Appendix*

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In the following tables, we explain the measurement strategy employed for the operationalization of the terms denoted in equations (1) to (3) in more detail. Table 3 shows the list of variables included in the index for protest participation, constructed by extracting a single factor from a factor analysis (Iterated Principal Factor method used for the analysis of the correlation matrix) of these items. Following either Kaiser's rule of thumb (taking all factors whose eigenvalue is greater than 1), or the screeplot visual test (choosing the number of factors to the left of the elbow-point), the common variance of all indicators was shown to be most effectively captured by a single factor.

Given that we refer here to the dependent variable of interest, some further details need to be mentioned. To start with, the total amount of common variance among all seven standardized indicators was 2.07. This means that FA captures only 41.4 percent of the total variance simply because this is the portion of variance shared among the different indicators. The factor solution seems to capture the linear structure among the variables well since it reproduces the correlation matrix with relative accuracy (sum of squared errors .0023). To be sure, there is some variability in the portion of variance each variable shares with the others. The variable referring to the number of general assemblies in which the individual took part shows the lowest levels of communality. It seems that the variability in this indicator is more dependent on the institutional arrangements of each faculty than on the individuals themselves. This is because there is some variability regarding the total number of assemblies that took place in each faculty and thus individual differences may simply be the outcome of this inter-university variation. That said, according to the structure matrix (which of course is equivalent to

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Table 1: Measuring the dependent variable of protest participation.

Question	Factor loadings	Average score
Voted for university student occupation (0, 1=Yes)	.723	.20
Number of assemblies respondent attended (1= None, 2=one, 3=more than one)	.476	2.44
Visit university during the occupation (0, 1=Yes)	.575	.58
Number of marches participated in (1= None, 2=one, 3=more than one)	.786	1.50
Active in occupation (0, 1=Yes)	.641	.20
Eigenvalue	2.07	
Percentage of total variance shared	41.4	

the pattern matrix for the one-factor solution), all selected variables seem to correlate significantly with the underlying factor. Since the latter is regarded as a measure of true participation, we can evaluate its reliability by examining its variance. The score of .803 shows that the constructed factor captures a large amount of the variance in the latent dimension. We have also tested the scalability of the items by transforming the two trichotomous variables into dichotomous ones. With regard to the number of assemblies in which respondents took part, we have simply distinguished between those who attended more than one assembly (1) and those who attended one or none (0). The recoding for the equivalent variable asking respondents about their participation in marches is analogous. With all indicators coded in a dichotomous fashion, we then employ a Mokken scale analysis (Mokken 1971) which constitutes a non-parametric version of Guttman scaling, designed particularly for polytomous and dichotomous variables. The resulting H-coefficient, which provides an indication of the unidimensionality of the indicators, is .6, much higher than the recommended value of .3. None of these indicators is excluded from the scale, yet another indication that all five items are included in the same scale. Replicating the analysis using the summated rating scale generated from this procedure leads to the same substantive conclusions drawn in the main part of the paper. We opt for a factor-analytic approach because it allows us to use the full metric of the individual indicators, as they are all standardized before the estimation of the pattern matrix. Employing a summated rating scale would make it necessary to normalize all indicators

with regard to their range of values.

Table 2: Measuring perceived efficacy

Question	Item-rest correlation	Alpha if item deleted
'The dynamics of the movement within the university would not be the same if I had not taken part' (0, 1=Yes)	.65	.64
'My participation made a contribution to the occupations, no matter how small' (0, 1=Yes)	.51	.76
'My contribution motivated other students to take part in the movement' (0, 1=Agree)	.68	.60

The measurement of personal and general benefit involved two questions, the answers to which were coded as dummy variables. For Personal Benefit: 'Regardless of general consequences, the proposed bill would not affect my own personal studies' (0, 1=Disagree). For General Benefit: 'Regardless of personal impact, the problem was that the law would be applied to other students' (0, 1=Agree).

Moving to the scale used for the measurement of perceived efficacy, the questions refer both to the respondents' perception about the importance of their own contribution to the overall outcome as well as to the extent to which their own contribution was important by inducing the participation of other students. Given the identical measurement of the three questions (all agree/disagree items) we constructed a simple summated rating scale with the three items. The basic assumption behind the construction of these scales is based is that of a monotonic relationship between the items. To test this assumption, a locally weighted regression (loess) curve was fitted to a scatterplot between scores in each item and scores on a scale comprising the other two items (Jacoby 1991). As with all non-parametric regression methods, the basic idea behind the loess curve is to trace the salient features of the mean response while making only minimal assumptions about its distribution (Fitzmaurice, Lard & Ware 2004, 69). The graphs generated from this procedure show that the assumption of a monotone relationship is easily satisfied. A good indicator of scale reliability with summated rating scales is Cronbach's alpha which is the average correlation of all possible split-halves among the indicators. Cronbach's alpha for perceived efficacy is .771, which is higher than the conventional .7 rule for a scale to be considered reliable. To test whether the implicit assumption of equal weight for all three items is satisfied, we also proceeded with a simple factor analysis (IPF) from which

we extracted one factor. The variance of the constructed factor is marginally larger (.779) and the pattern matrix shows that all three variables load almost equally to the factor. Thus, for the sake of greater simplicity, we employed the original summated-rating scale.

Table 3: Measuring perceived cost

Question	Factor loadings
'Participation takes time from other important issues in personal life' (0, 1=Agree)	.65
'Taking part in occupations entails the risk of being labelled as trouble-maker and might cause problems with the authorities' (0, 1=Agree)	.51
'Helping in the movement might cause problems in continuing my studies' (0, 1=Agree)	.68
Eigenvalue	.95
Percentage of total variance shared	32

Perceived cost is measured with a great deal of noise which may account for our not finding very strong evidence for this factor. Trying to combine the three questions in a single scale does not seem to produce a reliable measure because the three items do not share much of their variance.[1] Although this results in a noisy scale, we refrain from using the three items separately, assuming that each relates to a different aspect of the same underlying dimension, the notion of cost: that stemming from the act of voting itself; from the need to comply with general social conventions; and from the duration of the occupations in a more instrumental sense. Importantly, when each item enters the equation separately the interpretation of the results is identical.

The variable capturing process incentives was constructed through a one-factor solution of a factor analysis (IPF). The reliability of the scale is .789. The equivalent coefficients attached to process incentives in the last column of Table 2 in the main text when the individual indicators are used are as follows. 'Pleasant and entertaining experience:' 1.28 (.186); 'meeting like-minded people': .975 (.177); 'feeling comfortable': .886 (.092). The results related to the mediating role of process incentives are almost identical to those presented in the main text.

[1] In effect, the reliability of an encompassing scale of cost falls below .5 if equal weight is given to the indicators and somewhat larger than this threshold when different weighted are allowed.

Table 4: Measuring process incentives

Question	Factor loadings
'For me, participating in protests and occupations is a pleasant and entertaining experience' (0, 1=Yes)	.72
'For me, participating in protests offers the opportunity to meet like-minded people' (0, 1=Agree)	.79
'I feel comfortable taking part in the movement' (1–4=Strongly agree)	.69
Eigenvalue	1.62
Percentage of total variance shared	54

Table 5: Measuring pessimism.

Question	Item-rest correlation	Alpha if item deleted
'The proposed bill is part of a general plan to distort the public and free nature of Greek higher education' (0, 1=Agree)	.71	.38
'As a student I feel that my future is unsafe' (0, 1=Agree)	.75	.26
'The level of studies offered in the university compared to the past has:' 1: improved 2: stayed the same 3: deteriorated	.65	.52

To measure pessimism we used three questions about the extent to which students believed that the level of studies in Greek universities had increased or decreased in recent years, whether they felt that their future was unsafe, and whether they believed that the proposed changes were part of a more general plan for the commercialization and liberalization of Greek higher education. However, as shown in Table 5, their overall scalability is questionable. This is particularly the case for the last of these indicators. Excluding this item the overall reliability of the scale seems to increase. Accordingly, our resulting measure consists of only the first two items, with an overall reliability of .53. Although this also implies that there is much noise in the measure, we chose to keep these two items together in a single scale, based on our prior theoretical beliefs that the three questions measure the same underlying dimension. Again, when each item is used separately, the results are very similar and substantively identical to those presented in the main

text.

Social norms were measured by an interaction term between a question regarding family (or 'significant others') opinions about the students' movement (coded -1, 1=Approve) and a question about the importance of the opinion of family (or 'significant others') to the respondent (coded 1–5=Strongly important).

For post-materialism, we used Inglehart's (1971, 994) standard question with two modifications: in order to account for the effect of unemployment which has replaced inflation as a major economic concern in past years (Clarke & Dutt 1991) we substitute 'rising prices' with 'unemployment' in the question wording. In addition, we use a four-point scale to measure post-materialism (instead of the typical distinction among post-materialists, mixed and materialists) by distinguishing between respondents who selected a post-materialist goal over those who selected a materialist goal as their first choice.

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