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Summary of WP Student Team

STRATEGIC REFLECTION ON GOOD PRACTICES FOR THE INCLUSION OF PEOPLE
WITH DISABILITIES ON THE EMPLOYMENT MARKET IN EUROPE AND
REPLICATION STRATEGY IN PORTUGAL

Group constitution:

Student Name	Program	Individual Title
Antoine Marneffe	Impact Entrepreneurship and Innovation	Gap Assessment
Gonçalo Monjardino	Finance	Financial Implications
Jack Vanhumbeeck	Management	Concepts & Dimensions
Jules De Coster	Impact Entrepreneurship and Innovation	Recommendations
Raúl Vaz da Conceição	Impact Entrepreneurship and Innovation	Benchmark

Work project carried out under the supervision of:

Advisor: José Miguel Pita

Reading observations for the jury:

Due to the collaborative nature of the thesis, each group member contributed to every module, focusing on specific subchapters within each section. For the presentation, we divided sections among members, and the listed titles indicate the sections each member presents. Note that these titles don't fully represent individual contributions but aid time management during the presentation.

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A Work Project, presented as part of the requirements for the Award of a Master's degree in Management, Impact Entrepreneurship and Innovation and Finance, from the Nova School of Business and Economics.

STRATEGIC REFLECTION ON GOOD PRACTICES FOR THE INCLUSION OF PEOPLE
WITH DISABILITIES ON THE EMPLOYMENT MARKET IN EUROPE AND
REPLICATION STRATEGY IN PORTUGAL

JACK VANHUMBEECK
ANTOINE MARNEFFE
GONÇALO MONJARDINO
RAÚL VAZ DA CONCEIÇÃO
JULES DE COSTER

Work project carried out under the supervision of:

JOSÉ MIGUEL PITA

20/12/2023

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Abstract

This study examines the challenges faced by disabled individuals in finding employment and looks at case studies from other European countries to identify best practices. Based on these findings, the study proposes practical recommendations for Portuguese institutions to improve employment prospects for people with disabilities. The financial implications of these recommendations are also estimated. By promoting a more inclusive society, this study aims to reduce the employment gap between disabled and non-disabled individuals in Portugal.



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Keywords

EWD – Employee with a disability

EEPO - European Employment Policy
Observatory Review

UNCRPD - United Nations Convention on
the Rights of Persons with Disabilities

PWD – People with disabilities

PWSD – People with severe disabilities

PWMD – People with moderate disabilities

EWSD – Employee with severe disabilities

EWMD – Employee with moderate
disabilities

ICF - International Classification of
Functioning, Disability and Health

WHO - World Health Organization

ILO - International Labor Organization

EU- European Union

AAPD - American Association of People
with Disabilities

DEI - Disability Equality Index

DEGP - Disability Employment Gap in
Percentage

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1. Concepts & dimensions

1.1. Definition of disabilities

There is no single universally accepted international definition of disability, but there is a general framework provided by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The UNCRPD is an international treaty adopted by the United Nations General Assembly in 2006, opened for signature in 2007, and entered into force in 2008 (United Nations. n.d.). It is the first comprehensive human rights treaty of the 21st century, and it is the first human rights convention to be open for signature by regional integration organizations. It promotes the full integration of PWD's in society; it is designed to protect PWD's and promote their rights and dignity (World Bank. 2023.). The treaty aims to ensure that PWD's enjoy all human rights and fundamental freedoms equally with others. It offers guidance on understanding and addressing disability, but it allows some flexibility for countries to adapt the concept to their specific contexts. It covers a wide range of rights, including civil, political, economic, social, and cultural rights. The UNCRPD has garnered 187 ratifications/accessions, encompassing countries or regional integration organizations (United Nations. n.d.). Ratification is the act by which a state indicates its consent to be bound to a treaty. At the same time, accession is the act by which a state accepts the opportunity to become a party to a treaty that has already been negotiated and signed by other states (United Nations. n.d.).

The UNCRPD does not explicitly define disability. However, the preamble of the Convention states that "Disability is an evolving concept, and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder full and effective participation in society on an equal basis with others" (United Nations. n.d.).

Article 1 of the Convention states, "Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations. n.d.).

Even if there is a general framework from the UNCPRD, different countries may have different legal frameworks and their own specific definition of disability. These definitions play a crucial role in determining who is eligible for specific privileges. In Portugal, the legal definition of the term "disability" is found in the Framework Law on prevention and rehabilitation of disabled persons (Law 9/89 of 2 May 1989). Under this law, "persons who, because of a congenital or acquired loss of an abnormality of psychological, intellectual, physiological, or anatomical structure or function, are in a disadvantaged situation concerning the performance of an activity considered normal taking account their age, gender, and the prevailing social and cultural factors, are considered as disabled" (European Blind Union. n.d.).

1.1.1. Types of disabilities

Various types of disabilities exist, and they can be classified into four main categories: physical, mental, intellectual, and sensory. It is imperative to recognize that PWD's may experience distinct challenges based on the type of disability they have. Additionally, each category of disability uniquely influences the performance and productivity of PWD's, necessitating diverse accommodations to address their specific needs. Understanding and identifying these variations is essential because it guides the creation of inclusive solutions that address the various needs of PWD's within each group. By designing accommodations to meet these specific needs, it is possible to create a setting in which PWD's can flourish and fully contribute their skills and abilities.

1.1.1.1. Physical disabilities

Physical disabilities can have either a temporary or permanent impact on an individual's physical capacity and mobility. Various factors contribute to the development of physical disabilities, encompassing inherited or genetic disorders, severe illnesses, and injuries. These disabilities may result in mobility, coordination, balance, strength, or sensation difficulties, and can vary in severity and impact on an individual's daily life. Examples of physical disabilities include paralysis, limb amputation, cerebral palsy, muscular dystrophy, multiple sclerosis, spinal cord injuries, and arthritis. (Aruma. n.d.) To support individuals with physical disabilities in the workplace, some accommodations are necessary. The main adaptations are to ensure accessibility through the modification of existing facilities, such as the installation of ramps, elevators, and wider doorways. Additionally, employers should implement ergonomic workstations by adjusting elements like chairs and desks to accommodate various physical limitations. (Job Accommodation Network. n.d.)

1.1.1.2. Mental disabilities

Mental disabilities constitute a broad and encompassing category, denoting a spectrum of conditions that profoundly influence an individual's emotional, cognitive, behavioral, and interpersonal functioning. Such conditions can impose substantial challenges and impairments upon affected individuals, as well as cause distress for their loved ones. (Aruma. n.d.) Examples of mental disabilities include conditions like major depressive disorder, schizophrenia, bipolar disorder, and generalized anxiety disorder. (Aruma. n.d.) To ensure the successful integration of individuals with mental disabilities, it is important to promote their well-being by allowing flexibility in work hours or remote work. Furthermore, enhance the work environment by providing resources such as noise-canceling headphones or quieter workspaces. Additionally, employers should provide stress reduction programs or counseling services to ensure a supportive workplace culture. (Job Accommodation Network. n.d.)

1.1.1.3. Intellectual disabilities

Individuals with an intellectual disability are identified by possessing an IQ score below 70, in contrast to the average IQ of 100. Moreover, they face profound challenges when it comes to performing fundamental daily tasks like self-care, maintaining safety, communicating effectively, and engaging in social interactions. Those with an intellectual disability often exhibit slower information processing abilities, encounter difficulties in acquiring communication and independent living skills, and struggle with grasping abstract concepts like managing finances and understanding the concept of time. This condition can arise due to a variety of factors including genetic abnormalities, complications during pregnancy and childbirth, health ailments or illnesses, as well as the influence of environmental elements. Examples of intellectual disabilities include Down syndrome, autism, fragile X syndrome, and intellectual developmental disorder. (Aruma. n.d.) To assist individuals with intellectual disabilities, creating an inclusive learning environment through one-on-one training and support provided by supervisors or specialists is crucial. It is also important to adapt training materials to suit different learning styles for effective comprehension. Additionally, there is a need to implement accommodations that simplify complex tasks or offer step-by-step instructions tailored to individual needs. Job restructuring should also be considered to align tasks based on an individual's abilities. (Job Accommodation Network. n.d.)

1.1.1.4. Sensory disabilities

A sensory disability is characterized by impairment in one or more of the sensory modalities, such as sight, hearing, smell, touch, or taste. Given that a significant majority of environmental information is acquired through the senses of sight and hearing, the presence of a sensory disability can substantially impact an individual's capacity to access and interpret information from their surroundings. (Aruma. n.d.) To enable people with sensory disabilities to work in a comfortable environment, various accommodations are needed for their diverse needs. It is

essential to create sensory-friendly environments or make modifications to minimize distractions, ensuring a more comfortable setting for everyone. Visual aids and descriptive services provide essential information to those with vision impairments. For individuals with hearing impairments, sign language interpreters or real-time transcription services facilitate effective communication. Additionally, implement specific adjustments, including using shades to reduce eye strain from bright or fluorescent lights. It is also essential to ensure that technology is accessible to all by confirming compatibility with screen readers or other assistive devices. (Job Accommodation Network. n.d.)

1.1.2. Degrees of impairments

There are no EU-wide guidelines for determining the degree of disability. These definitions vary depending on the country and the organization, which may lead to different views and treatments. However, there are international standards for measuring disability. The International Classification of Functioning, Disability, and Health (ICF) is a framework for describing and organizing information on functioning and disability. The ICF is based on the same foundation as the International Classification of Diseases (ICD) and the International Classification of Health Interventions (ICHI) and shares the same set of extension codes that enable documentation at a higher level of detail. (World Health Organization. n.d.) The ICF is the World Health Organization's (WHO) framework for measuring health and disability at both individual and population levels and was officially endorsed by all 191 WHO Member States on 22 May 2001 as the international standard to describe and measure health and disability. (World Health Organization. n.d.)

For instance, in Portugal, the ICF is used to assess the extent of impairment in bodily functions, activity limitations, and participation restrictions based on an individual's health condition. The degree of impairment is estimated using a scale of percentages ranging from 1% to 100%. The

assessment considers various factors such as impairments in mobility, communication, self-care, understanding and decision-making abilities, and overall quality of life.

In Portugal, the initial process for a PWD to assess his official degree of impairment involves visiting the Social Security website to complete a designated form. Subsequently, the individual will be scheduled for an evaluation of his impairment. (Segurança Social. n.d.) The evaluation is conducted by multidisciplinary teams composed of medical doctors, psychologists, and social workers. The medical assessor assigned to the case examines the medical documentation provided by the applicant, conducts a medical examination if necessary, and evaluates the functional limitations and their impact on daily life activities. The medical board determines the final decision on the degree of impairment based on the medical assessor's report. (European Commission. n.d.) Finally, the resulting percentage of impairment determines the person's eligibility for specific rights, benefits, and assistance programs.

1.2. Importance of integrating people with disabilities

In today's world, the importance of integrating PWD's into the workforce cannot be understated. One of the key reasons behind this is the fundamental danger of poverty that many of these individuals face.

The integration of PWD's into the employment market is an essential aspect of creating a more inclusive and equitable society. PWD's should have the same chances as everyone when it comes to finding a job and creating value in the employment market. To achieve a more equitable employment market, it is crucial to implement policies that guarantee equal opportunities for PWD's.

To shed light on the current situation in Europe and, more specifically, in Portugal, important statistics were explored and critical factors that underline the necessity of inclusive practices and policies for individuals with disabilities.

1.2.1. Current Statistics in Europe and Portugal

To better understand the importance of including PWD's, it is relevant to examine the current reality within the European population. The question at hand will be approached through a general analysis of Europe, with a focus on the situation in Portugal, which is the leading country for this study.

According to recent estimates, there are 101 million people over the age of 16 in Europe with some form of disability, representing one adult in four (European Council. 2023) [2]. Furthermore, projections indicate that the number of PWD's in the European Union is set to increase as a result of aging of the population due to medical progress (World Health Organization. Regional Office for Europe, 2022) [1]. This indicates that attention should be maintained on integration policies to guarantee their effectiveness.

In Portugal, the proportion of PWD's is higher than the European average. In fact, according to the European Commission, one Portuguese in three is affected by some disability (Stefanos Grammenos, 2020). This number includes people with different levels of disability, falling into the moderate and severe categories. The difference between moderate and severe disability lies primarily in the degree of impact on a person's functionality. Moderate disabilities have an observable but less profound impact. Severe disabilities, on the other hand, have a more severe impact and drastically limit the functions of those affected to the point where they need help with basic activities (Worcester State University. 2020).

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The table shows that there are fewer people with more severe disabilities. In the case of Portugal, they account for 9%, compared with 25% for disabilities considered moderate (Grammenos Stefanos, 2020).

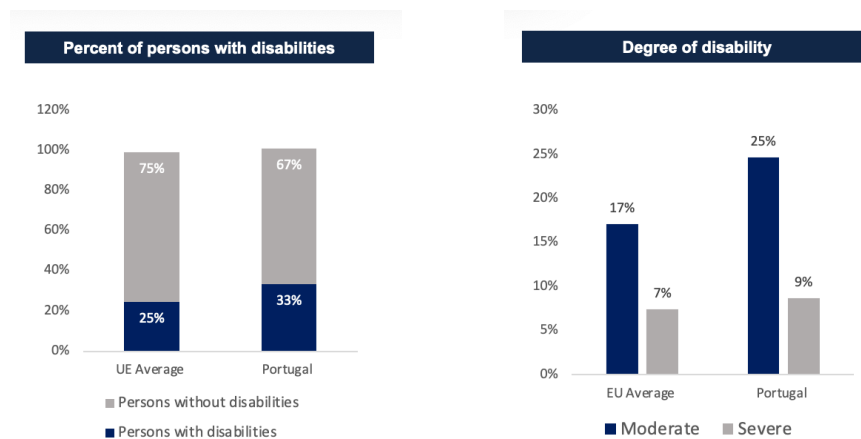


Figure 1 -Percent of persons with disabilities

Figure 2-Figure 3 – Degree of disability

A deeper analysis focusing on the working-age population, the age group most relevant to the study as it centers on the employment market, reveals some fascinating trends.

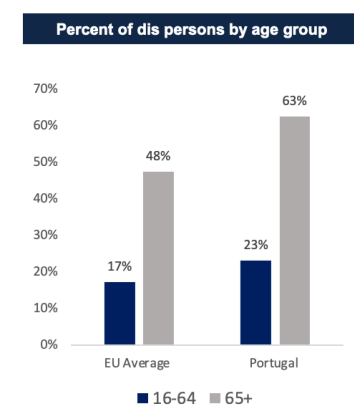


Figure 4 - Percent of PWD'S by age group

In 2017, according to the EU-SILC, 17% of people in Europe between the ages of 16 and 64 are classified as having a disability. It is worth noting that the elderly population has a significant impact on the number of PWD's in Europe, as the rate of impairment increases dramatically to 48% for those over 65 (Grammenos Stefanos, 2020).

Within the context of Portugal, the proportion of PWD's in both age categories is higher than the average for EU member states. In other words, people with impairments are estimated to impact 23% of people in the 16–64 age range and 63% of people over 65 (Grammenos Stefanos, 2020). These statistics highlight a significant gap, showing that a higher percentage of PWD's reside in Portugal compared to the EU as a whole.

It is interesting to note that there is a consistent trend when examining the prevalence of disabilities in EU member states from a gender perspective. Across all EU member states, women tend to be more affected by disabilities than men. For instance, in Portugal, the statistics show that 38% of women in the population are disabled, compared to 28% of men (Grammenos Stefanos, 2020).

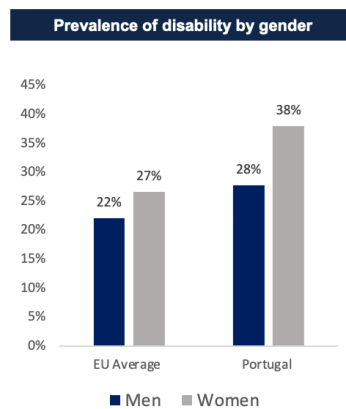


Figure 5 - Prevalence of disability by gender

1.2.2. Challenges faced by people with disabilities in Portugal

It is evident that PWD's face daily struggles in their lives, whether it is in a work environment or elsewhere. Therefore, solid policies and legislations are vital drivers to equal access to opportunities, mainly because of external factors such as "poor education, prejudice and negative attitudes against PWD's", as said by Jorge Falcato, who sustained paraplegia as a result of a gunshot wound in 1978 (Peláez 2017). Thus, beyond the challenges PWD's naturally face in their lives, there are also challenges associated with how society perceives PWD's and how it was built in a way that most times does not guarantee their proper accommodation and inclusion.

In light of this, access to education, employment and culture is for PWD's, a fact that can be associated with 30% of this population being at risk of poverty and social exclusion, as previously mentioned (Youth Employment 2023).

Despite the ongoing changes to increase access to employment for PWD's, significant improvements are still needed for an inclusive employment market. The disability employment gap in Portugal is lower than the EU average in 2020. Portugal had 18,2 p.p. and the European Union had 24,5 p.p.. However, the comparison between Portugal and the European Union alone does not effectively illuminate the challenges PWD's face in the job market. To gain a better understanding, it is essential to commence by analyzing the specific figures provided by the employment centers in Portugal. Nonetheless, when comparing people without disabilities with people with severe disabilities (PWSD) in Portugal, the disability employment gap is higher (28,8pp.), although it is the lowest rate among all members of the European Union, including the European average (44,1 pp).

In 2021, the number of registered people with moderate disabilities (PWMD) in the employment centers reached its highest point in Portugal, totaling 14 510 people. When comparing people without disabilities and people with moderate disabilities, Portugal's gap is

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not within the lowest amongst the members of the European Union (15,3), although it is still lower than the EU-27 average (17,4) (Figure 5).

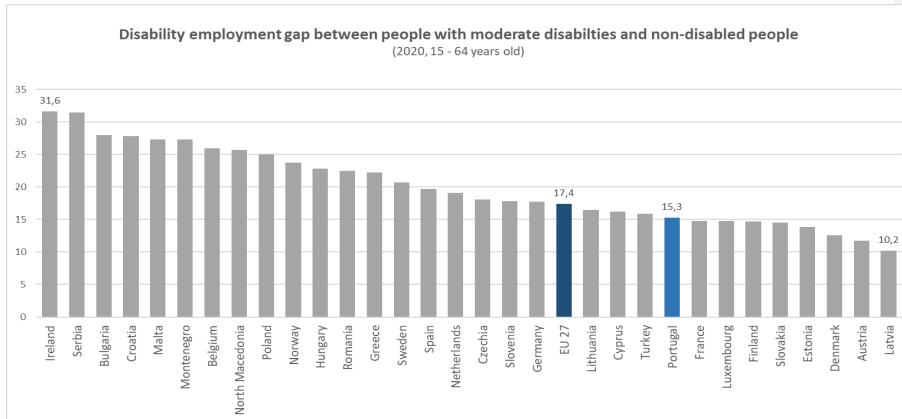


Figure 6 - Disability employment gap between people with moderate disabilities and non-disabled people

Regarding the evolution of unemployment over the years, from 2016 to 2019 unemployment was decreasing for both people with and without disabilities in Portugal. However, the pandemic made the numbers go up again with unemployment increasing for both groups mentioned. Nonetheless the unemployment in the post-pandemic years started to decrease again for people without disabilities, which was not the case for PWD, showing that the pandemic brought larger negative consequences for PWD's (Figure 6).

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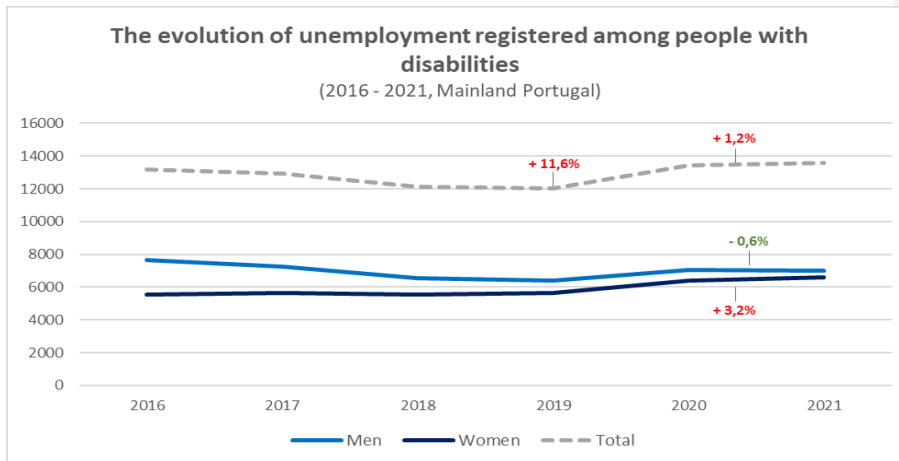
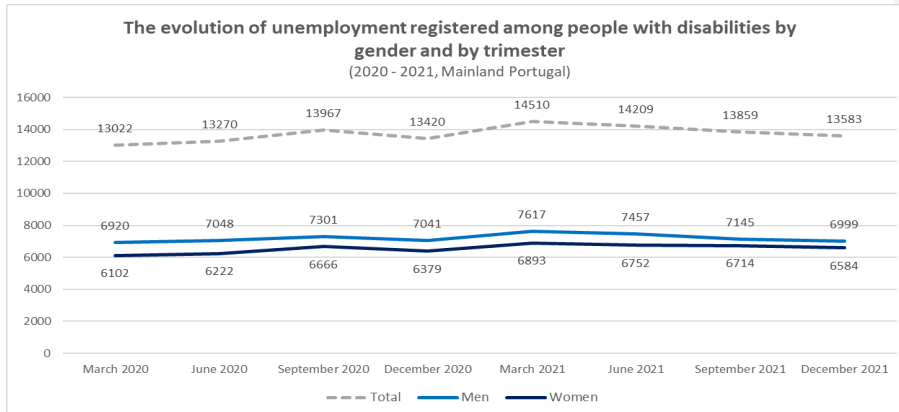


Figure 67 - The evolution of unemployment registered among people with disabilities

Moreover, the recovery post-pandemic came earlier for men with disabilities than women with disabilities, for which the unemployment kept increasing. Going through the data of the study mentioned above, one can also identify that gender inequality is a factor to take into consideration, as mentioned in the work done by Brown and Moloney (2019). This research helps understand the various challenges faced by PWD's in the workplace, one of them being gender inequality, as highlighted by the data used from a longitudinal analysis of community surveys that included a diverse group of people with and without physical disabilities, where the possibility of women with disabilities facing more workplace challenges compared to men with disabilities was investigated. The results pointed that, on average, women with disabilities experience a more significant psychological impact due to unfair workplace conditions, influenced by lower earnings, increased exposure to workplace stress and also a reduced probability of enjoying independent working conditions. Moreover, the report "Pessoas com Deficiência em Portugal- Indicadores dos Direitos Humanos 2021" highlights some gender inequality challenges in Portugal. One graph from said report compares the evolution of

unemployment by trimester between 2020 and 2021 among women with disabilities, men with disabilities and both combined (Pinto, Neca and Bento 2022).



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Figure 78 - The evolution of unemployment registered among people with disabilities by gender and by trimester

It has been observed that among the population without disabilities, the percentage of men registered as unemployed has been higher than the percentage of women (Pinto and Pinto 2019). However, the disparity between the two genders has been decreasing as fewer men with disabilities and more women with disabilities are registered as unemployed.

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Figure 8 illustrates that women with disabilities have more difficulty accessing employment. In the last decade, mainland Portugal has seen a significant increase of 30,5% in unemployment, particularly affecting women with a steep rise of 61,3%. In contrast, men with disabilities experienced a more moderate increase of 9,8%. Unlike the population without disabilities, which experienced an overall decline in unemployment in the same period, the population with disabilities faced varying trends.

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From 2011 to 2016, the scenario for men and women with disabilities' unemployment worsened, with the exception of 2014 and a peak in 2016. Between 2017 and 2019, there was a slight improvement, however, in 2020 and 2021 unemployment began to increase again due to the pandemic. Analysis of the behavior of this indicator in men and women with disabilities

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also reveals different results, showing a constant rise in unemployment registered among women with disabilities between 2011 and 2021, except for 2014 and 2018. Even before the Covid-19 pandemic, women already had more difficulties accessing a job. So, the overall decline in registered unemployed individuals with disabilities is primarily due to the employment of men with disabilities (Pinto, Neca and Bento 2022).

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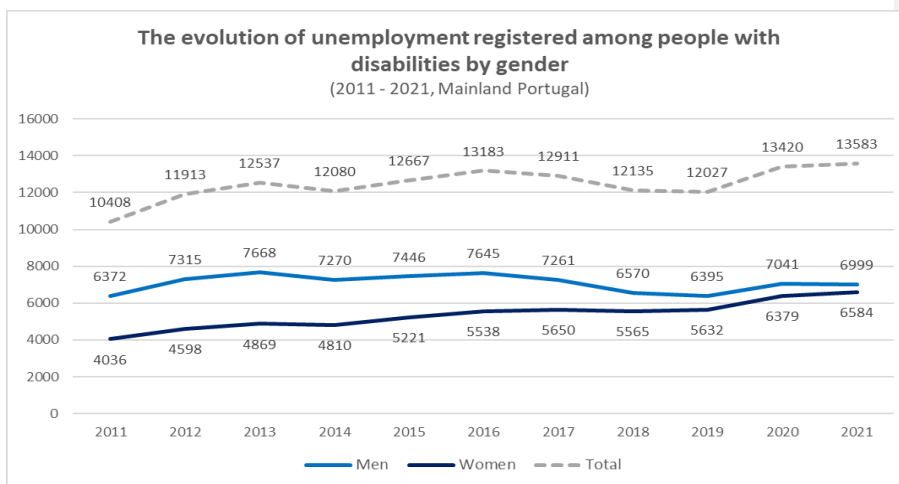


Figure 8 9- The evolution of unemployment registered among people with disabilities by gender

Concerning the professional integration of PWD's in the private sector, data from 2019 in mainland Portugal has shown that workers with disabilities represented only 0,58% of all human resources in said sector. Although an upwards trend has been identified over the years, the data actually suggests a very soft employment growth of young PWD's in the private sector. On the other side, data from the Boletim de Estatísticas de Emprego Público (BOEP) shows that the percentage of PWD's in the overall human resources in the public sector is slightly higher than the private sector (2,62% in 2020). The mentioned study, however, concludes that further research is necessary to better understand the motives and drivers of this seemingly growth in the representation of PWD's in the job market. One of the possibilities referred is that these increasing numbers do not represent new job openings for PWD's, but rather active working

people without disabilities that remain working after acquiring some kind of disability (Pessoas com Deficiência em Portugal 2021). |

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In conclusion, the challenges faced by PWD's in the job market are multi-faceted and also influenced by various factors, including societal perceptions, educational opportunities, and gender inequality. Despite current efforts to increase access to employment for PWD's, significant adversities persist. Analyzing the disability employment gap in Portugal reveals that, while the overall gap is lower than in the European Union, gender disparities within the population with disabilities are evident. Addressing this issue, challenges faced by PWD's in the job market, requires comprehensive strategies that tackle societal attitudes, promote gender equality and enhance employment opportunities. The commitment to inclusivity of PWD's is crucial to create a more fair and accessible work environment.

1.2.3. The disability inclusion advantage

To a significant extent, companies have not fully leveraged the skills of PWD's for three key reasons: a limited awareness of the breadth of available talent, a lack of understanding of the potential benefits, and misconceptions regarding the cost compared to the return on investment associated with disability inclusion. According to that, improvement is still needed in raising awareness among employers about the financial benefits.

The employment of PWD's can bring substantial enhancements to an organization. Viewing it merely as a social cause is a misconception, and more critically, it represents a missed opportunity. Numerous innovative companies across various industries are demonstrating that the inclusion of PWD's can confer tangible competitive advantages and foster long-term profitability. Research from the Harvard Business Review indicates that having employees with disabilities in a workforce can contribute to building a firm's competitive advantage in four ways:

Group part

- The inclusion of PWD's in a company can contribute to increased innovation. Their need for creative adaptation to their surroundings fosters the development of essential attributes for innovation, including problem-solving skills, persistence, foresight, and a willingness to experiment. (Alemany, Luisa. June 13, 2023.)
- Improving overall productivity is another positive outcome. The inclusion of PWD 's contributes to fostering a culture of collaboration within the entire organization, thereby boosting productivity. When employees sense that they belong to an inclusive environment, their motivation and commitment are heightened, resulting in a positive impact on overall productivity. (Alemany, Luisa. June 13, 2023.)
- The inclusion of PWD's has also positively influenced the company's reputation. Companies that embrace inclusive marketing strategies often distinguish themselves in a competitive landscape. A reputation for inclusiveness strengthens the firm's value proposition with customers, fostering a greater willingness to establish long-term relationships with the company. (Alemany, Luisa. June 13, 2023.)
- Given that PWD's constitute a significant portion of the consumer market, their inclusion in the workforce can lead to an improvement in market share. Employing individuals who possess a deep understanding of the needs and preferences within this market segment enables companies to customize products and services, ensuring they align closely with the specific requirements of this diverse consumer base. (Alemany, Luisa. June 13, 2023.)

Some recent researches have supported the potential benefits of employing PWD's by revealing that "companies that embrace best practices for employing and supporting more persons with disabilities in their workforce have outperformed their peers". (Alemany, Luisa. June 13, 2023.)

To identify best-in-class businesses in sectors related to disability employment and inclusion, the Accenture study examined the Disability Equality Index outcomes of 140 U.S. companies

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during four years in greater detail. The Disability Equality Index (DEI), a yearly transparent benchmarking tool that provides U.S. businesses (usually large businesses) with an objective score on their disability inclusion policies and practices, is produced by Disability:IN in collaboration with the American Association for PWD's. The study selected 45 businesses from among these 140 enterprises to form an elite group known as "Champions" with the highest DEI. Two key indicators of respondents' financial success were the focus of the analysis: profitability (revenues and net income) and value creation (economic profit margin). The result of the study stated that "Champions achieved – on average – 28 percent higher revenue, double the net income and 30 percent higher economic profit margins over the four-year period analyzed". (AAPD. Disability:IN. 2018.)

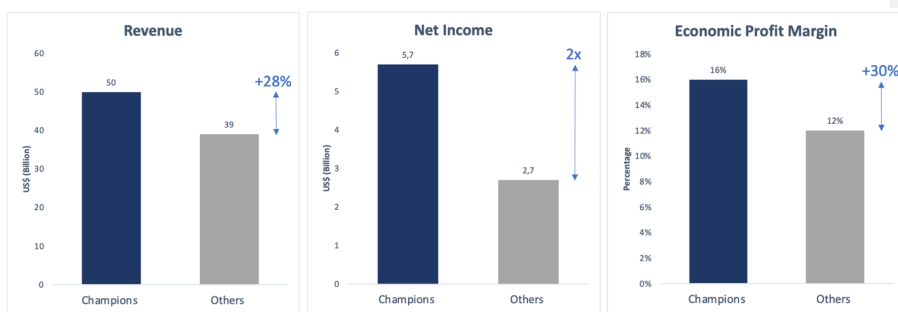


Figure 10 - Champions outperform on Profitability and Value Creation (AAPD. Disability:IN. 2018.)

1.3. Existing measures for inclusion in the employment market in Portugal

In recent years, Portugal has made significant progress in promoting the inclusion of PWD's in the labor market. The measures implemented align with the broader European Union trends and aim to create a more inclusive and accessible work environment for PWD's. By analyzing the average employment rates of PWD's and the disability employment gap in various countries, it is possible to assess the success of implemented measures. A comparison of these indicators reveals that Portugal stands out as one of the top performers within the European Union.

	Disability employment gap	Employment rate of disabled people (total)
Latvia	21%	62%
Portugal	24%	60%
Germany	24%	53%
Italy	25%	52%
Denmark	26%	60%
Austria	29%	54%
Netherlands	29%	60%
Slovakia	30%	57%
France	32%	52%
Czechia	33%	56%
Sweden	34%	54%
Romania	38%	47%

Table 1 - Disability employment gap and rate across comparable countries

On April 21st, 2021, the Portuguese Prime minister, António Costa, announced his commitment to approve new measures promoting the inclusion of PWD's into the job market. These measures include social benefits and incentives for hiring PWD's as well as measures to promote fairness and equality within PWD's. These measures tackle various fields of inclusion, most aimed at revising and ensuring the quality of the preexisting measures.

The existing measures promoting the integration of PWD's on the employment market can be subdivided into three categories: Legislation, Employer Legal Requirements and Financial and Tax Incentives.

1.3.1. Legislation

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Legislation focuses on creating guidelines that protect employees' rights and duties in the labor market. The Portuguese labor code has Subsection VII dedicated to workers with disabilities or chronic illnesses. In such subsection, articles 85, 86 and 88 stand out. Article 85 is dedicated to promoting equal opportunities for PWD's in the workplace. Its provisions establish guidelines for the employment of such individuals, ensuring that they are afforded the same rights and responsibilities as other employees. This includes access to employment, training, professional development, promotion, and fair working conditions. It is also stipulated that the Portuguese state will stimulate and support employers hiring a worker with a disability or chronic illness.

Article 86 aims to ensure accessibility in the workplace for PWD's or chronic illnesses. Employers are required to take the necessary measures to facilitate employment, professional training, and career advancement for such individuals, except when such measures entail disproportional burdens. In order to fulfill this objective, the state commits to promoting and supporting these efforts through appropriate means.

The commitment to the protection of EWD's against exploitation or work beyond the normal working schedule is expressed in Article 88. "A worker with a disability or chronic illness is not obliged to provide additional work", "violation of the provisions in this article represents a serious administrative offense."

1.3.2. Employer Legal Requirements

Employer Legal Requirements are frameworks put in practice to promote the inclusion of PWD's in the workforce. These usually take the form of quota systems. On January 10th, 2019, the Portuguese government established its first employment quota system for PWD's, requiring companies to employ a minimum percentage of workers with a degree of disability of at least 60%.

A quota system in Portugal mandates that both public and private sector employers with a minimum of 75 employees must reserve a certain percentage of job positions exclusively for PWD's. The specific requirements are the following:

- Companies with 75 to 249 employees must ensure that at least 1% of their workforce is composed of PWD's.
- Companies with more than 249 employees must have a minimum of 2% of their workforce composed of PWD's.

Companies unable to meet the minimum quota can fulfill their obligations in alternative ways by entering into agreements with specialized employment centers or by supporting projects that promote the inclusion of PWD's into the labor market.

Every year, companies are required to send a report to the Institute of Employment and Vocational Training to ensure they are complying with the quota system.

Employers are required to comply with the quota regulations on the following dates:

- For employers with 75 to 100 employees, 1st February 2024
- For employers with more than 100 employees, 1st February 2023

During the transition period between 1st January 2020 until the mandatory compliance date, companies should ensure that at least 1% of their new hires are allocated to PWD's. Additionally, if necessary, employers can request a declaration regarding employment provided to PWD's in previous years. This request should be made to the IEFPP (Instituto do Emprego e da Formação Profissional – Employment and Professional Training Institute).

Failure to comply with the quota system may result in fines. According to the information provided by the National Institute of Rehabilitation (INR).

The law also promotes the adoption of measures to ensure the effective integration and professional development of EWD's, such as providing reasonable accommodations and offering training programs.

1.3.3. Financial and tax incentives

Financial and tax incentives are measures put in place to better include PWD's in the job market. They are focused on both employers and individuals. These measures can level the playing field in the job market by alleviating the financial challenges associated with disabilities, such as covering a potential loss of productivity due to a disability, enabling these individuals to compete effectively for employment opportunities.

1.3.3.1. For the disabled individual

Individuals benefit primarily from tax credits in countries with high tax rates, such as Portugal. To qualify for these tax benefits, an individual must present a degree of disability of at least 60% according to the applicable law.

Disabled individuals can benefit from a 10% income tax exemption for incomes up to €2500, meaning that individuals are not required to pay tax on the first €2500 of their income from employment, self-employment and pensions.

Each disabled taxpayer can take advantage of €1900 in annual tax credits and can additionally receive €712,5 in tax credits for each disabled dependent and ancestor who meets certain conditions set out in Article 79(1) e) of the Individual Income Tax Code (i.e., as long as they are part of the same household and do not earn more than the minimum pension of the general regime). Ex-militaries are eligible to an extra tax credit of 475€ annually.

Tax benefits can also extend to education and rehabilitation, allowing individuals to receive a 30% tax credit for the total expenses they or their dependents incur in these categories. To be eligible for tax credits related to life insurance, the individual must be at least 55 years of age

and hold an insurance contract for a minimum of 5 years. If these criteria are met, they can claim 25% of total annual premiums paid (applicable only against risk of death), with a limitation set at 15% of their personal income tax liability.

Individuals with disability levels above 90% are eligible for an extra €1900 in tax credits on special assistance costs.

1.3.3.2. For the employer

Employers mainly receive financial incentives in order to be compliant with the established disability quotas for employment. Two incentives stand out: Internship measures and Workplace Inclusion measures.

The employment and internship integration program tailored for PWD's has a duration of 12 months with no possibility of extension.

This program takes place in private institutions regardless of their profit status (be it profit or non-profit). The participation of IEPF (Instituto do Emprego e da Formação Profissional – Employment and Professional Training Institute) ranges between 80 and 95% of the internship grant, depending on the company and its dimension.

Workplace Inclusion measures are financial support packages to employers that will require to adapt their equipment or workstations to the characteristics of the disabled person. The amount of this grant can go up to 16 times the IAS (Indexante Apoio Social – Social Support Index). In 2022, this amounted to $16 \times €443.2 = €7\,091.2$.

Support for workplace adaptation can also be granted to employers who retain employees in their workforce who have acquired disabilities during their professional careers. In these cases, the amount of support is equivalent to 50% of the adaptation cost, up to 16 times the IAS.

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Additionally, when permanently employing a PWD who has a working capacity under 80% of what is generally required for doing the task at hand, the employer will receive a 50% reduction in the employee's social security (from 23.8% to 11.9%) monthly contribution.

Financial implications

5.1. Monthly levy per missing employee with disabilities

The proposed financial levy represents the reference amount, which will be adjusted to penalize companies in case of non-compliance with quota requirements. The suggested base levy stands at €1,211 monthly per missing EWD.

The levy is not uniform, as it considers not only the degree of non-compliance but also company size, measured by the number of employees. To account for company size, a levy multiplier was introduced for each tier of the quota requirements ranging from 1 to 3. Recalling the equation to compute the levy amount, $Levy_{emp} = Emp_{ben} + WageExpenses_{standard}$, the variable Emp_{ben} is now subject to the multiplier to adjust for company size. So, the formula to calculate the minimum levy with a multiplier is:

$$Levy_{emp_{mult}} = Multiplier * Emp_{ben} + WageExpenses_{standard}$$

Recall that the $Emp_{ben} = €113$ and $WageExpenses_{standard} = €1,211$. The following table demonstrates the effects of the multiplier in the levy.

Company size	Levy multiplier	$Levy_{emp_{mult}}$
40-59	1	€ 1,211
60-249	2	€ 1,324
>250	3	€ 1,437

Table 2 - Effects of the multiplier in the monthly levy amount per missing EWD

Specific thresholds have been established within each quota requirement to address the varying degrees of non-compliance. Consequently, the monthly levy will be increased by 75% for every level of non-compliance. This dynamic design ensures that companies failing to adhere to requirements face increased penalties compared to those actively trying to comply.

The combination of these two different approaches outputs a comprehensive levy structure considering both the degree of non-compliance and company size. The following table outlines the possible scenarios that non-compliant companies might encounter.

Quota Requirements		Levy proposition	
Company size	Required number of EWD's	Missing amounts of EWD's	Monthly levy per EWD
40-59	1	1	€ 1,211
60-249	5%	< 2%	€ 1,437
		2% - 3%	€ 2,515
		3% - 5%	€ 4,401
>250	7%	< 2%	€ 1,550
		2% - 3%	€ 2,713
		3% - 5%	€ 4,747
		5%-7%	€ 8,307

Table 3 - Proposed new levy structure for Portugal

By centering the design of the levy on the minimum wage, it facilitates adjustments to the measures as needed. This adaptability is crucial to maintain the efficiency of the system over time. The table outlining this structure enhances transparency, offering a clear and comprehensive overview of each company's financial implications when failing to comply with the Quota requirements.

5.2. What are the estimated annual levy expenditures with the new levy amount?

To project the compensatory levy's anticipated amount for the Portuguese government, a thoughtful analysis relies on estimations and reasonable assumptions. Given the early stage of the quota system, there is no data yet about compliance in Portugal. In fact, the quota law was enacted on February 1st, 2019, with a transitional period of 4 to 5 years depending on the company size. The first data about compliance in Portugal will be available in February 2024. Gathering data on compliance with quota systems in other European countries is a real challenge. However, a recent report, which was a collaborative effort between Aktion Mensch and the Handelsblatt Research Institute, revealed that only 39% of German companies have fulfilled the mandatory disability employment quota in 2022. (Aussiedlerbote, Zeitung. November 30, 2023.) Given the similarities between the recommended quota system for Portugal and the current German system, from which some inspiration was drawn, this percentage will serve as an assumption for compliance in Portugal.

Three scenarios were considered to estimate the annual levy amount. The baseline scenario involves applying the same compliance rate as that of Germany, namely 39%. A scenario with lower compliance will be examined with a rate of 30%, while another scenario with higher compliance will be explored with a rate of 50%.

Among the 9919 enterprises subject to the recommended quota system, encompassing all those with 40 or more employees, a comprehensive understanding of the distribution across three distinct categories based on company size is imperative. Notably, 11 763 companies in Portugal have a workforce ranging from 20 to 49 employees (Statista. July 5, 2021.). Given the assumption that it is linearly distributed, this figure can be divided by three to derive an approximate count of companies employing 40 to 49 individuals, yielding an estimated total of

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3921 companies. Likewise, 5190 companies have between 50 and 249 employees, dividing it by 20 provides an estimated 260 companies with 50 to 59 employees (Statista. July 5, 2021.). The cumulative count of companies within the first size category, namely 40 to 59 employees, is thereby determined to be 4181. For the second size category, a deduction of 260 from the total companies with 50 to 249 employees, initially recorded as 5190, yields a count of 4930 companies. The third and final size category concern companies with 250 or more employees, which represent 808 companies.

Following the determination of the number of companies falling within each size category, the next step involves the application of the non-compliance percentage, 61%, to know the number of companies that do not fully comply. This results in 2550 for the first category, 3007 for the second category), and 493 for the third category. For the second and third category, the value of the monthly levy per missing employee varies depending on the degree of compliance, which is represented by the percentage of missing EWD. It is assumed that within each category, companies are evenly distributed across compliance levels. Consequently, for the second category, the 3007 companies are distributed equally across three levels of compliance, resulting in 1002 companies in each (with 1003 in the first one, given the odd number 3007). Similarly, for the third category, the 493 companies are evenly distributed across four compliance levels, yielding 123 companies in each (with 124 in the first one, given the odd number 493).

The last step is to determine the missing number of EWD's for each level of compliance across the three different categories of company size. For that, it is necessary to convert the required percentage of EWD's' into the required number of EWD's for the second and third category. The result is between 3 and 12 EWD's for the second category and 17 or more EWD's for the third one. From these figures, the average number of required EWD's can be determined. For the second category, an assumed average of 6 is chosen, considering that there are fewer

companies nearing 249 employees compared to those approaching 60 employees. With the same logic, as there are more companies close to 250 employees than companies with much more employees, it is assumed that the average company size for the third category is close to 250 employees. According to that the average number of required EWD's is assumed to be 20 for the third category. Having identified 6 and 20 as the average required number of EWD's for the second and third categories, respectively, the next step is to convert these values into an average company size. Given that 6 is intended to constitute 5% of the workforce, the inferred average company size for the second category is calculated at 120 employees. Similarly, as 20 is intended to represent 7% of the workforce, the average company size for the third category is established at 285 employees.

To derive the values in the "missing number of EWD's" column across all the missing percentage of EWD's, the min and max percentages of the different ranges are applied to the average company size. The resulting figures from both percentages are then aggregated, divided by 2, and the result is rounded to the nearest whole number. For instance, in the context of the second compliance level within the third category, calculations involve multiplying 0,03 by 285, yielding 8,55, and 0.05 by 285, yielding 14,25. The sum of these figures, divided by 2, results in 11,4, which is rounded to 11. For the two compliance levels denoted as "less than 2% missing EWD," a figure slightly below 2% of the average company size has been selected.

The ultimate formula to be employed across the eight rows of the tables to compute the annual levy amount is as follows:

$$LevyAmount_{annual} = MissingEWD * LevyPerMissingPWD_{monthly} * 12 * NonComp$$

- NonComp stands for the total number of companies that do not fully comply with the quota requirements

By performing these calculations and summing the results from all eight rows, the estimated total annual amount from the levy in the baseline scenario is €749 725 116. In the second

scenario with 50% of compliance, as less companies are obligated to pay the levy, the annual amount decreases to €614 928 612. Conversely, in the third scenario, the annual amount increases to €860 240 028.

A comprehensive summary of these details is presented in the tables below for the three different scenarios.

Company size	Number of companies concerned	Required percentage of EWD	Required number of EWD	Estimated average number of required EWD	Estimated average company size
40-59 employees	4181	/	1	1	/
60-249 employees	4930	5%	Between 3 and 12	6	120
250 or more employees	808	7%	17 or more	20	285
Missing percentage of EWD	Estimated average missing number of EWD	Monthly levy per missing employee		Estimated number of companies that do not fully comply	Annual amount from the levy
1	1	€1.211,00		2550	€37.056.600,00
< 2%	2	€1.437,00		1003	€34.591.464,00
2% - 3%	3	€2.515,00		1002	€90.721.080,00
3% - 5%	5	€4.401,00		1002	€264.588.120,00
< 2%	4	€1.550,00		124	€9.225.600,00
2% - 3%	7	€2.713,00		123	€28.030.716,00
3% - 5%	11	€4.747,00		123	€77.072.292,00
5%-7%	17	€8.307,00		123	€208.439.244,00

Total = €749.725.116,00

Table 4 - Baseline scenario – same compliance as Germany, 39%

Missing percentage of EWD	Estimated average missing number of EWD	Monthly levy per missing employee	Estimated number of companies that do not fully comply	Annual amount from the levy
1	1	€1.211,00	2091	€30.386.412,00
< 2%	2	€1.437,00	822	€28.349.136,00
2% - 3%	3	€2.515,00	822	€74.423.880,00
3% - 5%	5	€4.401,00	821	€216.793.260,00
< 2%	4	€1.550,00	101	€7.514.400,00
2% - 3%	7	€2.713,00	101	€23.017.092,00
3% - 5%	11	€4.747,00	101	€63.287.004,00
5%-7%	17	€8.307,00	101	€171.157.428,00
Total =				€614.928.612,00

Table 5 - Second scenario - higher compliance than Germany, 50%

Missing percentage of EWD	Estimated average missing number of EWD	Monthly levy per missing employee	Estimated number of companies that do not fully comply	Annual amount from the levy
1	1	€1.211,00	2927	€42.535.164,00
< 2%	2	€1.437,00	1151	€39.695.688,00
2% - 3%	3	€2.515,00	1150	€104.121.000,00
3% - 5%	5	€4.401,00	1150	€303.669.000,00
< 2%	4	€1.550,00	142	€10.564.800,00
2% - 3%	7	€2.713,00	142	€32.360.664,00
3% - 5%	11	€4.747,00	141	€88.351.164,00
5%-7%	17	€8.307,00	141	€238.942.548,00
Total =				€860.240.028,00

Table 6 - Third scenario - lower compliance than Germany, 30%

5.3. What is the estimated cost of implementing the new tax reduction method?

Concerning improving the tax reduction technique already in place in Portugal, which is currently not optimal, it has been decided to change not only the eligibility criteria but also the amounts received by employers when they employ PWD'S. These measures come at a price for the Portuguese government, as the tax reductions represent money that Portugal should have received, but instead allow employers to reduce the amount of tax they pay. In other words, it can be said that this benefit, has a "cost" at first glance as it would generate less money in Portugal's wallet but ultimately allows for greater inclusion in the labor market by reducing the unemployment rate of PWD'S of working age.

Therefore, this thesis chapter will explore the various steps involved in calculating the total "cost" and the long-term positive impact of such tax reductions will be explained later in this chapter.

As a reminder, the initial recommendation was to eliminate any eligibility criteria to avoid discrimination. Consequently, every active person with disabilities will be included in this initiative. As such, a thorough investigation was conducted to determine the total number of individuals that would be affected by this policy. It was found that roughly 1 216 000 people would be considered in the calculation (See annex for development).

In the previous chapter about remedies to adopt for tax reliefs, the second recommendation put forward was to implement a variable reduction based on the severity of disability. This would involve dividing employees with disabilities into different categories based on the severity of their condition, and each category would receive a different reduction amount.

It is important to note that this approach to variable reduction is a fair way to support employees with disabilities. By tailoring the reduction amount to the individual's disability, it ensures that

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those who require more assistance receive a greater tax reduction, thereby helping to alleviate financial burdens that may arise from their condition.

To determine the amount of tax reduction for each employer, a categorization system would be used based on the degree of disability, ranging from 1% to 100%. The system divides disabilities into seven categories for degrees up to 69% and an additional category for those with a degree of disability from 70% to 100%. Each category is assigned a multiplier, ranging from 1 to 4.5, with the highest multiplier being reserved for the most severe disabilities.

Impairment degree	Multiplier	(-) Reduction on Tax	
		For 2023	For 2024
1 to 9%	1	480,43	500
10 to 19%	1,5	720,645	750
20 to 29%	2	960,86	1000
30 to 39%	2,5	1201,075	1250
40 to 49%	3	1441,29	1500
50 to 59%	3,5	1681,505	1750
60 to 69%	4	1921,72	2000
>70%	4,5	2161,935	2250
IAS		480,43	500

Table 7 - Quantitative reduction for each disability category

IAS: Monetary Index for the calculation of social benefits in Portugal.

This multiple will be linked to the Indexante dos Apoios Sociais (IAS), which is a monetary index used in Portugal and is the reference value for adjusting and updating various amounts in the legal and administrative context. In 2023, the IAS was €480,43 (Directorate-General for Employment Social Affairs and Inclusion, 2023), and it is projected to increase to approximately €500 in 2024 (See assumptions in Annex). This index would be used to calculate the amount of tax reduction that each employer is entitled to receive annually.

As an example, if an employer hires an employee with a 30% disability impairment, they will be eligible for a tax reduction of €1250 on the employee's income tax in 2024.

Calculating the total cost to the social security system requires determining the number of individuals who are considered disabled and are part of the working population, this number was conducted before and turns out to be 1 216 000 (See annex for development). It will be split in each of the categories mentioned above.

To obtain a clear picture of the disability population, it is assumed that the number of people counted in a specific category decrease as the degree of disability increases. According to the European Commission (2022), Portugal has a larger number of individuals with moderate disabilities than those with severe disabilities.

Assumptions of the population considered in each category:

	Number	Proportion
PWD in Active Population	1.216.000	100%
PWD in the category 1 (1-9%)	304.000	25%
PWD in the category 2 (10-19%)	243.200	20%
PWD in the category 3 (20-29%)	182.400	15%
PWD in the category 4 (30-39%)	121.600	10%
PWD in the category 5 (40-49%)	97.280	8%
PWD in the category 6 (50-59%)	72.960	6%
PWD in the category 7 (60-69%)	48.640	4%
PWD in the category 8 (70-100%)	145.920	12%

Table 8 – Number and proportions of the active population that is disabled

To determine the potential cost savings of providing tax reductions to employers who hire PWD's, the data were analyzed by multiplying the number of individuals in each category by the corresponding amount of tax reduction allocated to that category. The findings show that employers could potentially save up to 1,368 billion in taxes if all disabled individuals between the ages of 16 and 64 in Portugal were employed. However, it's important to note that this estimate may not be entirely realistic. A more realistic approach would be to consider an employment rate of 75% for disabled individuals, which would make the employment gap between disabled and non-disabled individuals zero. Based on this approach, we estimate that the deficit in the State's public finances would be 1,026 billion.

Max COST (yearly)	All disabled working
Category 1	152.000.000
Category 2	182.400.000
Category 3	182.400.000
Category 4	152.000.000
Category 5	145.920.000
Category 6	127.680.000
Category 7	97.280.000
Category 8	328.320.000
Total Cost	1.368.000.000

COST (yearly)	75% working (no gap)
Total Cost	1.026.000.000

Table 9 - Number and proportions of the active population that is disabled

Going forward, it would be advisable to compare the recommended methodology with the one currently in use in order to determine which is more cost-effective for the State.

The current criterion for employers to benefit from tax reduction for hiring individuals with disabilities is based on a minimum 20% reduction in work capacity. While this includes a significant portion of the population, it excludes many disabled individuals whose reduction is less than 20%. However, this criterion differs from the proposed method of categorizing disabled employees based on their degree of impairment, which is similar to the quota legislation. This unification of selection criteria would bring simplicity to the system, which is why the recommended strategy follows this unification of having only one system of categorizing the severity of a disability.

Considering the eligibility criterion and assuming the same criteria but in the opposite direction, it would mean the number of individuals with a 20% reduction in their work capacity would correspond to the same number as the first two categories (table above), which is approximately 547 000 people out of the 1 216 000 in total.

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This number sheds light on the number of people who are currently not eligible for tax reductions for their employers, so it is assumed that the other 669 million individuals are entitled to this benefit. With the current technique, the reduction is a lower percentage that the employer must pay in tax on the employee's salary, leading to a reduction in the tax rate from 23,75% to 11,9%.

In order to obtain a deeper comprehension of the subject matter, it would be helpful to examine the current average gross salary in Portugal, which amounts to €24 557 annually. With the reduction applied, the employer's contribution goes from €5833 to €2923 of the EWD remuneration. The state is losing out on €2910 worth of taxes per employee.

To determine the total cost of tax reduction for the state or the amount that should have been imposed by the state but wasn't, it is necessary to multiply this amount (€2910) by the number of people eligible for the reduction based on the eligibility criteria. Given the eligibility of 669 000 disabled individuals (aged 16 to 64), the total cost amounts to €1,947 billion, assuming all disabled individuals have a job.

However, a more realistic approach based on the objective of eliminating the gap between the employment rates of disabled and non-disabled individuals (set at 75%) would result in a total cost of €1,460 billion.

It is important to compare this figure with the results obtained by applying the new measure recommended for Portugal, which amounted to €1,026 billion. It can be observed that the recommended new reform would be less expensive for the state than the current established measure and would include every disability.

Max COST (yearly)	All disabled working
Category 1	0
Category 2	0
Category 3	530.784.821
Category 4	353.856.547
Category 5	283.085.238
Category 6	212.313.928
Category 7	141.542.619
Category 8	424.627.857
Total Cost	1.946.211.010

COST (yearly)	75% working (no gap)
Total Cost	1.459.658.257

Table 10 - Cost of the current tax reduction incentive

5.4 Financial model and implication of a wage subsidy scheme

Estimating the Initial and Final Costs:

Implementing an indirect wage subsidy system for disabled individuals in Portugal would require an initial investment to compensate employers for the productivity deficit linked to hiring disabled employees. This compensation would be tailored to each employee's disability severity, ranging from 0% to 100% of the Portuguese minimum wage.

According to data from the 2021 Portuguese population census, roughly 1.2 million individuals, constituting 6.7% of the population, live with a disability. Assuming equitable employment rates among people with and without disabilities (since the wage subsidy scheme chosen would improve the DEGP as well as it is better to overestimate the costs than underestimate them), it's estimated that around 768,000 disabled individuals could benefit from this wage subsidy program.

It was assumed that the average monthly productivity deficit for disabled individuals would around 25% of the Portuguese minimum wage (25% is the estimation, since we want to guarantee that employers feel comfortable with hiring new disabled employees as this should

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cover the cost for productivity when factoring in less and more severe disabilities). However, this deficit can vary significantly based on the specific disability. (Statistics Portugal - Web Portal, n.d.)

To accommodate this variability, the wage subsidy would consist of two components:

- The employer-focused component: This aspect directly compensates employers for the productivity loss due to their disabled employees. The subsidy amount would match the actual productivity deficit of the employee, capped at 50% of the Portuguese minimum wage.
- The employee-focused segment: This portion would be indirectly allocated to the disabled employee through the subsidy given to the employer to mitigate the income gap caused by their disability. The subsidy amount would be half the employer-focused subsidy.

For instance, an employee with a 50% productivity deficit would receive an employer-focused subsidy of €443,50 per month (50% of €887, the Portuguese minimum wage) and an employee-focused subsidy of €221,75 per month (25% of €887).

The estimated initial cost of the employer-focused subsidy (if the average productivity loss of an EWD is 25%) €170,304,000, while the employee-focused subsidy stands at €85,152,000, resulting in a total estimated initial cost of €255,456,000.

The system's final cost would encompass administrative expenses linked to its operation, covering application processing, productivity assessments for newly hired disabled employees, and system effectiveness evaluations. It's estimated that administrative costs would amount to EUR 100 per application (the estimated cost of €100 for administrative costs per wage subsidy application is based on the assumption that the processing of each application would require a

significant amount of time and resources. This includes the initial assessment of the application, the verification of eligibility, the calculation of the subsidy amount, and the ongoing monitoring of the employee's productivity), totaling EUR 76,800,000 considering 768,000 wage subsidy claims.

Moreover, the indirect wage subsidy system could yield significant economic benefits for Portugal, including:

- **Improved Productivity:** An indirect wage subsidy scheme could potentially increase company productivity by 1-2% (as seen in 4.3.2).
- **Increased Consumption:** By augmenting incomes for disabled employees, this system could stimulate consumption. Assuming an 85% (this assumption is based on Portuguese spending habits retrieved from the Instituto Nacional de Estatística) expenditure of the additional income by new disabled employees, the anticipated economic gains from increased consumption amount to €72,379,000.
- **Reduced Social Costs:** With the assumption that newly hired disabled employees no longer receive the total amount of social benefits, potential gains from reduced social costs can also be expected.

It is important to note that this financial model as a wage subsidy scheme to level the playing field for PWD's is a potential simplified framework. To acquire more realistic estimations, waiting for the first reports demonstrating different productivity levels can become quite valuable. However, the numbers stated here are just a rough approximation to give an idea of how much the costs of such a wage subsidy scheme could amount to.

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Jules De Coster- 55468

6. Conclusion

This thesis explores the dynamic field of disability inclusion in the European labor market with the objective of replicating successful practices in Portugal. The analysis focusses on initiatives that have proven effective in other European countries such as tax exemptions, wage subsidies and quota systems. While recognizing Portugal's success on a European scale; continued growth requires introspection and adaptation.

Replicating best practices from other European nations is a promising approach, keeping in mind that there is no one-size-fits-all model. Each nation harbors unique economic landscapes, cultural nuances and social support systems that have a significant impact on inclusion strategies. Rigid transplantation of a successful program risks overlooking these crucial contextual elements. Portugal needs to adopt a dynamic approach, easily adapting its strategies to its specific needs and realities. The proposed measures that could be incorporated are the following:

- Restructuring of the Quota and Levy systems so that they are more flexible and inclusive for the inclusion of PWD's.
- Reassessing tax reduction by adapting the method to every PWD's and establishing a variable reduction for employers.
- Creating a two-step indirect subsidy scheme to bolster disability employment while boosting productivity.

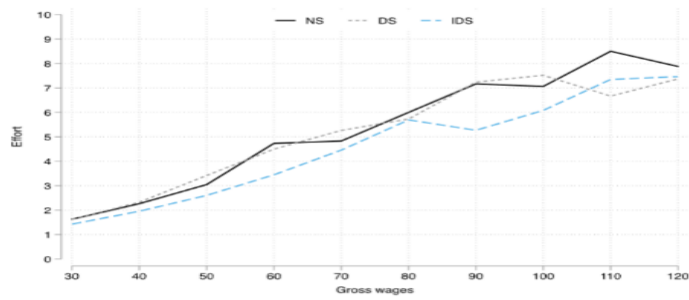
By fostering a culture of continuous learning, adaptation and openness to new information, Portugal can navigate the evolving landscape of disability inclusion. Embracing this dynamic approach paves the way for Portugal to not only strengthen its position as a European leader in disability inclusion, but also to become a global model for equitable and inclusive societies.

Jules De Coster- 55468

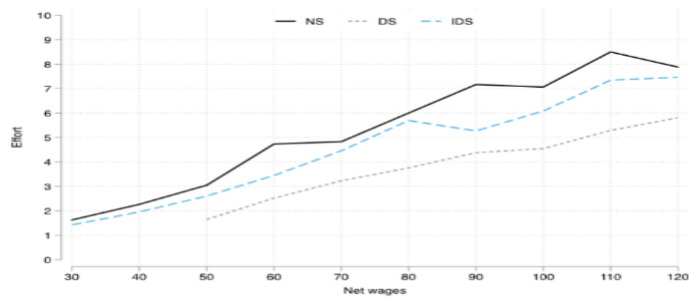
Annex

QUOTA LAW	Financial sanctions?	If financial sanction, which type?
Portugal	Yes	Compensatory levy
France	Yes	Compensatory levy
Italy	Yes	Administrative sanction
Germany	Yes	Compensatory levy depending on the percentage of disabled employees in the company and is per month and unfilled obligatory post
Netherlands	Yes	Administrative sanction
Austria	Yes	Compensatory levy per month and unfilled obligatory post
Czechia	Yes	Compensatory levy per month and unfilled obligatory post
Romania	Yes	Administrative sanction
Slovakia	Yes	Compensatory levy per month and unfilled obligatory post

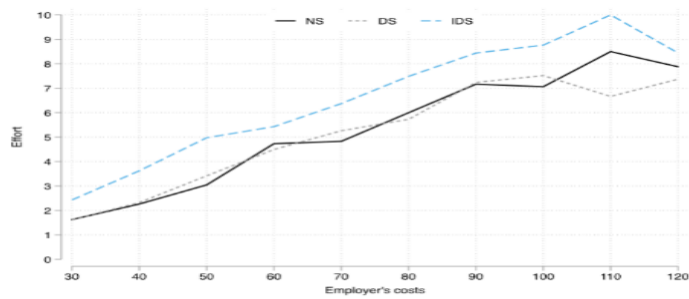
Table 11 - Financial Sanctions for non-compliance with the quota laws - By country



(A) BY GROSS WAGES.



(B) BY NET WAGES.



(C) BY EMPLOYER'S COSTS.

Figure 12 - Difference in effort between No Subsidy, Direct Subsidy, and Indirect Subsidy

(Blumkin, T., Pinhas, H., & Zultan, R. (2020). Wage subsidies and fair wages. *European Economic Review*, 127, 103497.)

Development of the active population having any disabilities:

Active population in Portugal (09/23)	5.287.300(Instituto Nacional de Estatistica, 2023)
% of PWD in active population	23%(EU-SILC UDB 2017)
Num of PWD in Active Population	1.216.079

IAS Calculation for 2024 with the past year IAS:

IAS 2021 = 438,81

IAS 2022 = 443,20 (increased of 1%)n

IAS 2023 = 480,43 (Increased of 8,4%)

IAS 2024 = +-500 (Increased of (1%+8,4%)/2)

Jules De Coster- 55468