

# Recruiting Talents

THEMATIC  
REPORT

**#2**

October 2022

Doctorate holders seen  
by non-academic employers:  
their strengths and weaknesses



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## Observatory of Research and Scientific Careers – F.R.S.-FNRS

Thanks to funding from the Federation Wallonia-Brussels (FWB), the Observatory of Research and Scientific Careers was created in September 2018. Integrated in the F.R.S.-FNRS, this structure aims, among other things, to track and analyse the careers of researchers in the FWB through surveys and data cross-referencing. In collaboration with the six FWB universities, the Observatory is responsible for developing knowledge on the doctoral and postdoctoral process. It makes recommendations to facilitate the professional transition of PhD holders and optimise the doctoral process in order to meet the expectations of researchers and society. Particular attention is paid to the various obstacles to a scientific career: stereotypes and discrimination related to gender, constraints related to the requirement of international mobility, impact of the pressure to publish early in one's career, etc. The results of surveys and analyses are systematically published on the site: <http://www.observatoire.frs-fnrs.be>

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### To cite this report

Dethier, B., Bebiroglu, N., & Ameryckx, C. (October, 2022). Doctorate holders seen by non-academic employers: their strengths and weaknesses. Observatory Thematic Report Series: Recruiting Talents #2. [www.observatoire.frs-fnrs.be/ media/report.employers.2.pdf](http://www.observatoire.frs-fnrs.be/media/report.employers.2.pdf)

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# 1 INTRODUCTION

Alongside highlighting the positive impact of doctorate holders and collaborations between universities and industry on the innovation process (Garcia-Quevedo, Mas-Verdú & Polo-Otero, 2012; Herrera & Nieto, 2015; Baba, Shichijo & Sedita, 2009), relatively few studies have directly questioned non-academic employers or aimed to pin down their opinions on the specific group that doctorate holders make up.

In Belgium, and more specifically in Flanders, De Grande, De Boyser, Vandeveldé & Van Rossem (2011, 2014) received responses from 479 employers from the private sector who had filled in a questionnaire on the skills sought for in a researcher. The results highlight that these employers place prime importance on technical skills, teamwork, analytical thinking, initiative, and scientific knowledge; followed by social skills, project management, and business skills. The doctorate is seen as providing important expertise but needing complementing with more transferable skills. In 2016, ECOOM-UGhent also published a brochure setting out a series of testimonies from Flemish employers from the private (profit and non-profit) and public sectors concerning the value of doctorate outside academia (Stassen, Levecque & Anseel, 2016). The employers who were questioned

notably underlined doctorate holders' skills with regard to written and oral communication, as well as their ability to innovate, learn, be rigorous and perseverant. However, negative aspects were also referred to, with doctorate holders being perceived as lacking business and management skills, flexibility and the ability to transfer their academic knowledge to a different professional context (Wille, Legrand, Mortier & Levecque, 2020).

Quantitative and qualitative studies carried out in the United Kingdom, France and Finland have broadly similar findings (McAlpine & Inouye, 2021; Rubio & Hooley, 2009; Couston & Pignatelli, 2018; Haapakorpi, 2017). On the one hand, non-academic employers feel positively towards doctorate holders, praising their scientific expertise and their technical skills, their advanced cognitive capacities (problem solving, fast learning, attention to detail, quick and efficient assimilation of information, etc.) and certain personal characteristics such as the ability to work independently, intellectual maturity and even credibility. On the other hand, these studies also reveal more negative perceptions by the employers, who point to doctorate holders' lack of interpersonal skills, difficulties working as part of a team, an unhelpful perfectionism, a lack of commercial awareness, and difficulties moving from the academic sector into another sector. On this subject, Haapakorpi (2017) highlighted employers' hesitation to employ doctorate holders with no experience outside academia, and the competition between those with doctorates and those with master's degrees on the labour market.

With regard to the situation in the Wallonia-Brussels Federation (FWB), reports by the Observatory based on the survey on the job transition of doctorate holders who had recently received their doctorates (Bebiroglu, Dethier & Ameryckx, 2019, 2020; Dethier, Bebiroglu & Ameryckx, 2021) had already given a glimpse of



similar challenges and the importance of questioning employers on their vision of the value doctorates can add. First of all, it would seem that the majority of doctorate holders prefer pursuing an academic career after finishing their thesis (despite the very limited prospects in the long term) but many of them nevertheless move towards other professional sectors: industry, government/public sector, service sector, etc. (Bebiroglu, Dethier & Ameryckx, 2019). Furthermore, it appears that only 34.5% of doctorate holders working outside the university sector hold posts which require a doctorate or postdoctoral experience. Moreover, doctorate holders identified a series of skills that they acquired during the doctorate (e.g., critical and analytical thinking, research skills and methods, scientific and technical expertise, etc.), and identified a series of skills as not acquired or only partially acquired (e.g., business skills, collaboration and teamwork skills, social and intercultural skills, etc.). Some of the latter skills were nevertheless considered as necessary to their current job (Bebiroglu, Dethier & Ameryckx, 2020). Finally, it can be seen that doctorate holders are attaching ever more importance to — and feeling some anxiety about — the transition to professional sectors outside of academia after their doctorate (Dethier, Bebiroglu & Ameryckx, 2021), expressing their desire for greater openness in academia, for the doctorate to be valued more highly outside of it, and better consideration of professional prospects after the doctorate (career management support, training, information, etc.).

In light of these various observations on the increasing number of doctorate holders transitioning from academia to other professional sectors and the difficulties they are likely to encounter in their subsequent professional careers, the Observatory embarked on the "Recruiting Talents" study devoted to the added value of a doctorate according to employers outside academia.

In order to gain insight into the specific situation in the FWB, to better understand employers' opinions and perceptions of doctorate holders, to look into any reluctance on their part or any perceived advantages in hiring doctorate holders, and to offer the most comprehensive approach possible, the "Recruiting Talents" study was divided into two components.

Firstly, a quantitative survey made it possible to collect data from more than 600 employers, via a questionnaire, *inter alia* about the skills employers looked for in candidates with a doctorate. Initial results published in June 2022 (Bebiroglu, Dethier & Ameryckx, 2022) show, among other things, that the employers surveyed are primarily seeking the following six skills in doctorate holders, in order of importance: scientific and technical expertise, collaboration and teamwork, creativity and innovation, project management, research skills and methods, and initiative and autonomy. These employers have a high level of satisfaction with doctorate holders with regard to their scientific and technical expertise, their research skills and methods, and their critical and analytical thinking. On the contrary, they are less satisfied with their project management, team management and business skills. This point of view, which generally overlaps with that of doctorate holders evaluating their own skills, calls for a reflection on the reinforcement of these types of skills during doctoral or postdoctoral training.

Next, a qualitative survey was conducted in parallel to better understand the point of view of the various employers by allowing them to further develop their opinion on doctorate holders and the added value they bring, on the employers' motivations to set up or maintain collaborations with universities, or on their recommendations to improve the job transition of doctorate holders. In this first report, concerning the qualitative component of the study, the objective was to give the floor to a series of



employers in order to report on and analyse their perceptions of doctorate holders, as well as any concrete experiences in recruiting and/or working with this type of employees.

According to these employers, what are the strengths and weaknesses of doctorate holders? How do they perceive these highly qualified individuals and what do they expect from them? What are the incentives and obstacles to recruiting doctorate holders into their organisations? What have employers learned from their experiences working with doctorate holders? These questions form the basis of this report, which proposes to give an in-depth account, through a qualitative approach (or "comprehensive" approach, i.e. aiming to understand how actors think, speak and (inter)act in relation to a context or situation; Dumez, 2016), to the way in which a sample of employers (in various roles, belonging to organisations of different sizes and from diverse professional sectors) apprehend the added value of a doctorate in these different dimensions, in the specific context of the Wallonia-Brussels Federation.



## 2 SAMPLE CHARACTERISTICS

To carry out this qualitative research dedicated to the added value of a doctorate according to employers, 25 semi-structured interviews were conducted with 26 individuals : two exploratory interviews were conducted in July 2020 (and were kept in the data set) and 23 interviews were conducted between December 2020 and June 2021. Two of these interviews were removed from the data set in order to limit the bias they would generate with regard to the whole: one concerned an employer located abroad (with no activity in Wallonia or Brussels) and the other concerned an institution linked to academia that could not be classified as a non-academic "employer".

The final sample is therefore composed of 23 interviews carried out with 24 people, whose profiles are detailed in Table 1. These 14 men and 10 women held, at the time of the interviews, roles in general management (5), management/middle management (13) or recruitment (6). 10 of these individuals had a doctoral degree themselves, while 14 did not. They worked in organisations which were either public

Table 1. Sample characteristics (1)

Profile	Gender	Role	Sector of activity	PhD holder	Organisation size
1.	M	Innovation Manager	Private – Business consultancy	PhD	Large
2.	M	Technical Manager	Private – Chemistry	PhD	Large
3.	M	Head of Research Service	Public – Public service (Employment and Training)	No PhD	Large
4.	F	Talent Acquisition Specialist/Coach	Private – HR consultancy/Freelance	PhD	Large
5.	M	Head of Research Service	Public – Public service (Employment and Training)	No PhD	Large
6.	F	Selection responsible	Public – Public service (General)	No PhD	Large
7.	F	Director (Team Leader)	Private – HR consultancy	No PhD	Large
8.	M	CEO	Private – Marketing/IT	No PhD	Micro
9.	M	Branch Manager	Private – HR consultancy	No PhD	Large
10.	M	Quality Manager	Private – Metallurgy	No PhD	Large
11.	M	CEO	Private – Business federation	No PhD	Small
12.	M	Manager	Private – Pharmaceutical industry	No PhD	Large



(5) or private (19) of various sizes (large, medium, small and micro-organisations) and with activities in Wallonia and/or Brussels. The activity sectors of participants included industry, service, and research centers.

Among this set are six labour market intermediaries with a more specific "employer" status: two people from public employment services who mentioned, during the interviews, both their perspective as employers of doctorate holders and their perspective related to their knowledge of the labour market (but did not have recruitment activity for external clients); three people working in recruitment functions in HR consulting firms, who were asked about their recruitment activity on behalf of multiple employers (and not as an employer of doctorate holders); and one person working in a similar HR consulting firm, but who was asked only about his function as "R&D manager", which did not involve recruitment activity for external clients. For ease of understanding, all participants will be referred to as "employers".

The interviews were conducted separately by either the first or the second author of this paper, using a common interview guide. They were all conducted in French, with the exception of one, which was conducted in English. The interviews, which lasted an average of about 50 minutes, focused on the interviewees' experience of working (or not) with doctorate holders, on the perceived added value of this type of profile, the collaboration between their organisation and the FWB universities, and advice on how to improve the professional transition of doctorate holders to professional sectors outside academia. All the interviewees gave their consent after receiving information about the study.

Table 2. Sample characteristics (2)

Profile	Gender	Role	Sector of activity	PhD holder	Organisation size
13.	M	R&D Director	Private – HR consultancy	No PhD	Large
14.	F	Scientific Director	Public – Scientific institute	PhD	Medium
15.	F	Talent Acquisition Advisor	Private – Pharmaceutical industry	No PhD	Large
16.	M	Director R&D	Private – Pharmaceutical industry	PhD	Large
17.	F	CEO	Private – IT/Logistics	PhD	Micro
18.	F	Director R&D	Private – Food industry	PhD	Small
19.	F	Head of Research Service	Public – Administration (Culture)	PhD	Small
20.	F	Engineering Manager	Private – Aeronautical	PhD	Large
21.	F	HR Manager	Private – Aeronautical	No PhD	Large
22.	M	Medical Director	Private – Scientific institute	No PhD	Medium
23.	M	CEO	Private – IT/Engineering	PhD	Small
24.	M	Director R&D	Private – IT consultancy	No PhD	Medium





Of the participants, nine had already completed the quantitative questionnaire (Bebiroglu et al., 2022) and had checked the box indicating that they were willing to discuss these topics in a qualitative interview. Thanks to these contacts, it was possible to gradually balance the sample in order to vary the profiles, points of view and professional sectors as much as possible. The names of individuals and organisations as well as any references to locations or institutional affiliations have been removed. A pseudonym was given to each interviewee.

Conducted online because of Covid19 pandemic context, these interviews were recorded and then transcribed. They were then coded via a thematic analysis with the help of NVivo qualitative data analysis software (QSR International): the two people who conducted the interviews coded the transcripts; these codes were discussed and progressively refined to tease out the main themes of the analysis.



# 3 THE STRENGTHS OF DOCTORATE HOLDERS

The statements collected in the interviews show that doctorate holders have several years of experience at the intersection of advanced postgraduate training and real professional experience in the university sector. This experience enables them to acquire a series of research skills with regard to technical expertise, as well as positive attitudes towards work, and communication skills.

The categories of characteristics associated with doctorate holders were inspired by the list of skills used in the questionnaire for the quantitative component of the survey (Bebiroglu et al., 2022) but were partially adapted during the coding process to better match what respondents said. The following characteristics were mentioned and explained by at least 4 of the 24 employers interviewed – characteristics that were mentioned fewer than four times have not been included here.

They can be linked together and form general profiles that can be clearly perceived as an added value for employers, even though the needs of organisations may vary according to their professional sector, their size or the types of activities they carry out.

## Initiative and autonomy

The ability to work alone without the need for close supervision by a line supervisor

## Scientific and technical expertise

High level of education conferring a high level of intellect, expertise, and specialised knowledge in a more or less specific field

## Critical and analytical thinking

Ability to quickly analyse a given situation, understand the issues and ask the right questions

## Complex problem-solving skills

Ability to evolve in a complex environment, to overcome obstacles and to think of the best way to get around or solve them

## Research skills and methods

Ability to act in a reasoned manner and to structure one's work correctly using a scientifically valid approach

## Creativity and innovation

Ability to develop new approaches, to imagine new processes and to "think outside the box"

## Scientific communication

Ability to present one's work, structure one's ideas or defend a project in a formal, precise and argued manner, in writing or orally

## Perseverance

Ability to complete a project, to meet objectives and to overcome any difficulties that may present themselves

## Long-term work

Ability to work on long-term projects and to support a long-term vision of the organisation's activities



## Initiative and autonomy

The ability to work alone without the need for close supervision by a line supervisor

Mentioned by  
**13**  
employers

Many of the employers interviewed spontaneously emphasised the ability of doctorate holders to take initiative and work autonomously. This characteristic is highly valued by these employers because they feel it reduces the amount of time spent supervising a person's professional tasks. In their doctoral research career, doctorate holders have already been confronted with the fact of working relatively independently on a project, of getting on with the work to be done without there being "always someone telling you what to do" (Technical manager (M), chemistry, PhD) – which does not however mean without any supervision at all.

*\* "In general, they do not require as much [supervision], because they are a little bit older on average and they have work experience. They are also used to an environment which is not as closely monitored as you would expect in the private sector."*

**Innovation manager (M)**  
**Business consultancy**  
**PhD**

**Head of research service (M)**  
**Public service (employment and training)**  
**No PhD**

*"There is intellectual rigour too. It's striking, as does the degree of autonomy, which is very valuable because, in the first instance, they understand immediately what you tell them, and sometimes, even better, you don't even have to tell them. [...] When we tell them that we are going to do things in such and such a way, they comment, they ask questions, and once we have reached an agreement, there is no more discussion, they get going. Others are quicker to nitpick, or you have to go over it three times before you get a result. This is a really valuable trait, and probably has something to do with their previous work environment. We tell them things and they understand them, they see the point straight away and get going with it."*

*"It's easy to integrate a doctorate holder because, generally, they become autonomous very quickly. I see this often, for the three [that I hired] anyway. They're able to knock on the doors of other departments, to go and seek out information... They're used to getting information, you can sense it, you really don't have to push them to do it."*

**Quality manager (M)**  
**Metallurgy industry**  
**No PhD**

***"That's what often makes the difference between hiring someone with a doctorate and "settling" for someone without a doctorate: it's the degree of autonomy you expect from the person. "***

**Scientific director (F - Public scientific institute - No PhD)**



## Scientific and technical expertise

High level of education conferring a high level of intellect, expertise, and specialised knowledge in a more or less specific field

Mentioned by  
**11**  
employers

According to the data collected during the interviews, doctorate holders are above all people recognised for their high level of education and knowledge, and an expertise acquired in a more or less specific field. When moving from a university to another professional sector, these individuals will not automatically move into a position specifically related to their precise research domain or thesis topic. If they are able to, it can obviously represent a direct added value for the employer.

These profiles are most commonly sought after and valued by employers whose organisations have activities that require a high level of scientific and technical expertise, are active in research and development, or are present in cutting-edge sectors such as new technologies, the pharmaceutical industry or medical research. These organisations are more likely to be in the private sector, but scientific and technical expertise can also be sought for certain roles in public services and in public research institutes.

*"Generally, we won't lie to ourselves, these are very brilliant people, with a high level of intellect and who really have, in their field, quite sophisticated knowledge."*

**Head of selection**  
**Public service**  
**(F) (general)**  
**No PhD**

**Talent acquisition**  
**advisor (F)**  
**Pharmaceutical**  
**industry**  
**No PhD**

*"[A doctorate] has an added value and it is not for nothing that we want to hire this type of person because in terms of their scientific knowledge, they are certainly people who bring us their knowledge more quickly than others, which allows us to advance at the desired pace."*

*"We clearly have our "expert", it's someone who has a doctorate and a strong research background, in statistics. For this kind of role, it is clear that we cannot do without someone who has a doctorate because to have this kind of input in our activity, you need to have a certain rigour, and not be afraid of immersing yourself in the literature."*

**Manager (M)**  
**Pharmaceutical**  
**industry**  
**No PhD**

***"It is not for nothing that we want to hire this type of person ,,"***

**Talent Acquisition Advisor (F - Pharmaceutical industry - No PhD)**



## Critical and analytical thinking

Ability to quickly analyse a given situation, understand the issues and ask the right questions

Mentioned by  
**10**  
employers

The high level of doctoral training provides a critical and analytical mindset particularly emphasised by the employers interviewed. Doctorate holders are considered to be able to quickly analyse a given situation, understand the issues, and ask the right questions. Their way of thinking is perceived as "different", that is, more advanced, more in-depth than people with, for example, a master's degree. The critical and analytical mindset makes it possible to take a step back from what has already been done within the organisation, whether with a view to innovating existing approaches – this point will be discussed in more detail later – or "simply" to improving existing processes.

*"I find that it brings skills that you can't find elsewhere, in terms of research capacity, the ability to ask questions upstream, to broaden the field of possibilities to analyse and invent..."*

**Branch  
Manager (M)  
HR  
consultancy  
No PhD**

**Head of research  
service (M)  
Public service  
(employment and  
training)  
No PhD**

*"The first asset is surely a higher level of intellectual maturity. These are people who have learned to think. I see people today coming out of university with very... very random, or very "emotional" reasoning skills, much less solid than a postgraduate who really has an ability to conduct research, to think according to research standards and who knows what the methodological standards are. [...] This more developed analytical mind, it's really valuable because it saves us time."*

***"This more developed analytical mind, it's really valuable because it saves us time. ,,"***

**Head of research service (M - Public service (employment and training) - No PhD)**



## Complex problem-solving skills

Ability to evolve in a complex environment, to overcome obstacles and to think of the best way to get around or solve them

Mentioned by  
**9**  
employers

In some organisations, the main activities focus on products, on themes that can be very complex, whether in research and development, in sectors that are very focused on innovation or in activities that are more focused on industrial production. Whether they are developing new products or working on existing ones, organisations can be confronted with obstacles, with problems requiring a high level of expertise and thinking capacity, in order to find the best way to get around or solve the problem encountered. As such, several interviewees emphasised the ability of doctorate holders to handle and solve complex problems.

*"What we value in people who have done a doctorate is their ability – this depends on the type of doctorate that was done – to interface between the business problems that we encounter and the specific tools that we can implement to meet these rather specialised needs. These tools sometimes exist but, often, it will require a combination of specific methodologies and the design of custom-made tools to address particular "business" problems. I would say that what is interesting in doctorate holders is their ability to act as "technological conductor", to answer specific business needs. It's about resolving complex problems."*

**CEO (M)**  
**IT/engineering**  
**PhD**

***“ Individuals with a doctorate will be used to seeing things through, to tackling a complex problem head on. ”***

**Technical Manager (M - Chemistry - No PhD)**



## Research skills and methods

Ability to act in a reasoned manner and to structure one's work correctly using a scientifically valid approach

Mentioned by  
**8**  
employers

Complex problem-solving and the exercise of critical and analytical thinking are correlated with the use of research skills and methods. In order to manage a project of a certain level of complexity, employers are looking for people who are able to act in a reasoned manner, to structure their work correctly and to use proven methodologies. In certain types of organisations, in particular in the case of research institutes, but more generally for any organisation involving research activities in the broadest sense, the scientific approach represents an asset thanks to which doctorate holders again distinguish themselves from other employee profiles.

"The doctorate is an added value because, given that we carry out projects and studies, it means that a doctorate holder is someone who has already had this experience, who will be able to be more easily autonomous, and have his/her own expertise in certain specific methodologies".

**Director (F)**  
**Public**  
**administration**  
**(culture)**  
**PhD**

**Director R&D (M)**  
**HR consultancy**  
**No PhD**

"When you do research, there are a lot of things around that you can't control. To frame this scenario, [a doctorate is] very useful. Someone with a master's degree is likely to push on without really thinking about what he/she is not doing. A doctorate holder will also think about everything that is not taken into account in the research. This aspect of broadening the scope is very important."

"A doctorate certifies that a person is capable of doing research, of being autonomous on a project of a duration that varies from three to six years. This is quite a significant factor, knowing how to work autonomously, manage workload, and a guarantee that the research will be managed well".

**Director R&D**  
**(M)**  
**IT consultancy**  
**No PhD**

**Head of research**  
**service (M)**  
**Public service**  
**(employment and**  
**training)**  
**No PhD**

"For an analyst, it is important to ask yourself how you are going to answer a question in a reasoned way, so that it is not refuted by a boss on the one hand, and by a unionist on the other. We therefore need proven methodologies, not just opinions."

**“What interests us is someone who, with a doctorate, in terms of scientific approach, contribution to the project and innovation, will bring more than someone who doesn't have a doctorate.”**

**Medical director (M - Private scientific institute - No PhD)**



## Creativity and innovation

Ability to develop new approaches, to imagine new processes and to "think outside the box"

Mentioned by  
**8**  
employers

Some of the employers interviewed manage or work for organisations that are active in fields where innovation can play a key role: molecular biology, engineering, metallurgy, computer science, aeronautics or the pharmaceutical industry. Whether they are start-ups or large companies, they are more likely to look for high-level employees able to demonstrate creativity. To remain competitive in their respective markets, these organisations value people who can think outside the box, develop new approaches, and imagine new processes.

More broadly, this ability to "think outside the box" was also mentioned by employers whose activities do not necessarily involve cutting-edge technologies, as explained, for example, by the director of a research department within a public service. Specifically employing several doctorate holders in the Humanities and Social Sciences, he explains the valuable nature of these individuals in a context that has particularly shaken up habits in all professional sectors - the COVID-19 epidemic.

*"Inevitably, people who have learned to strive for excellence for four years have mindsets that are better able to stimulate creativity and innovation. In any case, in the science disciplines that I know most about, such as chemistry, biology or physics, [...] I am convinced."*

**Technical manager (M)**  
**Chemistry**  
**PhD**

**Scientific director (F)**  
**Public scientific institute**  
**PhD**

*"Someone with a doctorate will be able to propose new approaches, will have more scientific curiosity and will more easily question what we are doing, whereas a person who does not have a doctorate may be "content" with the traditional methods, doing things as we have always done them."*

*"Today, [my three doctorate holders] are all working on issues related to COVID-19. Moreover, for them, there is an indisputable stimulus, they find themselves in conditions of analysis which are entirely novel to them. All the databases, the methodologies that we usually use...we have to rethink."*

**Head of research service (M)**  
**Public service (employment and training)**  
**No PhD**

***"Those people have mindsets that are better able to stimulate creativity and innovation ,,"***

**Technical Manager (M - Chemistry - No PhD)**





## Scientific communication

Ability to present one's work, structure one's ideas or defend a project in a formal, precise and argued manner, in writing or orally

Mentioned by

6

employers

Another characteristic which was valued and mentioned during the interviews by several employers concerns communication skills, and more specifically "scientific" communication, be it written or oral. This means being able to write reports or any other written document, to varying levels of detail, in a precise, structured and reasoned manner, which means to activate the skills acquired during the doctorate thanks to the writing of scientific articles and the doctoral dissertation. Similarly, this includes having to present one's work, structure one's ideas and orally defend one's project in front of an audience – without necessarily including any particular outreach skills, which were mentioned more for their absence (see below).

*"In a doctorate, you have to defend your project every year or every two years. Having to defend one's project to management to secure investment and ensure that a budget is freed up is something that happens very often in business. This is not necessarily an experience you will have if you work in a company or university without doing a doctorate."*

**Director R&D (M)**  
**Pharmaceutical**  
**industry**  
**PhD**

***“ Having to defend one's project to management [...] is something that happens very often in business. ”***

**Director R&D (M - Pharmaceutical industry – PhD)**



## Perseverance

Ability to complete a project, to meet objectives and to overcome any difficulties that may present themselves

Mentioned by

6

employers

The notion of perseverance was also mentioned several times. Completing a doctorate is like managing a multi-year project and requires perseverance, self-sacrifice and resilience to see it through. It is an attitude toward work that some employers specifically associate with a successful doctoral experience.

*"In a doctorate, you have to master a lot of things, you have to fight, places are expensive. You have to be good at your subject, and have to want to do it, there's a lot of sacrifice involved."*

**CEO (M)**  
**Marketing/IT**  
**No PhD**

**Director R&D (F)**  
**Food industry**  
**PhD**

*"It also depends on the position, but I find that a doctorate and a master's degree are really different. I know that they have the significant experience of at least four years of research. This is a guarantee of quality. I think you can train people with master's degrees but they will be...there's no comparison, they will lack four years of experience. Now, it may be equivalent to a master's degree plus experience but it doesn't equate to the same experience at all... [...] The person has to be persistent...there are always problems, so they've had to work around problems... That's why I think there's really a benefit to having a doctorate."*

***“The person has to be persistent...there are always problems, so they've had to work around problems... That's why I think there's really a benefit to having a doctorate. ”***

**Director R&D (F - Food industry - PhD)**



## Long-term work

Ability to work on long-term projects and to support a long-term vision of the organisation's activities

Mentioned by  
**4**  
employers

A few employers also mentioned the value of having doctorate holders in their organisation in terms of their ability to work on long-term projects and to support a long-term vision for the organisation's activities. This was confirmed by one recruiter interviewed, working for a HR consultancy firm, who reminded us that relatively few private companies, "with their economic challenges", pursue long-term objectives. This does not prevent certain organisations, whether for-profit or not, from valuing the type of employee who is capable of projecting several years into the future, of thinking and anticipating how a given context will develop.

*"For me, that's a plus, because these are normally people who have had to deal with longer-term project management. First of all, to have the global vision, the necessary distance to assess all the elements, the management of projects, the ability to bounce back from significant obstacles by being creative and by proposing something else... [...] I think the strong point of a doctorate holder is to anticipate problems, see the weak points and be able to say: "OK, we may not have the answers yet, but I have a sense that this is a pressure point and I propose starting something now, and when we get to the problem I'll have the answer because I'm starting it now." It's the ability to anticipate, the long-term vision..."*

**Engineering  
manager (F)  
Aeronautics  
PhD**

**Director (F)  
Public  
administration  
(culture)  
PhD**

*"In my department – elsewhere [in the civil service] it wouldn't be the same – a doctorate allows you to have someone who is used to conducting research over long periods of time. They are people who will be able to set the markers and be more autonomous from the moment they are given an objective."*

**“The strong point of a doctorate holder is to anticipate problems, see the weak points [...]. It's the ability to anticipate, the long-term vision. ”**

**Engineering manager (F - Aeronautics - PhD)**



# 4

## EMPLOYERS' RESERVATIONS ABOUT DOCTORATE HOLDERS

The previous section has shown that the interviewees in our sample have developed a generally positive or even very positive view of doctorate holders, attributing to them many qualities that clearly attest to their added value in professional sectors other than academia. However, more negative elements also emerged from their discourses, characteristics that employers feel are missing or need to be improved and that may affect the attractiveness, in their eyes and in their respective contexts, of doctorate holders outside academia.

Beyond a few shortcomings noted in a series of transferable skills (managerial, relational and communicational), it cannot be said to be specific and easily identifiable skills that were discussed in the interviews, when the weaker points of the doctorate holders were addressed. Indeed, what seems to bother some of the employers more is the lack of experience outside university, the lack of knowledge of how organisations outside academia work and, consequently, the potential difficulty in adapting to a new work environment and a new organisational culture.

As with the section on the strengths of doctorate holders, the characteristics listed below were mentioned and explained by at least 4 of the 24 employers interviewed.

### Difficulty adapting

Difficulties in adapting to a non-academic work environment, to people and work methods different from those of their field of expertise

### Lack of knowledge of non-academic sectors

Lack of knowledge of professional sectors outside of academia and how they operate, as well as of the diversity of positions to be filled

### Too perfectionist

Tendency to pay too much attention to the smallest details of a process, to the detriment of the efficiency of the work carried out

### Lack of non-academic experience

Having spent several years only within the academic environment without having, a priori, built any links outside this environment

### Lack of management skills

Lack of skills and experience in team management and/or "business" (knowledge of the economic logic and constraints of an organisation)

### Lack of interpersonal skills

Tendency to be too introverted, to prefer solitary research activities to the detriment of collaboration and the collective dynamics of the organisation

### Lack of linguistic skills

Lack of foreign language skills, Dutch in particular

### Lack of scientific outreach

Ability to explain one's work in terms that are understandable and accessible to non-specialists in the field



## Difficulty adapting

Difficulties in adapting to a non-academic work environment, to people and work methods different from those of their field of expertise

Mentioned by

8

Employers

When joining a new organisation, each employee is confronted with a new work culture, new local organisational norms, and new sector standards. However, several employers reported difficulties in helping doctorate holders adapt to a professional environment other than the academic one. The dynamics are different: even if the organisation carries out activities related to research and development, work habits are changing and scientists are having to adapt to different ways of doing research, more concerned with economic imperatives and therefore, as emphasised above, by different time frames. This can result in a mismatch between the expectations of the doctorate holder and those of the organisation, which one employer interviewed expressed as a "head-on collision".

In addition, doctorate holders may be perceived as being particularly specialised in a specific research area or topic. Although they are prized for the quality of their analytical skills or research methods, they may have difficulty in moving beyond their field of expertise and transposing their skills to another context in order to adapt to new subjects and new content. They tend to be considered as "niche" experts:

"When we've worked with doctorate holders on the team, when we've hired them, the biggest difficulty we've had in the past has been the whole task management, work structure part. And in self-management, the whole aspect of commitment to the organisation. These were the two elements with which we had the most difficulty in the sense that the time dimension is really different in the business world and in the world of doctoral studies. Each time, there's been a real head-on collision between the expectations of the doctorate holder and those of the organisation (us), and a significant adaptation period was necessary to integrate the two."

Director R&D (M)  
HR consultancy  
No PhD

Head of  
selection (F)  
Public service  
(general)  
No PhD

"That's kind of the downside to their value...they're very, very sharp people who know their subject matter very, very well, but when they're in more transferable roles that maybe require more pragmatism, it can be harder for them to step back from their knowledge and their subject matter. [...] We see that doctorate holders are very attached to their subject. You can see that (laughs), you can see that they care about it."

"You know, I think we've already done tens of thousands of interviews, and we've often noticed that doctorate holders suffer from one thing, and that's an excess of learning. They are clearly experts, but niche experts. Often, we've seen doctors who did their doctorate in everything to do with event algebra, but beyond that, they had no idea about the industrial domain and event processing, which is nevertheless extremely relevant since it is the industrial use for their research! They were also unaware of all the related developments."

Director R&D (M)  
IT consultancy  
No PhD

**“ It can be harder for them to step back from their knowledge and their subject matter ”**

Head of selection (F - Public service (general) - No PhD)



## Lack of knowledge of non-academic sectors

Lack of knowledge of professional sectors outside of academia and how they operate, as well as of the diversity of positions to be filled

Mentioned by

7

employers

One recruiter interviewed was fairly adamant on this point: "Doctorate holders don't know about industry." She works in a sector specifically dedicated to the Exact and Natural Sciences, for which she notes that most doctorate holders seek only jobs in research and development, even though other opportunities could suit just as well. Although she uses the term "industry," her comment expresses a sentiment shared by other interviewees about doctorate holders' lack of knowledge of professional sectors outside of academia and how they function, as well as the diversity of positions they might hold within them.

As a result, there is a lack of knowledge of job opportunities and, more broadly, a lack of knowledge of how the professional world operates and of concrete activities within the non-academic sectors. The economic constraints are not the same, nor are the time frames and expectations. University is sometimes perceived as a "bubble", without sufficient contact with other professional sectors – which may themselves have their own research activities. Some employers lament the fact that doctoral (and even post-doctoral) experience seems, in their opinion, to place too many limits on the familiarisation of doctoral candidates with a more concrete application of scientific research.

*"To me, the big problem [with doctorate holders] is that they don't really know industry. If you ask people what they want to do, they always talk about R&D. But when you have a job coming up in R&D, you get 100 people applying, there's a lot of competition; and what they see is that their doctorate seems worthless because they never get invited to interviews. It's not that their doctorate is worthless, but that there are so many people applying that you have to be able to stand out from the rest, already in the application stage. Their perception is not correct. [...] There are many other solutions and other roles: clinical trials, production, etc. [...] In a technical sales position, which is scientifically demanding, you have to be up to speed with the techniques. And yet, almost nobody applies."*

**Talent acquisition specialist/coach (F)**  
**HR consultancy**  
**PhD**

**Technical manager (M)**  
**Chemistry**  
**PhD**

*"I think the financial aspect is the least known element during a doctorate. There is no understanding of how industry works. Even as a project manager in industry, you can't escape the financial aspect. You have to accept that sometimes a project gets shelved, even if the results are good. You have to have a certain amount of knowledge about how the industry works, how to manage a budget... These are things that are not covered at all during a doctorate."*



Thus, when transitioning to another professional sector, doctorate holders are not sufficiently aware of "reality" and what is expected of them in their new work context.

*"For example, we do research for our clients who have a specific requirement, who ask for an analysis and they need it for the day before yesterday - it's always urgent. So, we get one week to do a complete analysis of the requirements, to grasp what the real question is behind the request and to provide an answer. The client knows that it would normally take a year to do it right, but her world is very different and she needs the answer within a week. This is something that is integrated much more quickly by those without a doctorate than those with one.*

*Why? Because it's something that's new to them... I'm not saying that there's no stress or pressure in the world of doctorates, but it's a completely different kind of pressure. This can be seen in the longer-term projects where it is the non-doctorate-holders who will have more difficulty. As for the doctorate holders we've had in our team, they needed more time to adapt to this daily reality and this pressure."*

**Director R&D (M)**  
**HR consultancy**  
**No PhD**

***“To me, the big problem [with doctorate holders] is that they don't really know industry ,”***

**Talent acquisition specialist/coach (F - HR consultancy - PhD)**





## Too perfectionist

Tendency to pay too much attention to the smallest details of a process, to the detriment of the efficiency of the work carried out

Mentioned by

7

employers

Perfectionism was cited on several occasions as a negative characteristic, to illustrate this problem of a mismatch between doctorate holders and their new professional context. This may be a personality trait, but doctorate holders are actively encouraged in the academic environment to get to the bottom of things, to aspire to a full understanding of the subject under study. However, when it comes to solving a problem, employers generally prefer efficiency and a good dose of pragmatism. While reflection may be necessary – and is commendable when required – it must at some point give way to decision and action. Outside of academia, the objectives are different, and the approach must be adapted to the specific context of the employer: it is no longer primarily a question of research and the development of knowledge, but rather their realisation in a business sector framed by different constraints. As one interviewee reminds us, excellence is paramount in academia, but in industry (and of course in other sectors as well), it is efficiency and profitability that prevail.

*"We don't necessarily work for people who are experts in the field, there is a certain efficiency to be found. We could spend an extra day on a report so that it is tiptop, even better referenced, with even more precise terms...but in the end, this small percentage of improvement is not going to impress the client. This marks a contrast with academia, where excellence is an end in itself. [...] We don't necessarily have the same vision in industry: it is above all efficiency and profitability that take precedence over excellence."*

**Technical manager (M)**  
**Chemistry**  
**PhD**

**Engineering manager (F)**  
**Aeronautics**  
**PhD**

There are people who are fundamentally attracted to detail and need to understand everything... That's fine, it isn't a criticism and that's important for us too, but it's a question of moderation. [...] Either we arrive at a decision, or we never finish analysing. Not being sure, having to check and re-check...at a certain point, this is no longer compatible with the world of industry, at least in our country."

*"I understand that everyone wants to stay at university, it's easy...you do a postdoc, then another postdoc...and then the budget runs out and you run into problems. And if you do a postdoc after your doctorate, great, if you do a postdoc abroad, even better; but if you do three postdocs, it's a no. [...] Unless you have done a postdoc precisely in the field sought by the company, but that happens once in a blue moon. In industry, these people are seen more as staying at university because they don't know what they want to do...it doesn't look good."*

**Talent acquisition specialist/ coach (F)**  
**HR consultancy**  
**PhD**

***"In industry, it is above all efficiency and profitability that take precedence over excellence ,,"***

**Technical Manager (M - Chemistry - No PhD)**





## Lack of non-academic experience

Having spent several years only within the academic environment without having, a priori, built any links outside this environment

Mentioned by  
**7**  
employers

These various criticisms and shortcomings are linked to the fact of having spent several years within the academic environment, having acquired its standards, and then encountering difficulties in adapting to another environment, especially when no links have been built outside of university during this period. Beyond a person's level of skill and knowledge, employers want to ensure that they will be able to adapt relatively easily to the functioning of their organisation. However, this is a question they seem to have about doctorate holders and more particularly, according to some of the recruiters interviewed, about people who have continued their academic career with one or more post-doctorate qualifications.

*"It can be the same situation as when you have people who have worked for the same employer for 20 years: sometimes when you interview the person (whether or not they have a doctorate), you can sense a strong culture of that previous employer, and you can sense a lack of adaptability to a new environment when you question them in interview. This is true both for doctorate holders who have been in the academic sector for many years and for people who have been in the industrial sector for 20 years with the same employer."*

**Talent acquisition advisor (F)**  
**Pharmaceutical industry**  
**No PhD**

**Branch manager (M)**  
**HR consultancy**  
**No PhD**

*"For someone who has got themselves ensconced and done 10-15 years in academia, to be honest...an employer is just going to decide that that person is never going to fit in, plain and simple. In the same way, someone who has worked for 15 years in the same company can be a frightening prospect: how will this person adapt to my own structure, having been shaped for so long into a precise mould? [Post-doctorates] probably have their uses, but I tend to see them as more of an obstacle to subsequent recruitment. It's a little sad to say, but I feel like it's just putting off the problem until later."*

***"It can be a frightening prospect: how will this person adapt to my own structure, having been shaped for so long into a precise mould? ,,"***

**Branch manager (M - HR consultancy - No PhD)**



## Lack of management skills

Lack of skills and experience in team management and/or "business" (knowledge of the economic logic and constraints of an organisation)

Mentioned by  
**7**  
employers

Several employers reported a lack of management skills, specifically business skills and team management. "Business" skills are evoked in a relatively broad sense: employers do not so much expect doctorate holders to be well versed in detailed financial management as to be at least aware of or familiar with the workings of companies or organisations, and the economic logic and constraints in force. This ties in with the issue of adapting to a new work environment: employers are looking for people who will be able to adapt and rapidly mobilise their high-level skills, while avoiding "organisational shock." In addition, doctorate holders may quickly be called upon to hold positions of responsibility, which implies a minimum of budgetary management as well as team management, another aspect of managerial skills. While it may seem logical that these skills are not at the forefront of the doctoral experience, the employers cited below emphasised that they were nevertheless a tangible reality outside of academia. One of them, himself a doctorate holder, made an important comment, which is in line with one of the conclusions already mentioned by the Observatory (Bebiroglu et al., 2022): these managerial aspects are also important in the pursuit of an academic career. Indeed, academics are also responsible for managing budgetary resources and supervising a team of young researchers.

*\* « For all the respect I have for academics who work hard, there is a lack of knowledge about professional knowledge management, HR management. It is underestimated. People on the tenure track are very knowledgeable but have a lack of knowledge on what constitutes a good HR management. It is not because you are a great expert in your field that you will be able to lead a team of 20 people, or even able to manage it financially. [...] It's not only for those who will go in the private sector. Even for those on the road of a tenure track, leadership is a more than relevant experience. »*

**Innovation manager (M)**  
**Business consultancy**  
**PhD**

**Medical director (M)**  
**Private scientific institute**  
**No PhD**

*"I have the impression that here, we see that in terms of soft skills, management, financial management...doctorate holders are often quite weak. They have not been exposed to people who make business plans or take decisions... The financial aspect is not the most important, but on some level, let's be clear, it still plays a role."*

*"Not all doctoral candidates are wired to be solution-oriented: they will think about the most intellectually efficient solution but not necessarily the most efficient one from a business perspective. [What's missing] is the business side, the versatility. It's in my interest to hire a doctorate holder who has worked in the past with engineers, graduates, with other profiles. My feeling is that, often, a doctorate holder is going to be wired purely "academically". [...] It would be good to have a doctorate that had a "management" component and an opening towards the business world, with the management aspect among others. That would be a better selling point."*

**CEO (F)**  
**IT/logistics**  
**PhD**

**“ It would be good to have a doctorate that had a "management" component and an opening towards the business world, with the management aspect among others. That would be a better selling point. ”**

CEO (F - IT / Logistique - PhD)



## Lack of interpersonal skills

Tendency to be too introverted, to prefer solitary research activities to the detriment of collaboration and the collective dynamics of the organisation

Mentioned by  
**7**  
employers

Shortcomings were also identified more in terms of personal skills, such as interpersonal collaboration and working in a team. The stereotype of the "mad scientist" or "Professor Calculus", from the adventures of Tintin, was cited several times, to illustrate the idea of very isolated scientists, essentially at ease in their laboratories, immersed in their ideas, and therefore lacking the social skills necessary for the collective dimension of professional activities within an organisation. This image is sometimes the result of concrete experience with doctorate holders within an organisation or may be more the result of a collective imagination. As explained in the interview excerpts that follow, these characteristics are not automatically associated with every person who has completed a doctorate, and it seems clear to the employers interviewed that the intrinsic personality of the individual plays an overriding role. However, this shows that doctorates and scientific research in general are at least partially perceived as somewhat solitary activities and not conducive to learning to work as part of a team.

"Again, this comes from my experience... These are individuals who are more...they're immersed in their research: if you set them going on that, it's fine, but if you pair them up, it becomes more problematic. But this isn't the case for me. I prefer to work in a team and the fact that I have a doctorate doesn't mean a thing. I think it's also a question of personality, but it's true that some people have a little more difficulty sharing information, communicating, and therefore don't get involved in the team, in the life of the team... For example, if you have to replace a person who is already busy in another meeting, I notice that some employees are more reluctant to get themselves into the team spirit. This can be tricky."

**Director (F)**  
**Public**  
**administration**  
**(culture)**  
**PhD**

**CEO (M)**  
**IT/engineering**  
**PhD**

"It really depends on the type of doctorate holder we get, and crucially on the advisor he or she has had. For certain thesis advisors we know very well that the individuals they have worked with will be of a high quality; for others, we are more uncertain, we are dealing more with personalities...how should I put this...the "Professor Calculus" profile, disconnected from the reality of things, at the technological level, problems in applied research..."

"I'm going to use the cliché of the "mad scientist" but in order to say that this is what we are trying to avoid. Instead, we are looking for a personality who will be able to integrate into the existing teams and add value to the team. We don't go it alone here."

**HR manager (F)**  
**Aeronautics**  
**No PhD**

***"I'm going to use the cliché of the "mad scientist" but in order to say that this is what we are trying to avoid. ,,"***

**HR Manager (F - Aeronautics - No PhD)**



## Lack of linguistic skills

Lack of foreign language skills, Dutch in particular

Mentioned by

**4**

employers

The final more negative points that were mentioned a few times by the interviewees relate to communication skills. On the one hand, it is a question of linguistic knowledge and more specifically the use of Dutch, particularly useful when the organisation is active in Brussels or covers the whole of Belgium. According to the employer cited below, the absence of these types of skills can completely discount the relevance of the rest of the person's profile in some cases.

*"In our country, I have friends who are up to their ears in degrees but don't speak Flemish! It's the point which sets them apart, excludes them... Not for Wallonia, but if you want a job in Brussels in a big company and you are not bilingual, you won't get in the door, doctorate or not... [...] I would also like to say that a doctorate, on a CV, is not like... It constitutes knowledge but you have not been confronted with the actual work. When I see a CV, I like to see what the guy or woman has already done, his or her background... [...] An analysis of the CV today means multilingualism, a good knowledge of certain fields..."*

**CEO (M)  
Marketing/IT  
No PhD**

***“If you want a job in Brussels in a big company and you are not bilingual, you won't get in the door, doctorate or not. ”***

**CEO (M – Marketing/IT - No PhD)**



## Lack of scientific outreach

Ability to explain one's work in terms that are understandable and accessible to non-specialists in the field

Mentioned by  
**4**  
employers

On the other hand, in terms of communication, it is the lack of outreach skills that is sometimes evoked, for instance, being able to discuss and explain your work to people who do not necessarily master the details, the ins and outs of it. Depending on the context, these other people may be other internal employees, clients or partner organisations, or even policy makers. In other words, it is the ability to step outside of your own field of expertise and adapt to the person you are talking to. This is an aspect that appears only a few times, but again we see the links that can be made with the broader issues of adaptation to a new environment, and to a new work culture.

*"They are experts, they are not used to discussing with non-experts and that will cause problems in a company like mine. And I say that even though I have a doctorate."*

**CEO (F)**  
**IT/logistics**  
**PhD**

**Technical manager (M)**  
**Chemistry**  
**PhD**

*"I don't think a doctorate... It brings writing structure and skills but not necessarily outreach skills since, by definition, you are mostly speaking only to an informed audience in your field. This is pretty niche."*

*"The people I know from university are not able to explain what they have learned to your average layperson. But if I have to address the Council of Ministers to discuss whether to raise or lower interest rates, I need someone who can explain that to me in a very simplified way. [...] I have attended a few doctoral defenses in my life. In fact, they have a hard time translating their knowledge to explain it to a Board of Directors or a Council of Ministers. They lock themselves into their own system of justification."*

**CEO (M)**  
**Business federation**  
**No PhD**

***"I have attended a few doctoral defenses in my life. In fact, they have a hard time translating their knowledge to explain it to a Board of Directors or a Council of Ministers. "***

**CEO (M - Business Federation - No PhD)**



# 5

## DISCUSSION

The perception of the employers interviewed, regarding doctorate holders and their added value, is similar to the other studies on the subject mentioned in the introduction. As in these other studies, many positive characteristics are associated with doctorate holders, mainly with regard to a high level of expertise, autonomous work, and research skills; at the same time, employers have questions concerning their potential difficulty adapting to a non-academic context, in parallel with shortcomings noted in certain transferable skills. Nevertheless, this report contributes to an improvement in knowledge on the subject in several ways, summarised in this discussion.

First of all, the "Recruiting Talents" study as a whole makes it possible to objectify these results and to provide important data on the perception of doctorate holders by employers in direct relation to the specific context of the Federation Wallonia-Brussels. Secondly, the qualitative approach is complementary to the results of the quantitative studies, as it allows us to deepen our appreciation of the employers' opinion about the added value provided by a doctorate and to make links between the different characteristics discussed. Finally, the diversity of the sample, although it cannot be qualified as representative, also makes it

possible to move away from a perspective of doctorate holders as a homogeneous group and to distinguish certain types of employers, according to their professional sector, their size or their concrete activities. Lastly, the results present the added value of doctorate holders in a positive light, while providing constructive elements on areas still to be improved, which should certainly not be overlooked.

### Doctorate holders valued for their high level of expertise but raising some concerns

Generally speaking, the employers surveyed viewed doctorate holders quite positively. Of our sample of 24 employers (10 of whom had doctorates themselves), 18 clearly expressed a positive view of doctorate holders; however, this did not prevent them from discussing more negative elements or areas for improvement. The 6 other employers were more mixed (or indifferent): while they recognised certain qualities, these would not be easily adaptable to a professional context which was different to the academic environment, or only in relatively specific and limited situations. Nevertheless, there was a consensus that doctorate holders are highly qualified and highly intelligent employees.

The main positive characteristics that these employers associate with doctorate holders are scientific and technical expertise, the ability to work independently, to analyse given situations and solve complex problems, and skills related to structured presentation and argumentation on the technical content of their work. 12 of the 24 employers questioned also explicitly cited these strengths as distinguishing doctorate holders





from those with a master's degree. Indeed, the doctoral experience allows them to develop a sharper analytical mind, a greater ability to "think outside the box", to question established processes in order to improve them and, in doing so, to be creative. For these employers, this makes doctorate holders undeniable assets in innovation contexts and, more broadly, when taking charge of projects with a certain level of complexity.

However, employers also mentioned more negative characteristics, flaws that they see to varying degrees as potentially hindering successful integration into their organisation and work activities. Similar to the results which emerged from the first report from the "Recruiting Talents" study (Bebiroglu et al., 2022), shortcomings were cited in terms of management skills (team management, business knowledge) and interpersonal skills (collaboration, teamwork). However, the qualitative approach allowed employers to elaborate on certain reservations with respect to doctorate holders, not so much in terms of specific skills but rather with regard to a lack of experience outside the university setting, a lack of knowledge of how non-academic sectors work, and problems they have adapting to a new work environment, a new organisational culture with which they may be unfamiliar.

Employers interviewed who had hired or worked with doctorate holders explained that they tended to have difficulty stepping outside their specific area of expertise, respecting different time frames (shorter deadlines, economic constraints), and focusing on efficiency when solving a problem rather than a complete understanding of it. For this reason, perfectionism was mentioned as a negative trait: doctorate holders are sometimes prone to getting too bogged down in details, wanting to understand everything, when this is not necessary in the context of their employer and can be detrimental to the efficiency of the work carried out. As one employer mentioned above, excellence

is the priority in academia, but not in industry (and not in other sectors either) where efficiency and profitability are paramount.

### A potential to value and improve

Doctorate holders have the potential of bringing added value and integrating successfully into the non-academic job market, but there is still room for improvement: the perception of doctorate holders by the employers interviewed was therefore positive but nuanced. On the one hand, interest in hiring doctorate holders may vary depending on the employer's context, what they know or imagine to be associated with this profile. On the other hand, beyond specific situations, structural and strategic issues emerge regarding the preparation of doctorate holders for a possible transition to professional sectors outside of academia – an eventuality that actually concerns a large majority of these individuals in the short, medium, or long term (Bebiroglu et al., 2019).

In a forthcoming report to be based on the qualitative component of the "Recruiting Talents" study, we will look in more detail at the relationship between academia and other sectors through the experiences of the employers interviewed. Moreover, the Observatory's latest publication on transferable skills from the point of view of doctorate holders and employers (Bebiroglu et al., 2022) provides constructive elements on how to support researchers at the beginning of their careers in the concrete development of these transferable skills which are necessary to pursue a career both in academia and in other professional sectors. A set of general and targeted recommendations has also been published based on this report.



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