Accepting unsatisfactory internship offers under pressure factors. A model-based exploration of the consequences on Italian students.

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Aimed at providing the students with the complementary set of knowledge and skills not covered during their studies, internships represent a compass toward the job market. However, the actual usefulness of this experience has been questioned, mainly due to the heterogeneous quality of the internship offers, and to the compulsoriness of the experience for some graduates: these factors combined are deemed to potentially introduce distortion in the labor market, by forcing students to accept unsatisfactory offers in order to earn their degree. This paper provides a simple model to illustrate the acceptance of unsatisfactory internship offers and assesses their effects on the motivation of Italian students, on their satisfaction, and willingness to work for the same company in the future.

Internship | Compulsory | Paid | Motivation | Satisfaction | Retention

Internships play a fundamental role in the professional development of university students. Data from Italy shows that in 2021 57.1% of graduates completed curricular internship experiences (Almalaurea, 2022)(1). Similar or higher figures are observed across Europe, putting this issue at the center of political debate. In June 2023, a resolution(2) from the European Parliament proposing that interns receive compensation covering at least living, accommodation, and transportation expenses was passed, while in Italy several political parties have recently presented reform proposals to stop unpaid internship(3) or to provide a minimum gross remuneration(4).

Several studies on the topic have been published in recent years(5–12). With respect to the compulsoriness of internships, an Austrian study (Bittman F., Zorn V.S., 2020)(5) showed better market outcomes of voluntarily initiated internships over mandatory internships in terms of income, job satisfaction, and job mismatch. Similarly, a previous study on German interns (Klein M., Weiss F., 2011)(6) suggested that mandatory internship programs do not increase the likelihood to being employed. Looking at the issue from another perspective, data from the US (Rothschild P., Rothschild C., 2020)(7) underline how students participating in unpaid internships were disadvantaged in terms of salary and employability compared to those who were paid. However, different evidence on the short-term effects has been provided in a more recent study (Hurst J., Gardner P., Dorie A., 2023)(8) which has proven that both types of internships provide graduates with solid support to launch their careers.

Our study aims at examining the effects of unsatisfactory internship offers on the motivation, satisfaction, and retention of students. We recognize that various factors contribute to the acceptance of internship offers beyond mere compensation and compulsoriness. Moreover, we hypothesize that the actual monetary compensation provided for internships is often insufficient by itself to make an offer satisfactory. Evidence collected for this study confirms this hypothesis, as shown in Fig. 1. We therefore move to conducting a comprehensive analysis of the elements influencing students' internship choices.

Monetary Compensation (MC). We consider the monetary compensation earned by the student to positively affect the student's motivation, satisfaction, and retention.

Relevant Skills Acquirable (RSA). The expectation of acquiring valuable skills for the future career during the internship. We anticipate a positive correlation between RSA and the variables of study.

Future Signaling (FS). The belief that the internship experience will send a positive signal to future recruiters. We expect positive correlation with the variables of interest.

Mandatory Factor (MF). This variable encompasses formal or actual pressure factors influencing students' decisions. These include compulsoriness set by the degree course, incentives to take the internship by means of a reduction in the number of exams to take, and social pressure. The value of MF is expected to be high when the values of RSA, FS, and MC are low, thereby balancing the total cost of accepting the internship. We predict that internships characterized by high values of MF will result in lower student motivation, satisfaction, and retention rates.

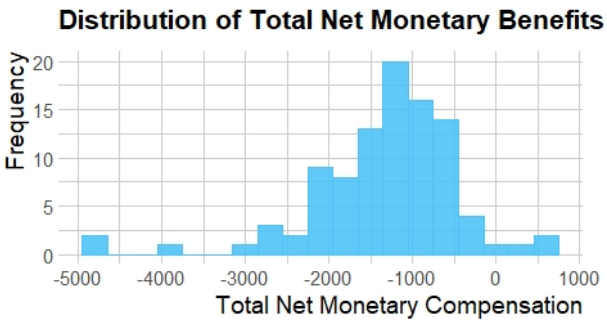

Fig. 1. Distribution of the total net monetary benefits (total monetary compensation net of total costs, including reservation wage, for the whole duration of the internship)

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Results

A significant share of "forced" internships. The data highlight a high percentage of internships (50.51%) characterized by high values ($\geq$ 5 on a 10-points scale) of the "Mandatory" Factor. Moreover, no value of the MF has been observed in the range 1-4.

Factors other than the monetary compensation affect students' motivation. Firstly, we create a composed indicator to represent the motivation of the student during the internship by considering their willingness to do overtime and to be initiative-taking on the job (after assessing the presence of high correlation between the two variables, we compute motivation as their average for each observation). Then, we regress the motivation controlling for the four main factors from our hypothesis. We find a positive significant impact of the RSA (P = 0.012; β = 0.243) and negative significant effect of the MF (P = 0.002; β = -0.292), whereas monetary compensation and future signaling don't seem to have a significant impact on motivation.

Skills acquired and pressure factors play a key role in determining satisfaction. We set up the same model to regress the variable satisfaction, defined as the overall satisfaction for the internship experience. We observe a similar outcome to the motivation model: positive significant effect of the RSA (P = 0.003; β = 0.294) and negative for the MF (P = 0.025; β = -0.211), while future signaling, and monetary compensation remain not significant.

Learning opportunities and a good pay positively affect retention. Lastly, we set retention as the dependent variable of the model, controlling for the same four factors drawn from our hypothesis. We consider the retention from the point of view of the students, as the willingness to apply in the future for open positions in the same company. We observe that monetary compensation (P = 0.048; β = 0.201) and RSA (P = 0.014; β = 0.249) are significant and have a positive effect on retention, whereas the mandatory factor becomes insignificant (P = 0.190; β = -0.129), along with FS.

	Complete Sample (N=97)			*Restricetd Sample (N=89)*		
	Motivation	Satisfaction	Retention	Motivation	Satisfaction	Retention
MC	0,155	0.164*	0.201**	0.175*	0.194**	0.277***
	(0.106)	(0.088)	(0.048)	(0.068)	(0.046)	(0.008)
RSA	0.243**	0.294***	0.250**	0.284***	0.309***	0.168
	(0.012)	(0.003)	(0.014)	(0.004)	(0.002)	(0.108)
FS	0.113	0.134	0.037	0.156	0.193**	0.129
	(0.244)	(0.169)	(0.713)	(0.104)	(0.048)	(0.123)
MF	-0.292***	-0.211**	-0.129	-0.295***	-0.168*	-0.096
	(0.002)	(0.025)	(0.190)	(0.002)	(0.079)	(0.343)

Fig. 2. The table shows correlations between independent variables (MC, RSA, FS and MF) and outcomes (Motivation, Satistaction and Retention).
$^{*}P < 0.10; ^{**}P < 0.05; ^{***}P < 0.01.$

Outcomes change significantly when restricting the sample to STEM and Economics students. Given the insignificance of the FS variable, we restrict the sample to a category of students more fitting to the assumptions of the model. We therefore exclude students enrolled in nursing, education, and physiotherapy degrees (for whom the FS factor is less meaningful) and obtain a sample involving Economics and STEM students (N = 89), for whom the conclusions previously drawn change. Firstly, in the satisfaction model all the variables, including FS and MC, become relevant; Secondly, in the retention model, the only relevant variable becomes monetary compensation.

Discussion

Distribution of the Mandatory Factor. Firstly, the jump in the distribution of the MF supports the hypothesis of the model: the variable either plays no role in the acceptance of the internship (MF = 0), thus characterizing a satisfactory offer, or it plays a decisive one ($MF \geq 5$).

Motivation. Results from the complete sample show that the motivation of students on the job is not significantly affected by their remuneration (MC), but mainly by the match between the position and their career expectations (RSA factor). However, when restricting the sample to STEM and Economics students, the MC be-comes relevant.

Satisfaction. Overall, satisfaction appears tightly correlated to motivation, with positive influence of the RSA factor. However, when excluding from the sample students involved in programs preparatory to the public services (education, nursing, physiotherapy), evidence shows that remuneration (MC), learning outcomes (RSA) and future signaling (FS) all decisively influence satisfaction.

Retention. Monetary compensation plays a key role, along with learning opportunities (RSA) in determining the willingness to be retained in the company. Moreover, after restricting the sample to STEM and Economics students, the MC becomes the only relevant factor considered by the interns.

Compulsoriness. Overall, compulsoriness of internships, which corresponds to higher MF values, may force students to accept unsatisfactory offers, with negative impacts on motivation and satisfaction for the experience. However, internship compulsoriness does not have a significant impact on retention.

Policy proposals. These findings suggest that there exists an economic incentive for companies to substitute entry-level positions with highly motivated, unpaid, and potentially unsatisfied interns. However, companies that are strategically willing to retain the best talents will need to provide them with a competitive remuneration. To avoid distortions caused by the MF, the other positive variables of the model should be maximized, by providing a stronger control from the universities on the quality of the internship projects (increasing RSA) or a minimum pay for interns (increasing MC).

Materials and methods

Model. We design a simple model to represent the choice of accepting an internship offer. We assume, as in the Standard Job Search Model, that the student is a rational individual aiming at maximizing net benefits, defined as the difference between total benefits and total costs. We represent this condition as:

$$\textit{total benefits} \geq \textit{total costs}$$

Moreover, we assume that for the students who accepted the offer at least the equality always holds. We define the total cost as:

$$\textit{total costs} = \textit{accommodation} + \textit{transports} + \textit{reservation wage}$$

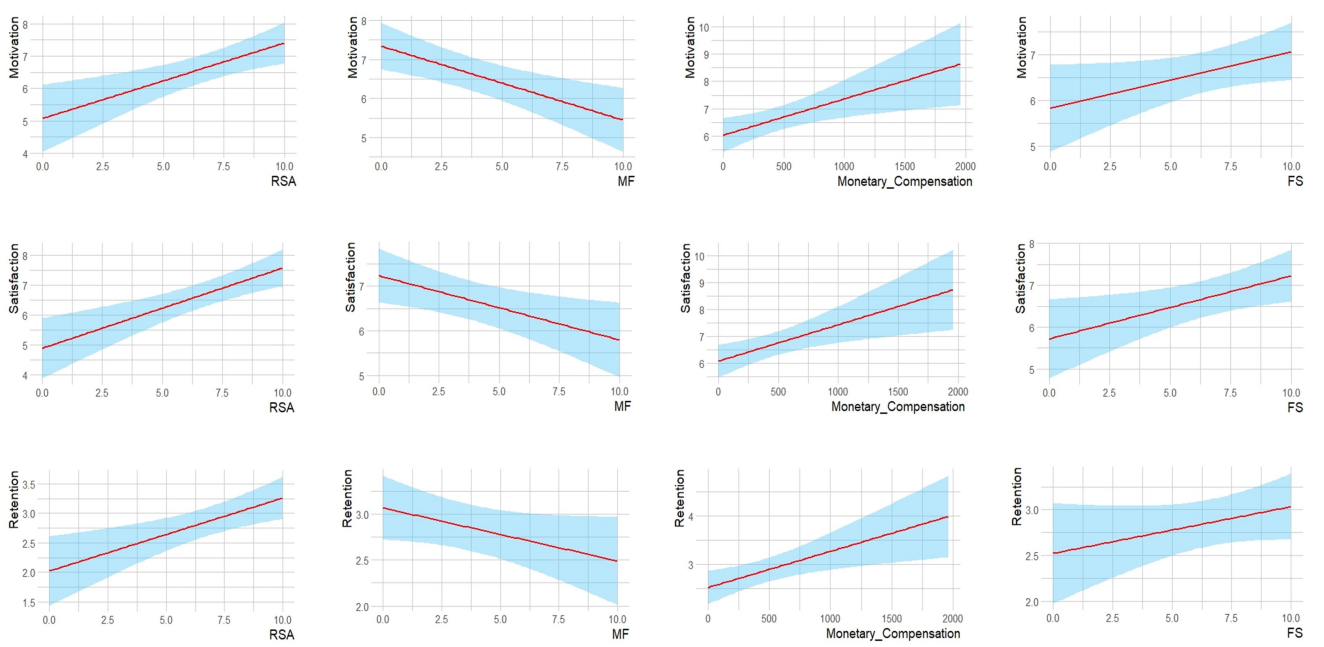

Fig. 3. Graph illustrating pairwise linear regressions (CI = 95%) of the variables of interest (Motivation, Satisfaction, and Retention), controlling for the independent variables of the model (MC, RSA, FS and MF)

On the other hand, total benefits are defined as:

$$\textit{total benefits} = MC + RSA + FS + MF$$

Where we consider the total Monetary Compensation (MC), involving both wage and benefits; the Relevant Skills Acquirable factor (RSA); the Future Signaling factor (FS) and the eventual "Mandatory" Factor (MF), defined as a negative benefit encompassing several pressure factors (compulsoriness in order to gather a degree, reduction of the number of exams, social pressure, cost of continuing the search) which balances the equality in case of unsatisfactory internships.

We then examine the impact of the defined independent variables measured through a survey on the motivation of interns during the experience, their overall satisfaction, and their willingness to be retained by the company in the future, by testing the following multiple regressions:

$$\textit{motivation} = \beta_0 + \beta_{MC} \cdot MC + \beta_{RSA} \cdot RSA + \beta_{FS} \cdot FS + \beta_{MF} \cdot MF$$

$$\textit{satisfaction} = \beta_0 + \beta_{MC} \cdot MC + \beta_{RSA} \cdot RSA + \beta_{FS} \cdot FS + \beta_{MF} \cdot MF$$

$$\textit{retention} = \beta_0 + \beta_{MC} \cdot MC + \beta_{RSA} \cdot RSA + \beta_{FS} \cdot FS + \beta_{MF} \cdot MF$$

Data. To collect the data both on the dependent and independent variables in the model, we designed a survey which has been administered to Italian undergraduates and graduates (N = 97) from 15 different Italian universities (both public and private) and 21 different programs who had completed an internship during their studies. The sampling strategy adopted has been exponential nondiscriminatory snowball sampling.

Data Availability. The data supporting the findings of this study can be found here.

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