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## **Full-time job and study abroad – is this feasible? – A case study of fostering student mobility within a part-time master programme in Quantitative Finance**

114 – Internationalisierung von Hochschulen – Der globale Diskurs im Kontext der Fachhochschulen

### **Abstract**

The following evidence-based case study looks at how the University of Applied Sciences BFI Vienna has taken up the challenge of enabling high quality student mobility in the part-time master programme Quantitative Asset and Risk Management. The real life example illustrates how an Erasmus+ Strategic Partnership project INTQUANT was set up to enhance high quality short-time mobility not only at the own university but within a network of master programme in quantitative finance. The following challenges had to be managed: 1) full-time working students not willing or able to go abroad even though the market is demanding international and intercultural competences. 2) Finding international Partners in the highly focused academic field of quantitative finance and risk Management. 3) Establishing shorter mobility Arrangements with this international Partners.

### **Keywords:**

Short-term student mobility, working students, internationalization, intercultural learning, master programme, quantitative finance, case study, curriculum embedment, finance industry involvment

At the Ministerial Conference of EHEA in 2009 the member states confirmed the policy goal that 20% of graduates from higher education should have experienced studying or training abroad (European Ministers in charge of Higher Education 2009). This was reinforced in the EHEA mobility strategy 2012 where it was pointed out that high quality mobility provides substantial added value: Amongst others it

enhances competences, knowledge and skills; fosters internationalisation of higher education; and promotes employability through international experience of graduates (EHEA Ministerial Conference 2012). Therefore in the recent years, there has been a great deal of research interest in the obstacles to student mobility (Beerkens et al.2016, Wulz / Rainer 2015, Grabher et al. 2014).

### **Gainful Employment alongside studies: an obstacle to student mobility**

Following the work of Netz (Netz 2015) showing that the impact of mobility deterring factors can change if students' decision process and planning process are distinguished (Hauschildt 2016) the EUROSTUDENT Intelligence Brief investigates obstacles for student mobility. Using data collected in the latest EUROSTUDENT survey 12 potential obstacles to student mobility are analysed including "Loss of paid job". In regards of this specific factor it is shown that fear to loose current employment is ranked number three among students without plans to go abroad on cross-country average, whereas for students already in the planning process this obstacle is only the seventh-most highly rated. This indicates that losing their job is one of the key concerns for students in the beginning of the decision process, preventing them to even consider mobility.

To tackle this problem the EUROSTUDENT Intelligence Brief (Hauschildt 2016) sees the following implication for higher education policy:

*"In order to motivate students not (yet) planning to go – besides ensuring financial support is available – ways of lowering the social costs, e.g. through shorter or intermittent mobility arrangements, and/or increasing the perceived value of mobility as well as the students' assessment that they can master a study period abroad could be effective."*

### **How can you enable students with a full-time job to go abroad?**

The following **evidence-based case study** looks at how the University of Applied Sciences BFI Vienna has taken up the challenge of enabling high quality student mobility in the part-time master programme Quantitative Asset and Risk Management. The real life example illustrates how an Erasmus+ Strategic Partnership project INTQUANT<sup>1</sup> was set up to enhance high quality short-time mobility not only at the own university but within a network of master programme in quantitative finance.

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<sup>1</sup> The Erasmus+ Strategic Partnership "Creating an International Semester for Master Students in Quantitative Finance" (INTQUANT, [www.quantitativefinance.eu](http://www.quantitativefinance.eu)) is co-funded by the Erasmus+ Programme of the European Union (Grant Number: 2014-1-AT01-KA203-001029). The European Commission support for the project does not constitute endorsement of the contents of this publication which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

## **Initial situation: Mobility in the part-time master programme Quantitative Asset and Risk Management at the University of Applied Sciences BFI Vienna**

The University of Applied Sciences BFI Vienna (UAS) was founded in 1996 and is an Austrian non-profit higher education institution that offers study programmes in economics and business with a strong European focus. The university currently enrolls 2,100 students in seven bachelor and six master programmes and offers academically well-founded professional education.

Practice-orientation is also shown in the fact that all offered master programmes are organized part-time (career-parallel) allowing the students to engage in (full-time) employment during their studies. Although not all students are gainfully employed and the employment status can change throughout the years of study, more than 80% of master programme graduates stated that they were employed during their studies in the university's 2016 alumni survey.

### Master programme Quantitative Asset and Risk Management

The master programme Quantitative Asset and Risk Management at UAS is a four-semester (120 ECTS) programme in the field of quantitative finance with 25 study places. Despite the high number of working students offering high quality mobility has been a main goal since the start of the master programme. The global search for an "efficient and sustainable financial system" (cf. European Commission 2010: 6) underlines the need for highly skilled experts in finance on an international level. At the same time the growing globalisation of the world of work also increases the demand for international and intercultural competences on the labour market. One way to enhance these competences is international mobility.

However, study programmes in finance and risk management face particular hurdles when trying to internationalise. It comes as no surprise that the academic field of quantitative finance and risk management is a highly focused one. While many higher education institutions run broad programmes in business administration, the number of focused programmes in finance and risk management is relatively small. Against this background it often proved to be difficult to find appropriate partner universities for high quality student exchange. This makes high quality mobility – which is a challenge for many institutions – an even greater challenge for programmes in finance and risk management. Especially shorter mobility arrangements that would meet the needs of students with existing working commitments have been found extremely difficult to establish.

### To sum up: we had three challenges:

- Full-time working students not willing or able to go abroad even though the labour market is demanding international and intercultural competences
- Finding international partners in the highly focused academic field of quantitative finance and risk management.
- Establishing shorter mobility arrangements with these international partners.

In the end of 2013 it was decided to approach this situation by establishing a network of partner universities to foster and enhance high-quality short-term mobility for full-time working students. To initiate this

cooperation the Erasmus+ Strategic Partnership application INTQUANT was submitted to the Erasmus+ National Agency in Austria together with other master programmes in the field of quantitative finance from following universities:

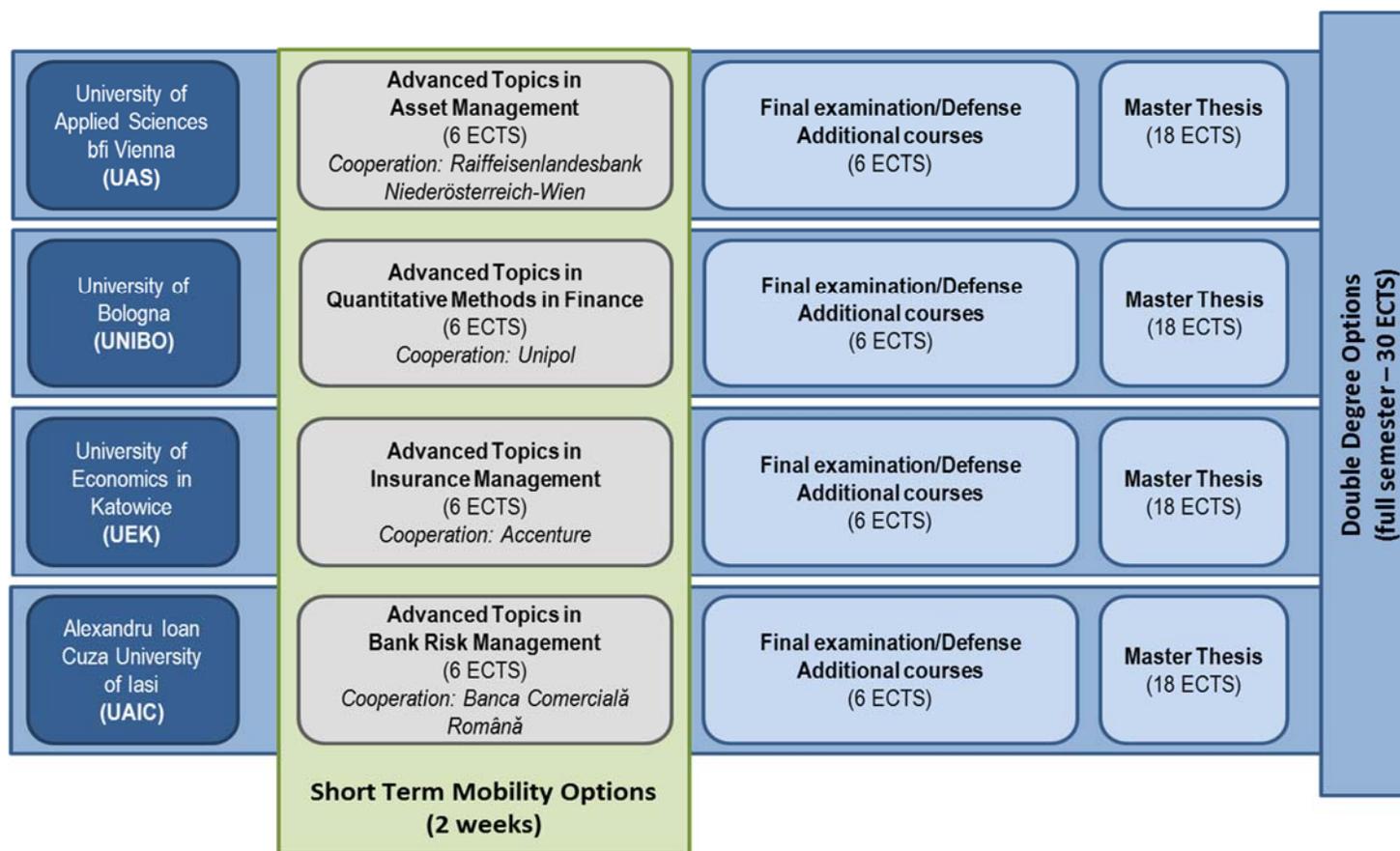
- University of Applied Sciences BFI Vienna (coordinating institution)
- University of Bologna
- University of Economics in Katowice
- Alexandru Ioan Cuza University of Iași

The master programmes in Quantitative Asset and Risk Management (ARIMA) at the University of Applied Sciences BFI Vienna (UAS) and the University of Economics in Katowice (UEK) were developed in an Erasmus Curriculum Development Project (2006-2010, coordinated by UAS). The University of Bologna (UNIBO) is a double degree partner of this programme (since 2011). While the ARIMA programme is proven and tested through a continuous implementation since 2009, the INTQUANT project was seen as an important step to further enhance the quality of the existing programmes and to extend the existing partnership. INTQUANT should set an important impetus for reform beyond the former curriculum development project: It was planned to lead to better structured mobility paths and the inclusion of a new partner, namely the Alexandru Ioan Cuza University of Iasi (UAIC). In doing so it aimed to make better use of the individual academic profile of each partner and strengthen the collective visibility and competitiveness in the higher education area. In addition new forms of cooperation with industry representatives should be established to enhance the links between theory and practice in all involved study programmes.

The consortium already had a substantial track record in implementing short-term mobility options (although in different academic fields and with different contents). For the purpose of the INTQUANT project we drew on this know-how, which was used for the development of new and targeted short-term mobility options in quantitative finance.

### **Erasmus+ Strategic Partnerships Project – INTQUANT (2014-2017)**

After the successful application of the Erasmus+ Strategic Partnership project INTQUANT we started to implement the project idea. By building on previous cooperation between the individual consortium members the project was sought to be complementary to existing projects and innovative at the same time. INTQUANT aims to enhance the quality and attractiveness of international student mobility in the master programmes in finance and risk management at the participating institutions. This was done through establishing four innovative short-term mobility paths (specialization streams) and attractive double degree options (long-term mobility for one semester). As advocated in the European Union's modernisation and internationalisation agenda in higher education (European Commission 2011), these mobility options have been systematically embedded in the curricula. Furthermore, based on an entrepreneurial approach a new course concept was developed, which allows students to put their acquired theoretical knowledge into practice, develop innovative ideas and to solve “real-world” problems independently. Direct cooperation with the industry in finance and risk management enhances the labour market relevance of the master programmes.



While built on existing cooperation mechanisms, the INTQUANT project is innovative for three reasons:

Firstly, although short-term mobility options have been offered in the past (e.g. through Erasmus Intensive Programmes at the participating institutions), this project took an important step forward: The short-term mobility were directly included in the curricula at all four participating institutions to enhance their quality. Amongst others, this enabled us to fully harmonize the course contents with the study programmes and to eliminate the barriers for efficient recognition of the study period. The reduction of mobility barriers is of particular importance given the fact that we also aim to include participants with fewer opportunities.

Secondly, a review of the selection results for relevant previous EU programmes (e.g. Curriculum Development Projects, Intensive Programmes in the respective countries) indicated that quantitative finance and risk management were peripheral topics at best (despite a large number of projects in the broader field of business and economics). This contrasts with the continuously high labour market demand for experts in quantitative finance and risk management, which was reinforced by the global economic and financial crisis. The European Commission even expects a further increase in the demand for professionals in the given field till 2020 (European Commission 2014: 99).

Thirdly, while the issue of employability has undoubtedly gained importance when designing study programmes, direct cooperation with labour market representatives is still an exception in many areas. Through the direct cooperation with industry representatives and the inclusion of case studies from companies we successfully fostered the cooperation between higher education and the world of work. UAS shared the experience it gained in this field as a higher education institution with an applied orientation with the other consortium members.

## **Conclusion**

To conclude: the established INTQUANT network supports the mobility of working students through the following set of measures:

**Short-term mobility options:** The consortium developed short-term mobility options, which are easier accessible for students with working commitments. Instead of spending a full semester abroad students get the chance to study in an international setting at a partner university for a manageable two-weeks-period. In addition travel and subsistence costs for the participants have been covered during the project to overcome economic barriers. Secure additional funding sources to provide related travel grants after the formal project end is a challenge the university network needs to tackle to ensure the sustainability of the established options. Corresponding follow-up projects are already planned to sustain the project results.

**Reduction of administrative barriers:** The fact that both short-term and semester-wise mobility is jointly organized and directly embedded in the curricula at all partners ensures an unproblematic transfer of credits acquired abroad. All necessary regulations and procedures (e.g. grading and recognition rules) were detailed in a specific set of guidelines to ensure a smooth implementation of all offered mobility paths.

**Information and support:** Souto-Otero et al. (Souto-Otero et al. 2014) clearly show that focusing on better information and communication is important to increase the participation in mobility. This particularly holds true for working students. Hence, a sound information policy is vital for INTQUANT: Each partner holds regular targeted information sessions to inform all students about the possible mobility options,

the procedures and the offered support. Through these sessions we aim to reduce fears and concerns regarding possible mobility obstacles among the student population. In parallel a team member at each partner institution acts as contact point for student issues and provide necessary support (e.g. housing). In addition the project website ([www.quantitativefinance.eu](http://www.quantitativefinance.eu)) provides easy access to all necessary information.

Internationalisation at Home (IaH): For students who do not have the chance to go abroad a number of places in the courses open for short-term mobility at their home university are offered. Thus, local students get the chance to gain international experience with participants from abroad.

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