

The Ant and the Grasshopper: Are hard work students guaranteeing success in Finance Studies?

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Abstract

When Aesop wrote down the fable “The ant and the grasshopper”, -or the most well known from Jean de la Fontaine, “*La cigale et la fourmi*”-, he was interested in focusing on the importance of hard work and fore sighting instead of been concerned with just working when necessary or keeping away till the last minute.

Following Shuell (1986) “In achieving efficiently the proposed objectives, the students shall do those activities of learning which have higher probability of leading them to these objectives. In fact, it is more important what student than teacher does”

Focusing in that premise we were searching for a correlation of multiple grading activities and the final exam results within the Financial Management studies at a High Education (HE) level. So we are looking for answers to a) are continuous activities interesting actions to improve the motivations and grade of the alumni?, b) if so, which are the more useful to reach a superior assessment? And c) if not, which activities could be more appropriate to drive a better performance for the students?.

Answering those questions we can promote those complementary activities leading the alumni to be more interested in the topic and get better grades at the final exam results which would derive in a better HE.

In doing so, we have developed a data base of three hundred students in order to analyze the effect of hard work in grading the knowledge of students.

We have defined four different tasks to be done continuously during the course such as 1) attending classes (ATT), 2) doing practices and case studies (PRC), 3) doing sum up of the literature (SUMUP) and 4) commenting press news about the studied topics (COMM). These tasks were supervised daily during the entire course.

Completing the dataset there are six social and demographic variables such as 5) being man or woman (SEX), 6) how old is the student (AGE), 7) do the student work or not during the course (WORK), 8) working experience measured in years (EXP), 9) have the students coursed previously finance studies (FINAN) and 10) academic performance in the past (ACAD)

Finally, we designed for the final exam to be split into three different parts 1) a single choice test from four possible answers (TEST), 2) two writing text questions (THRY) and 3) a practice case to solve with analytic solution (PRTC). These tasks to be taken at the exam are replicating the activities done during the course.

Our aim is to understand if these continuous activities will explain the learning, knowledge and analytic skills of the students.

The methodology we are developing is a statistical analysis that could put into scope the effect of several issues other than the final exam results explaining the interest and motivations for students in a defined topic through an analysis of some factors other than merely attending the exam.

Our final goal has been to settle a statistical model to capture all the effects of each parameter over the final exam result. A multivariate econometric model has been developed and the analysis is driven first of all by a descriptive analysis to look for correlations among the parameters used in the data set.

The findings of the analysis are those that all the four continuous tasks are explaining the final exam result although doing press comments or practices cases are not so important but to attend classes and do sum up.

This analysis should reinforce the European Higher Education Space known as Bologna Methodology within the guidance in the course planning.

The paper is organized as follows, part I is an introductory explaining the aims of our paper and a literature review. Part II exposes the statistical data we are using in the analysis while part III establishes a multivariate regression models focusing on those variables that have been identified as more important explaining the final exam results.

For doing this we have differentiate a two step model. First step is to realize how much important is to participate in the course activities and attend classes to explain if a student is taking the final exam. After that, a second step is to explain from those students who took the final exam which are the activities more relevant in explaining the results.

Part IV presents the conclusions of our analysis determining that the continuous activities are explaining the presentation of students to the final exam implying that those students that regularly attend classes and work hard during the course shall take the exam more than the others.

Controlling by academic performance and the other social variables has shown that those students with higher grades in their academic files have higher results in the exam but again attendance and text sum up are positive and significant for the final exam results.

Finally those students been young and women get higher results but the coefficients are not significant at all.

Among those students taking the final exam it is more important to have been attending classes and doing sum up than doing practice exercises or press comments. In fact, for the press comments it has been surprising to observing a significant negative coefficient.

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APPENDIX Tables

Table 1. First step regression for taking the EXAM.

Source	SS	df	MS	Number of obs = 343		
Model	42.031027	4	10.5077568	F(4, 338) =	81.30	
Residual	43.6832587	338	.12924041	Prob > F =	0.0000	
				R-squared =	0.4904	
				Adj R-squared =	0.4843	
Total	85.7142857	342	.250626566	Root MSE =	.3595	

EX_ATT	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
att	.5148687	.1146824	4.49	0.000	.2892876	.7404497
comm	-.1709974	.1015435	-1.68	0.093	-.3707342	.0287394
prc	.010243	.0928125	0.11	0.912	-.1723198	.1928058
res	.6067749	.0928248	6.54	0.000	.4241879	.789362
_cons	.1578652	.0269849	5.85	0.000	.1047857	.2109447

Table 2. Regression of EXAM results

Source	SS	df	MS	Number of obs = 240		
Model	6.45693186	4	1.61423297	F(4, 235) =	21.56	
Residual	17.5943863	235	.074869729	Prob > F =	0.0000	
				R-squared =	0.2685	
				Adj R-squared =	0.2560	
Total	24.0513182	239	.100633131	Root MSE =	.27362	

exam	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
att	.2707765	.0922906	2.93	0.004	.0889539	.4525991
comm	-.0713036	.0783567	-0.91	0.364	-.225675	.0830677
prc	.0398314	.0707969	0.56	0.574	-.0996463	.1793091
res	.2528531	.0733749	3.45	0.001	.1082965	.3974096
_cons	.1641012	.031614	5.19	0.000	.1018181	.2263843

Table 3. Regression of EXAM results controlled by academic performance

Source	SS	df	MS	Number of obs = 83		
Model	3.24190285	5	.64838057	F(5, 77) =	10.30	
Residual	4.84716216	77	.062950158	Prob > F =	0.0000	
				R-squared =	0.4008	
				Adj R-squared =	0.3619	
Total	8.08906501	82	.098647134	Root MSE =	.2509	

exam	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
att	.382019	.149589	2.55	0.013	.0841493	.6798887
comm	-.2047085	.1208545	-1.69	0.094	-.4453606	.0359436
prc	.1364116	.107157	1.27	0.207	-.0769653	.3497885
res	.2107953	.1229063	1.72	0.090	-.0339424	.455533
acad	.2343373	.091811	2.55	0.013	.0515182	.4171564
_cons	-.1094002	.1131454	-0.97	0.337	-.3347014	.1159011