by Klein & Hall on the improvement of employees' satisfaction (1998), and also Coyle-Shapiro and al. (2002) and to confirm our hypothesis of enhancing well-being.

Nonetheless, precautions need to be taken at that point. There is always a discrepancy between theory and practice. Based on the interviews, it was underlined that what really improves the well-being at work is the company culture, not the ESOP. The ESOP is more of a tool used to align both stakeholders' goals and create an inclusive company culture, leading to improving well-being (Quarré, 2022). This scheme can be seen as the materialization of the company culture, so closely connecting ESOP and well-being could be an overstatement.

2.6. Company culture

Based on the confidence received during the interviews about the materialization of the company culture through the ESOP, this subsection is going to test this assumption.



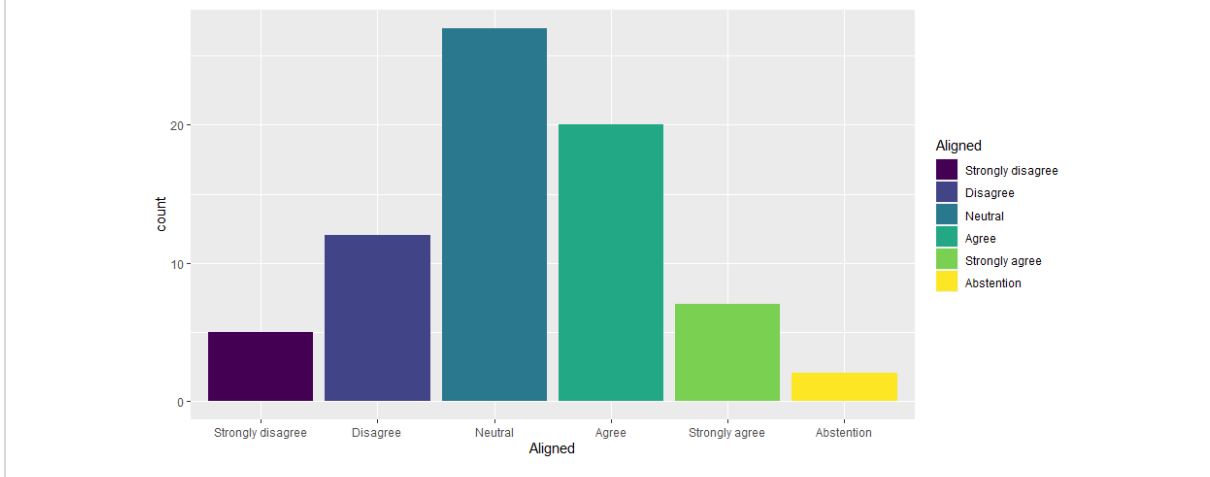
Source: Google Form (Employee Stock Option Plan), 2022

The last step in the vesting schedule is characterized by the exercise, leading through a place in the shareholding of the company (ACCION, 2018). By actively participating in it, an upsurge into alignment and contribution should occur. This statement proves to be true on the output of the histogram above. Indeed, the leading trend is the “Agree” behavior at 36,99%, followed by 16 people that do “Strongly agree” and the same amount that feels “Neutral” in this situation.

This tendency is supported by the idea of creating a feeling of community (Grandfils, 2022). If the employees are included in the shareholding of the company, they would directly feel more part of it as they become more than “simple” employees. Additionally, if the company desires to make the employees more owners, the ESOP is the perfect tool to do that (Quarré, 2022). Both statements join the theory around “Feelings of ownership” (Pendleton et al., 1998, pp. 115–116).

The feeling of being an integral part of the company is an element, but does the grantee experience being more valuable? (*Appendix 4.16.*). Compared to the previous graph, the trend is towards “Neutral” (26 out of 73 participants). 29 grantees positively react to this valuation whereas 17 do not feel this connection. The conclusion is not as clear as before, but a neutral to positive output can be observed related to this criterion.

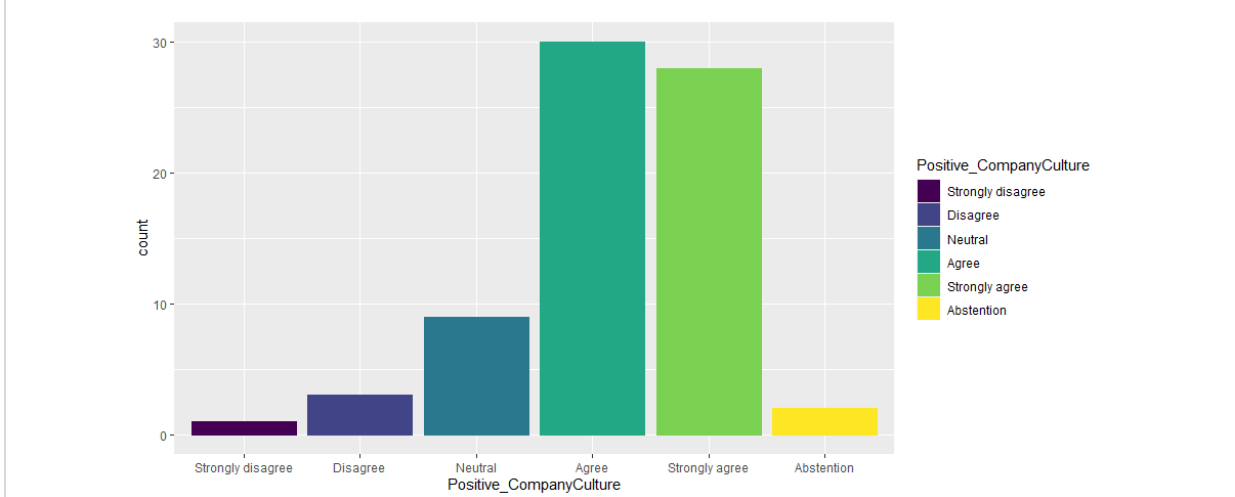
Figure 23: I do feel more aligned with the venture’s strategy since I am taking part in the shareholding.



Source: Google Form (Employee Stock Option Plan), 2022

Although the alignment of both stakeholders’ goals is an objective of establishing an ESOP, we can examine a trend toward a mitigated point of view at a level of 36,99%. Globally, grantees are feeling more aligned with the goals with 20 that “*Agree*” and 7 that “*Strongly agree*”. Even if the negative side is not the leading one, it is still substantial. Despite this moderation, the three interviewees stand in a more positive position. Michaël states the alignment of all stakeholders on the same trajectory as the third reason behind the establishment of an ESOP (Grandfils, 2022). Moreover, Nicolas advocates that this is the best way to align goals over the short-term and long-term of the company (Quarré, 2022). Indeed, if employees accept the stock options, this reflects the strong belief in the concept of the company and the desire to make it a success over time, without looking only at their own plates (Haarscher, 2022).

Figure 24: Distributing stock options to all employees has a positive impact on the company culture.



Source: Google Form (Employee Stock Option Plan), 2022

The graph speaks for itself, with 80,28% reacting positively to the idea of company-broad plan. Having a scheme that includes everyone in the profit-sharing, from top to bottom, seems to win over more than three fourth of the respondents. This information is completely in line with the views of the three founders. According to them, ESOP should be a company-broad plan in order to incentivize everyone (Haarscher, 2022; Grandfils, 2022; Quarré, 2022). Of course, there may be exceptions for trainees or short-term contractors for instance, but the model should englobe all active employees at different levels based on the responsibilities and the seniority (Grandfils, 2022). Although the distribution is a discussion (Haarscher, 2022) and is based on the profile of the person (Grandfils, 2022), a non-selective distribution is reflecting a certain mentality in the company, that leads to develop a company culture. The main message behind this distribution is that everyone – as a whole – participates in the value creation and should therefore be rewarded for their efforts (Grandfils, 2022).

This positive feeling is empowered by employees participating to company-broad plan. Taking into account the linear regression (*Appendix 4.17.*), it results into a positive significant influence of the full distribution criterion on the positive effects created by the company-broad plan. As the company-broad characteristic is a dummy variable, it induces that if the ESOP plan is open to all participants, the company culture should be strengthened by 1.964 at a level of confidence of 99%.

In conclusion, the four tests show a rather positive impact of the ESOP on the company culture, even stronger when the plan is destined to all employees, from the top to the bottom. The previous axis (2.5. *Well-being*) are also sustaining this idea. For instance, it has been stated that the ESOP is not the real factor impacting the well-being at work, but more a tool that was reflecting the company culture, which directly affects the professional well-being. Ultimately, I concur with the conclusions of Kruse and al. where a positive company culture legitimates the tool (2004). The added value of this is the relationship between the company-broad plan criterion and company culture, by enforcing that the ESOP is a parameter that reflects the company culture and can positively impact the latter when it is offered to everyone. We can therefore confirm the fifth hypothesis.

2.7. Additional insights

During the interviews, other topics were discussed outside the five axes, but still in the context of the ESOP.

Firstly, a quick mental connection could be made between high-tech startups and successful ESOP due to the examples of Meta and Google. Nevertheless, the entrepreneurs underlined that ESOP is for all companies regardless the industry. The main reasons behind this scheme are usually about retention, recruitment, attraction, aligning everybody on the same trajectory, and reduction of salary costs. Thus, these goals are for all regardless the industry (Grandfils, 2022). The distinction should not come from that criterion, but more from the type of startup. Valentin described favorable ventures as early and private as they are the ones where employees can get the higher multiples from it (Haarscher, 2022). Getting involved in a venture expected to have high growth is about taking some high risks, but it can certainly lead to an interesting reward if the concept succeeds (Quarré, 2022).

Secondly, a modification of the legal system can have a positive impact on the development of the culture around ESOP. However, the main characteristic to expand this scheme at an interesting level such as the one in the U.S., is reaching a “*critical mass of companies granting stock options*” (Quarré, 2022). If the concept begins to be highly developed in Belgium, a culture around rewarding will emerge strongly, and employees will finally have the tools to enjoy this remuneration at its fair value.

Thirdly, a more global perspective around the ESOP needs to be stated. If more encouragement around this scheme was given by the Belgian authorities, the concept could expand itself and create many spillovers. As this scheme aims to increase awareness of value creation, it is expected to generate growth inside the country. What rhymes with national growth is positive consequences on employment, GDP, national attractiveness, and so on (Grandfils, 2022). Moreover, the ESOP should not be seen as a plan for only startups. The development of rewarding by the means of stock options should be extended to larger corporations with some adjustments based on the size and the taxation framework.

Chapter 3: Limits

As this paper is about an experimental study in the context of the entrepreneurial landscape in Belgium, several limits need to be considered.

Firstly, the scope of the questionnaire is limited due to a low level of participation (73 participants). In order to draw conclusions without any bias, a certain level of participants need to be reached. This is not the case here for two main reasons. Firstly, this concept is not well developed in Belgium, which makes it more difficult and challenging to contact companies. Moreover, there are no official lists with the ventures offering ESOP to their employees, or even an online website that records some examples. Secondly, startups are usually extremely busy. Without any blame, it makes it complex to reach them and convince them to communicate internally about this questionnaire in the context of a Master thesis.

Secondly, a major part of the grantees (68,49%) are from the company Qover. It would be interesting to reach people from diverse industries and companies in order to capture a more universal trend concerning the ESOP. For instance, if the ESOP is seen as an excellent tool for employee retention and is aligned with a company culture where people feel good in this specific company, it can lead to a biased positive correlation due to a high level of participation from this company. However, it may not be the case if several companies are mixed in a database. Therefore, involving different firms would lead to more unbiased results that would be independent of one single company.

Thirdly, the lack of visibility in terms of figures and documents was a hindrance to the elaboration of this paper. All the information about the Belgian taxation that does not fall under the law of 1999 has been given to me by entrepreneurs as it is not readily available online. A clearer part about the figures would give an extensive perspective in this literature review. However, this is out not my responsibility. Government and financial authorities should improve the framework to promote the concept.

Overall, this paper is already good starting point for further studies and opens the door to a better understanding of this type of remuneration, albeit additional studies need to confirm these findings.

Conclusion

Throughout this paper, the concept of ESOP has been studied to comprehend the mechanisms behind this strategy, with a particular focus on the current Belgian entrepreneurial framework. In terms of application, it appears that this scheme is not well-known in Belgium due to a lack of visibility and promotion at the national level. Therefore, this study aimed to bring to light on the benefits that the plan offers through the participation of several Belgian startups. In this respect, some significant effects emerged.

Firstly, a significant rise in loyalty and accountability derives from the participation in the ESOP. By increasing the level of loyalty, the ESOP ultimately influences the retention effect on loyal workers positively at a 95% confidence level. Nevertheless, the interviewees stressed the importance of additional parameters to consider in the retention effect such as the vesting schedule and the company culture.

Secondly, ESOP was described as an efficient and valuable tool in the remuneration package according to the beneficiaries. In fact, the concept is seen as a valued benefit in kind although it is not the best among others. This second conclusion reinforces the “*Sentiment of the firm*” (Akerlof, 1982, pp. 543-544).

Thirdly, the company culture turns out to be the most important issue of this study. The results and the interviewees are unanimous, the ESOP positively and significantly stimulates the company culture and is even stronger when the plan is destined for the entire employees’ pool. At the same time, this scheme reflects the mindset of the founders and the startup as a whole. In conclusion, it is a two-ways impact.

On the other hand, two other axes offer no conclusion. Regarding taxation, the ESOP scene is mitigated between the upfront taxation and the tax on capital gains, regardless of the remuneration level. In the context of well-being, a positive impact could be confirmed on the basis of the quantitative research, but interviewees suggested that too many other variables have an impact on this axis where the company culture is the principal actor. Therefore, no conclusion will be drawn to avoid any biased outcomes.

Despite the favorable results, the emphasis needs to be placed on the novelty of this subject in Belgium. Consequently, this study should be seen as an open door for future research. The following is a non-exhaustive list of recommendations and reflections.

First, the Belgian taxation field remains a strong argument in the set-up of an ESOP. Due to a low participation rate and a lack of diversity, my findings may not reflect the right picture concerning the preferences. Therefore, I suggest focusing on this variable to properly assess the grantees' feelings about it. The purpose is to, firstly, contribute to extend the literature and, secondly, to push Belgian authorities to reconsider the current framework.

Secondly, and closely linked with the first one, the adaptation of the fiscal framework should also be considered in order to better emphasize the open choice presents behind the stock options. Enforcing a law of 1999 favoring the upfront taxation seems to be a brake on entrepreneurship as the opportunity to delay is not well-known. In addition, the upfront taxation seems to scare some team members, which leads to certain rejection and can make entrepreneurs less prone to establish an ESOP. To better embrace current trends, an updated legislation would be suitable as this new topic is controlled by an old Belgian fiscal framework.

Thirdly, I personally consider that the visibility around this concept should be extended in Belgium, as well as in Europe. Despite the creation of a few guides offering some clues towards the establishment of a stock options plan, there is no official website that reports on the diffusion in the country or the timely evolution. Creating a complete black box around this concept does not encourage founders to set up this scheme in their company. Therefore, it is crucial to develop the knowledge around this concept so that, on the one hand, employees are able to appreciate the culture of reward, and, on the other hand, founders can establish it in optimal way.

Finally, this master thesis should not be limited to the entrepreneurial landscape. With some modifications, the conclusions can be adjusted to larger corporations. By increasing the scope to all companies, it would become realistic to reach the "*critical mass*" defined by Nicolas Quarré (2022). Only when it is reached, should there be spillovers on the Belgian economy (Grandfils, 2022) and the creation of lucky employees.

Despite all the strengths of this concept, it is important to bear in mind that everything that revolves around the stock market is never certain at 100%. In the event that the venture goes bankrupt, this proportion of the salary going into stock options is lost without any claim. Although I truly believe that it is an interesting alternative to fairly reward employees, all the pros and cons must be mentioned to avoid any biased decisions. If trainings and promotion are done properly, I truly consider that this concept should thrive in the future and make thousands more employees happy.

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Appendices

See attached PDF.

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