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A COMPARATIVE STUDY OF STUDENT DEMAND FOR STATUS IN IRELAND, ITALY AND THE UNITED STATES

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A COMPARATIVE STUDY OF STUDENT DEMAND FOR STATUS IN IRELAND, ITALY AND THE UNITED STATES

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Abstract

This paper reports on results of surveys of hundreds of students in Italy, Ireland and the United States that show that if simply confronted with questions about their preferences for high relative income at the expense of absolute income that a) a substantial fraction give inconsistent answers and b) that the remainder are overwhelmingly status conscious. It also shows that where they are given more information about the benefits of higher real income that there is a significant decrease in this preference for status. The results are remarkably similar in all 3 countries and what differences exist are consistent with what we know about their differences in intergenerational income mobility. It also shows that when the price of status is changed American students response is highly inconsistent with any fully formed preferences for status. This is somewhat less so in Italy. Overall the results throw doubt on one of the empirical linchpins that has been used to bolster the idea that relative income is what people seek.

I. Introduction

There has been a considerable amount written that purports to show that a person's relative income position motivates economic behavior and affects individuals' perceived welfare or happiness levels. The proponents of this position infer from this that, in a sense, the creation of private income and consumption are external bads that should be discouraged and that public projects that create goods for all that are non-positional should be subjected to less stringent cost-benefit criterion than commonly used.

Part of this analysis is based on the idea that people derive pleasure from higher relative income because it gives them status and status is a zero sum and wasteful game. Congleton (1985), Lee (2006) and Greene and Nelson (2006a) call those assumptions into question. If status is achieved by activities that create goods for others, and there is substantial evidence that it is, then no such conclusions about excessive private income creation follow.

One of the linchpins on which those who argue for the idea that it is relative income that determines human welfare is a body of evidence from surveys that reveal that individuals say they would prefer to be in societies where they are relatively rich to societies where their purchasing power is higher but they are relatively poorer. In a previous paper Greene and Nelson (2006b) argue that there is a difference between statements about what choices one would prefer and actual choices and that the actual choices imply that relative income is far from overriding importance. They also present evidence from surveys of large numbers of students taking economic courses in the United States that the conclusion that it is relative income that counts is due in part to respondents in such questionnaires providing answers that they can infer the researchers want, and in part respondents having little information. They show that the very high

percentage of answers that display relativistic preferences are significantly reduced if more complete information is available.

Such results might be peculiar to the United States population sampled and we are unaware of data on the subject elsewhere. This paper looks not only at students in the United States, but also those in Ireland and Italy to see whether these same conclusions can be generalized to at least a few more locations. In Section 2, we briefly discuss some differences in the distribution of income and intergenerational mobility in the different countries and why these could conceivably lead to differences in "relativistic" preferences. Section 3 describes the surveys and samples in the different countries. Section 4 summarizes the results both via tables that show differences in proportion of students answering the questions in certain ways in the different countries (probit regression results that explain choices by country and socio-economic characteristics are available on request). Some concluding remarks follow.

II. Income Inequality, Attitudes Toward Inequality and Intergenerational Mobility in the Respective Countries

There are some factual and some attitudinal reasons to suspect that since income inequality, attitudes toward it, and intergenerational mobility differ as between the U.S., Ireland and Italy, so too might the responses to surveys designed to elicit whether students preferred to live as relatively rich people in a poor society or with more real purchasing power but in a society where they would be relatively poorer.

Apparently the actual distribution of earnings is somewhat more unequal in the United States and quite similar in Ireland and Italy. Brandolini and Smeeding [2005] report distributions of disposable personal income in year 2000 with Gini indices of .368 in the U.S. and .323 and .333 respectively in Ireland and Italy. The ratio of median

income in the 90th relative to the tenth percentile is reported as 5.5 in the U.S., 4.6 in Ireland and 4.5 in Italy. Precisely what higher inequality could mean for preferences about relative income positions is hard to infer. The greater inequality could mean that the issue of relative position might be more salient and people would be more strongly inclined to desire to be in relatively richer positions. On these grounds American students might be inclined to be more relativistic. At the same time the absolute income levels in the United States are a bit higher and to the extent that there is a declining marginal utility of absolute income this would tend to mean more weight given to other things including relative position.

But some evidence also exists implying differences in attitudes about whether inequality is too great. Osberg and Smeeding [2005] report survey results from the International Social Survey Program [ISSP]. In three surveys in the U.S. [1987, 1992, 1997] the average percent that disagrees or strongly disagrees with the statement that income differences are too large in our country was nearly three times higher in the U.S. than in Italy [32.8% vs. 11%]. But on a scale of 1 to 5 (agree to strongly disagree) there was virtually no difference between support for the statement that "Large income differences are necessary for a country's prosperity." The combined results would seem to imply Italians are willing to sacrifice more to reduce perceived inequality. The implication for how they might respond to questions about the importance of relative income position for themselves is unclear, but one would suppose that if Italians were more concerned with inequality they would be more likely to want greater absolute income for themselves and everyone else rather than low absolute income but more for themselves. Once again this could lead to a prediction of greater tastes for relative position in the U.S. Unfortunately no data is reported by the ISSP for the Republic of Ireland.

But the original reason we thought of extending the study of preferences for relative position to Ireland and Italy was an intuitive suspicion that the societies of Ireland, the U.S. and Italy possessed substantially different social structures. [1] The Celtic Tiger had recently experienced phenomenal economic growth, with the impression of fantastic intergenerational income mobility. While the U.S. had a reputation for great mobility it had suffered recently [see more below] and probably was less than in contemporary Ireland. Personal experience in Italy (it certainly seemed fewer professional acquaintances had experienced great class or income mobility) and the United Stated led us to the belief that Italy was a less mobile and more stratified society. Our hypothesis was that in immobile societies the lure of high relative income positions at the expense of lower absolute means would be stronger. Low relative positions would mean low relative position for one's children and grandchildren and vice versa.

But is it really the case that there is less intergenerational mobility in Italy than in the U.S. and still more in Ireland? While we cannot reach a definitive conclusion our intuitions seem correct. Typically the way economists measure intergenerational mobility is to study the income or earnings of fathers and sons. After early evidence of very substantial mobility in the U.S., Solon[1992] pointed out something faulty in the evidence that was based solely on annual incomes: they are poor estimates of permanent income. Income averaged over several years give better and smaller measures of mobility. Piraino [2006] uses the Historical Database of the Bank of Italy from 1977 to 2002 to provide an intergenerational income elasticity for Italy that can be compared to U.S. data. It confirms the study by Checchi et al (1999) that found lower mobility between occupation and educational groups in Italy. Using the two sample intergenerational variable technique pioneered by Angrist & Krueger (1992), Arellano

[1] Another reason is one of the authors association with ICER in Turin, Italy and the National University of Ireland- Maynooth

and Meghir (1992) and Bjorklund and Janti (1997) , Checchi et al. use a sample of sons who have reported their father's economic and social characteristics and a sample of adult men (pseudo-fathers), whose age is consistent with the son's actual ages, first to estimate an income equation for the "fathers" and then to regress the log of son's income on the log of predicted father's income. This procedure is not without problems since there will tend to be an upward bias if the instruments such as father's education have a separate positive impact on son's income. Nevertheless, the bias should be present both in Italy and the U.S. and comparative conclusions can be reached controlling for son and father age. Piraino finds almost identical elasticities of son's income with respect to father's of .51 in Italy and Bjorklund and Janti find as elasticity of .52 in the U.S. Since the average ages of fathers and sons in the Italian sample are higher [sons average in the U.S. sample is 32 and in the Italian 37] and this tends to lead to higher elasticities, this seems consistent with the idea of intergenerational income mobility also being somewhat less in Italy.

Results presented in Comi (2003) are consistent with the conclusion that Ireland is a much more mobile society than Italy. She uses the European Household Community Household Panel to produce estimates of intergenerational earnings elasticity for father-son pairs for 12 European countries including Italy and Ireland. Since the average ages of sons is much lower in these samples the intergenerational elasticities estimated are much lower than in Piraino. While they do reveal elasticities even lower than Ireland for three countries (Austria, Denmark and the Netherlands), the elasticity estimated for Italy is nine times the level of Ireland's and Italy's elasticity is the highest of all twelve countries studied. Comi also finds substantially higher elasticities in the U.K. than in Ireland (elasticities at least three times as high) implying that contemporary Irish society is more mobile than the United Kingdom.

This last observation is important because there are no studies that compare Irish and American data using similar samples and methodologies. Comparisons do, however, exist for the U.K. and the U.S. Corak [2006] finds estimates that are reasonably similar with the U.S. mobility, only slightly (6%) less than the U.K.

It seems fair to conclude then that intergenerational income mobility is strongest in Ireland and weakest in Italy. We hypothesize then that, on average, individuals would tend to be more conscious of their relative positions and more willing to forego higher purchasing power for rank in Italy than in the U.S., and in the U.S. than in Ireland if mobility is an important determinant of positional concerns.

III. The Form of Our Surveys

One of the main pieces of survey evidence purporting to provide data showing the importance of relative income positions for individuals is the study by Solnick and Hemenway (1998)[2]. They surveyed 155 students and 79 staff and faculty at Harvard's School of Public Health in 1995 to determine how important positional concerns were. One of the questions was whether the respondents would prefer to live in a society where the respondent had an income of $50,000 and the average person had an income of $25,000 or in one where one has income of $100,000 and the average person had an income of $200,000 (prices were specified as constant). Many chose higher relative income over a higher income level in spite of the fact that that higher relative income came at a very big price in terms of real absolute income levels. Among the 159 students, 52% preferred the higher relative income; 35% of the 75 faculty and staff answered similarly. The conclusion would seem to be that relative income and income levels are of approximately equal importance in determining decisions.

[2] It was extended in Solnick & Hemenway [2005] to provide evidence that not only is relative income important, but that income is more positional than leisure (and goods compared to bads, private compared to public goods).

There are several problems with this study. There is a zero return to any respondent giving a correct answer to the questions of this survey (while there need not be a universally correct answer, there should be a correct answer for any given student). There is no incentive for the respondent to give careful thought to evaluating the alternatives. Nor do they in our survey described below.

Even if a student gave careful thought, he has little knowledge of the world on which to base his assessments. The difference between the response of students and staff is revealing in that regard. The faculty and staff are considerably more knowledgeable than the students, and they responded to that knowledge by giving statistically significantly less weight to relative income than did the students.

There is a third problem, which is probably more important than these others, though its size is magnified by the zero-award scenario that generated the first problem. There is a framing problem. This survey was obviously about the relative importance of status – a survey that makes sense only if those designing the survey felt that status could be relatively important. Students don't need a survey to convince them that income levels are important. But a respondent might well say, "if it costs me nothing, why not give the survey makers what they want."

These are possible objections to the Solnick and Hemenway study. Just listing these objections does not imply that they play a sufficiently significant role to vitiate the results. We have created a survey of our own to show that the Solnick and Hemenway study probably exaggerates the relative income effect by not considering information levels. We will show that the results taken for granted in the literature are not robust and that this is the case in all three countries.

We have designed a survey that in many ways duplicates the Solnick and Hemenway survey. Our survey was administered to all students attending the first day's

session of either Principles of Microeconomics or Principles of Macroeconomics at Binghamton University on January 26 or 27, 2004 and students doing the same on August 31, 2004. Useable results involving answers to both questions were 673 and 632 respectively. To make the income figures comparable in real terms to Solnick and Hemenway, we raised them to $60,000, $30,000, $120,000 and $240,000 and asked simply: "In the question below, there are three states of the world - you are asked to pick the one in which you most prefer to live," with the same other wording as Solnick and Hemenway,

State A] your current annual income is $60,000 and others have $30,000 in annual income.

State B] your annual income is $120,000 and others have $240,000 in annual income.

State C] your annual income is $120,000 and others have $120,000 in annual income.

For some of the students in the September survey, States B' and C' were substituted for States B and C respectively,

State B'] your annual income is $90,000 and others have $240,000 in annual income.

State C'] your annual income is $90,000 and others have $90,000 in annual income.

Students are, then, asked to choose first which option they most prefer and secondly which they least prefer. The answer AB, for example, means that a student most prefers A and least prefers B. States A and B are the real income equivalents of Solnick and Hemenway's states, as is the question about which state the respondent most prefers. State C has been added, as has the question about which state one least prefers.

These additions permit a richer treatment of respondent's relative income preferences. It also permits us to determine the proportion of answers that are inconsistent.

Another big change from the Solnick, Hemenway format, however, lies in providing students different levels of information. Students are randomly given surveys, which differ by the information provided in the instructions. We postpone discussing those differences until the results section below.

In order to make international comparisons the surveys were also administered to students in principles of economics classes at the University of Turin in Italy in the spring of 2005 where the total sample size was 516 and at the National University of Ireland in Maynooth where the sample size totaled only 159. Of course in Italy and Ireland the monetary figures were expressed in Euros and were 32,000 and 16,000 euro, 64,000 and 128,000 euro and 64,000 euro for choices A B & C. Only in the U.S. and Italy was the cost of choosing high relative income varied.

IV. Survey Results

1. The Inconsistent Answers: We regarded five of the possible nine answers as nonsense. The most obvious cases are those where the students answered that they most preferred a state and least preferred that same state: AA, BB, or CC ,(Table 1) 6% chose one of these answers in the U.S., 6.7% in Italy and 4.9% in the Republic of Ireland (in this first section we treat B' and C' the same as B and C).

We also regarded two other answers as inconsistent with thoughtful choice. A student who answers AC asserts that he prefers high status at a very high price in income level terms but prefers low status (B) to equality at no cost to himself. This answer makes sense only if some people found a big return to high status but were indifferent about having low status. This attitude might work for an exaggerated version of the chimpanzees: if a males get all the returns to status and there is no return to being

anywhere else in the pecking order not even a return in terms of the prospects of becoming an a male. But the literature about humans seems to suggest, if anything, higher costs of low status than returns to high status. Overall, 5.7% answered AC in the U.S., 3.9% in Italy and 2.7% in Ireland.

We also found the answer BC similarly in consistent. Someone so answering must most prefer high income with low status and least prefer high income with equality. This requires that low status is more desirable than high status. 4% answered BC in the U.S., 3.7% in Italy and 3.8% in Ireland. In total, then, 15.6% of the U.S. students and 14.2% in Italy and 11.4% in Ireland gave inconsistent answers.

What does this result mean? Students were making some effort to answer the questionnaire. Even 15.6%, for example, is a far lower percentage than can be attributable to random answers. That probability would be 5/9, or 55.5%. Even the two less extreme answers of the inconsistent set, AC and BC had far lower percentages than for any of the sensible answers. However, 15.6%, or for that matter 11.4% ,is not a miniscule number. A substantial number of our students were either making little effort or do not know how to read. It makes one wonder how many of the remaining students were answering without much thought. The rest of our analysis excludes from the sample these inconsistent answers. It should be noted, however, that including them does not change our conclusions

2. The Demand for Status: A far higher percentage of our students wanted to buy status than in the Solnick-Hemenway survey. Their students were confronted with only two alternatives: A (high status, low income) and B (low status, high income). Our students also had the alternative C (middle status, high income). The equivalent of their students choosing A is our students choosing AB (*high status preference*) or CB (*moderate status preference*). In both these cases A is preferred to B.

Tables 2 and 3 report the number of AB, CB, CA and BA answers and the percentage with respect to the total number of consistent answers. Survey 1 and 5 (which is the variant of Survey 1 including Sate B' and C') provide the same information to subjects as Solnick-Hemenway. In these two surveys, 80.4% of the US students made the AB or CB choice. In Italy this percentage was 85.1 and in Ireland 76.3 (the difference in the fraction choosing status and income is statistically significant in all three states)[3]. Only 52% of the Solnick-Hemenway students chose positively. The difference in behavior between our students and theirs is both big in itself and statistically significant.

Why the difference? We can think of two possible reasons. First, their students were graduate students; our students were those taking an elementary undergraduate economics course. Graduate students know more about the world than undergraduate students if for no other reason than they are older. This interpretation is consistent with one of Solnick and Hemenway's results. They found that faculty and staff had a far lower percentage of status buyers than their students: 33% compared to 52%. Again the former were the more knowledgeable.

The second reason is more interesting. We had C as an alternative, they did not. In terms of strict logic, that should make no difference in the choice between A and B. But that logic is compelling only if a student were only interested in revealing preferences that existed prior to the survey. We suspect that most students have not thought about their status preferences prior to the survey, and they have no incentive and little time to do much thinking about those preferences during the survey (they had about 10 minutes to answer the questions). Under those circumstances the CB answer seems to be the safe answer. It allows the student to give some weight to both status and high income, a nice moderate choice. In consequence the sum of the AB and CB answers include a lot of students whose answers have little to do with their own preferences. (We

[3] The t-statistic for the equality of proportions in the US is 12.7, in Italy 12.1 and in Ireland 2.8.

would suspect that at least some of the non-preference revealing answers in CB have no preferences or have CA or AC preferences, but not sufficiently strong to resist the temptation to appear moderate.) Later, we will investigate evidence that suggests that something peculiar in the framing of the questions is, indeed, at work.

3. Inter-country differences: Let us also consider inter-country differences. The percentage choosing AB (High Status) or CB (Moderate Status) in all the surveys was highest in Italy (76.7% of all responses), smallest in Ireland: 61.1%. In the U.S. it was 67.5%. The t-statistics on differences in proportion between Italy and Ireland was 2.9, between Italy and the U.S. was 3.5 and between the U.S. and Ireland 1.25. This is consistent with our hypothesis that individuals would be more willing to forego higher purchasing power to obtain status in countries with less intergenerational mobility.

4. Information and Status Preferences: In addition to Survey 1 (and its variant Survey 5), students were randomly assigned to three other surveys, which varied by the amount of information given.

Survey 2 *(status information)*: Following phrase added: "In all societies you will associate most closely with people who have income close to yours. In richer societies you will be slightly more likely to associate with people with somewhat higher incomes and you will be aware of the average income of those you do not meet."

Survey 3 *(real income information)*: Following phrase added to information provided in Survey 1: "If you earn less than the average income in a society, you and your children will be more likely to have your income move up in the future than if you earn more than the average. The higher the average income in the society the better the public services such as education, road maintenance etc. that you will receive."

Survey 4 *(status and real income information)*: The phrases of both Survey 2 and Survey 3 added to the information of Survey 1.

We would predict that an increase in the information by these particular surveys would increase the proportion of those choosing income levels over status. The high income level choice should experience the greatest increase, while the high status choice should experience the greatest decline.

When considering the U.S. results, one of the information differences by surveys had large impacts on student choices. There were the same information differences between Survey 3 and Survey 1 on the one hand, and Survey 4 and Survey 2 on the other hand. The difference between both sets of surveys were that students were told that there were ways by which living in an area with higher average income could enhance one's own well-being. We'll call this *real income information*.

This information had a very significant effect on U.S. choices in both a statistical and magnitude sense. Table 4 provides the results of a simple linear probability model in which the percentage of answers AB, CB, CA and BA are explained by the different survey specifications. The table also provides the tests of the statistical significance of the differences in results across surveys. The omitted category is the baseline specification (Survey 1), therefore the estimated intercept in Table 3 corresponds to the response percentage reported in Table 3 for Survey 1. The other estimated coefficients in Table 4 are the differences in response percentages with respect to Survey 1.

As one moves from High Status (AB) to Moderate Status (CB) to Moderate Real Income Level (CA) to High Real Income Level (BA) there is a perfect order of the effect of real income information whether one looks at the differences in choices between Survey 3 and Survey 1 or the differences in choices between Survey 4 and Survey 2. The probability of this occurring by chance for both of these differences is extremely low - .0017. Furthermore, the differences in choices for each of the extreme options, High Status and High Real Income Level is statistically significant for each of the survey

differences considered. For example, the proportion of those choosing High Real Income goes up from just 3.5% in Surveys 1 and 5, the no additional information case, to 29% in Survey 3.

This is also true in Italy. The proportions choosing High Real Income goes from 3% in Surveys 1 and 5 to 22.2% in Survey 3. The fraction choosing High Status decreases from 45.2% in Survey 1 to 22.2% in Survey 3. The same pattern appears in Ireland, where in Survey 1, none chose the high real income answer but in Survey 3, 32.4% do so. In the Irish data, the fraction of respondents choosing High Status decreased from 28.9% to 13.5%.

The results are not nearly so impressive for the other kind of information examined: information that one's status for most associations is only modestly affected by one's income relative to average income. We call this *status information*. Status information affects Survey 2 relative to Survey 1 and Survey 4 relative to Survey 3. The predictions about how choices should behave in response to this information would be the same as the predictions we made with respect to real income information unless one assumes that students generally possess this information, but not the real income information. These predictions are only modestly realized for status information in the U.S.data. There is a statistically significant reduction in the proportion choosing High Status, t= 2.17. But, there is virtually no change, significant or not, in the proportion choosing High Relative Income Levels. Table 4 reports the impact of status information and the corresponding standard error. In fact, the sign of the difference between Surveys 3 and 4 are sometimes in the opposite direction from the predicted. Instead, more than the entire decrease in the choice of High Status is explained by an increase in the proportion choosing Moderate Status when the differences between Survey 1 and Survey 2 and the differences between Survey 3 and Survey 4 are combined.

The Italian results provide similar results. The percentage choosing High Status is 45.2% in Surveys 1, decreases to 23% in Survey 2 and falls slightly going from 3 to 4. In Italy as we go from Surveys 1 to 2 or from Survey 3 to 4, High Real Income does not change significantly.

If we look at the Irish results they too show the much larger (though because of the small sample size statistically insignificant drop in High Status as we go from Survey 1 to 3 as opposed to going from Survey 1 to 2 and the much bigger rise in High Relative Income as we go from 1 to 3 as opposed to 1 to 2. Moreover, in Ireland as we go from 3 to 4 we see a drop in High Relative Income, and a rise in High Status.

For all three countries, what is really significant, again, both in terms of statistical significance and in terms of magnitude, is the difference in the impact of our two kinds of information. Real income information has a great impact on choices compared to status information and the former behaves exactly as predicted compared to the less clear effects of the latter. What makes this result so interesting is that it seems incongruous with the thrust of the overall results. If one took our results at face value, they would suggest that our students even in Ireland are obsessed with status, that they are willing to give up a lot of income in order to have higher relative income. That would suggest that even in Ireland choices would be more sensitive to variation in information about the impact of relative income on status than it would be on information about real income.

That is, suppose that status were more important than real income in determining utility then, information that leads to an x% decline in relative income's effect on status should have a bigger impact on decisions than information that leads to x% decline in relative income's effect on real income levels. We believe, if anything, the status information should be more important in determining the effect of status than the real income level information is in determining one's real income. But, in fact, the real

income information affects our students' choices far more than the status information (once again it may be the case that students naturally possess the status information, but not the real income information and our conclusion is wrong).

Why? One possible answer is that our students are in fact far more concerned with their real income levels than they are concerned about their status, in spite of their answers that seem to suggest just the contrary. Alternatively, both the responses to information and to the choices are largely responses to students trying to deduce what the experimenters want. As discussed earlier, students might well choose status because they think the experimenters want them to choose status. The real income level information, we suspect, will have a bigger impact on revising students' views on experimenters' desires than the status information. The former explicitly gives reasons why the income level of others can increase one's own real income. The latter is couched in a more neutral matter.

Without knowing what is commonly assumed to be the effect of the income of others on status, a student could not tell whether the additional information about status should increase or decrease a desire for higher income relative to average income. In consequence, that information should have less effect in determining a student's prediction of experimenters' desires. At the very least, the observed differential effect of status and income level information on choices should make one skeptical of the extent to which student answers to the choice between status and income levels reveal their true preferences.

5. Changing the Price of Status: In the American and Italian survey we varied the increase in one's own income that one could get by reducing one's status.[4] Some students had the choice B' rather than B and C' rather than C in their choice. Both B' and C' contained a lower own income gain from giving up the high status in A, an option

[4] We did not do them in Ireland because of the small sample size.

available to both sets of students. Clearly, then, if status is important, more students should prefer A to either B' or C' than their preference for A over B and over C respectively. C' also reduces the amount that others get by the same amount that one's own income declines compared to C. If status is important that should also increase the number of students choosing C' compared to those who choose C when the choice is B' or B respectively.

The information level chosen as the reference level for this experiment was that of Survey 1 – no additional information -- therefore the impact of reduced cost of status can be read directly in Table 4. In Table 4 we label the case when B' and C' are substituted for B and C Survey 5.

These predictions are not born out by our results in the United States. In the U.S. there are no statistically significant differences. Moreover, the signs of the differences between Survey 1 and Survey 5 are partly mixed up. In fact, there is a slight decrease in the highest status result (AB) when the price of status goes down : 4.4%. But that decline is more than matched by an increase in the moderate status choice (CB): up by 7.4%. The high real income choice (BA) barely moves with a decrease in the price of status, down 0.4%.

In Italy our predictions are partly verified in the data. While there is no significant change in the fraction of students choosing High Status, there is a significant increase in those choosing Moderate Status, and a significant decrease in those choosing Moderate Real Income Level. It seems that in Italy preferences for status may exist and people may rationally respond to its reduced price. The strong orientation toward relative status is corroborated by the findings that in Italy overall 76.7% make status choices. This percentage is only 67.5% in the U.S. and 61.1% in Ireland.

IV. Conclusions

This paper shows that past surveys of students about their positional concerns which implied very substantial concerns were marred both by framing and informational problems. It does so using surveys of Americans, Irish and Italian undergraduates. The four of the surveys reported on here allows us to measure the extent of inconsistent or surely less than thoughtful answers. It is substantial in all three countries. Again in all three countries, students' greater informational levels lead to a substantial reduction in those giving positional answers. The reactions to different kinds of information throw substantial doubt on the idea that well-found positional concerns exist. In Italy the results are also dependent on informational levels, but less damming to the contention that such positional concerns exist.

Variations in the surveys in the U.S. and Italy that change the cost of choosing status tend to corroborate the conclusion that American students do not possess any well-formed positional concerns. On the other hand there is some evidence that, perhaps because of the lesser mobility, in Italy positional concerns may be important.

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TABLE 1 % INCONSISTENT RESPONSES

	US	Italy	Ireland
AA,BB or CC	6.0	6.7	4.9
AC	5.7	3.9	2.7
BC	4.0	3.7	3.8
TOTAL	15.7	14.3	11.4

TABLE 2. CONSISTENT RESPONSE NUMBERS

	Total	Type of response			
		AB High Status	CB Moderate Status	CA Moderate Real Income Level	BA High Real Income Level
US					
US Total (All surveys)	1,305	425	456	247	177
Survey 1 (Baseline)	271	123	91	47	10
Survey 2 (Status information)	272	95	109	50	18
Survey 3 (Real Income Information)	269	67	67	57	78
Survey 4 (Status and real income info.)	281	53	102	62	64
Survey 5 (reduced cost of status)	212	87	87	31	7
Total Survey 1 + 5	483	210	178	78	17
ITALY					
Italy Total (All surveys)	516	162	234	70	50
Survey 1 (Baseline)	126	57	44	20	5
Survey 2 (Status information)	99	23	59	13	4
Survey 3 (Real Income Information)	90	20	37	13	20
Survey 4 (Status and real income info.)	91	16	40	16	19
Survey 5 (reduced cost of status)	110	46	54	8	2
Total Survey 1 + 5	236	103	98	28	7
IRELAND					
Ireland Total (All surveys)	159	33	64	39	23
Survey 1 (Baseline)	38	11	18	9	0
Survey 2 (Status information)	42	9	21	11	1
Survey 3 (Real Income Information)	37	5	13	7	12
Survey 4 (Status and real income info.)	42	8	12	12	10
Total (All states and survey types)	1,980	620	754	356	250

TABLE 3 CONSISTENT RESPONSE PERCENTAGES

	Type of response			
	AB	**CB**	**CA**	**BA**
	High Status	**Moderate Status**	**Moderate Real Income Level**	**High Real Income Level**
US				
US Total (All surveys)	32.6	34.9	18.9	13.6
Survey 1 (Baseline)	45.4	33.6	17.3	3.7
Survey 2 (Status information)	34.9	40.1	18.4	6.6
Survey 3 (Real Income Information)	24.9	24.9	21.2	29.0
Survey 4 (Status and real income info.)	18.9	36.3	22.1	22.8
Survey 5 (reduced cost of status)	41.0	41.0	14.6	3.3
Total Survey 1 + 5	43.5	36.9	16.1	3.5
ITALY				
Italy Total (All surveys)	31.4	45.3	13.6	9.7
Survey 1 (Baseline)	45.2	34.9	15.9	4.0
Survey 2 (Status information)	23.2	59.6	13.1	4.0
Survey 3 (Real Income Information)	22.2	41.1	14.4	22.2
Survey 4 (Status and real income info.)	17.6	44.0	17.6	20.9
Survey 5 (reduced cost of status)	41.8	49.1	7.3	1.8
Total Survey 1 + 5	43.6	41.5	11.9	3.0
IRELAND				
Ireland Total (All surveys)	20.8	40.3	24.5	14.5
Survey 1 (Baseline)	28.9	47.4	23.7	0.0
Survey 2 (Status information)	21.4	50.0	26.2	2.4
Survey 3 (Real Income Information)	13.5	35.1	18.9	32.4
Survey 4 (Status and real income info.)	20.8	40.3	24.5	14.5
Total (All states and survey types)	31.3	38.1	18.0	12.6

TABLE 4. THE IMPACT OF STATUS AND REAL INCOME INFORMATION ON RELATIVE INCOME PREFERENCES (Linear probability models).

US	**AB** **High Status**	**CB** **Moderate Status**	**CA** **Moderate Real Income Level**	**BA** **High Real Income Level**
Survey 2 (Status information)	-.103	.066	.007	.029
	(2.62)	(1.63)	(0.22)	(1.06)
Survey 3 (Real Income Information)	-.203	-.085	..035	.253
	(5.15)	(2.10)	(1.05)	(9.06)
Survey 4 (Status and real income info.)	-.264	.028	.048	.187
	(6.75)	(.70)	(1.43)	(6.78)
Survey 5 (reduced cost of status)	-.042	.076	-.030	-.004
	(1.00)	(1.75)	(0.84)	(0.13)
Constant	.454	.336	.178	.037
	(16.26)	(11.64)	(7.41)	(1.87)
R-squared	.04	.01	.09	.004
Test Survey 2 = Survey 4	No	***	No	***
Test Survey 3 = Survey 4	*	No	**	No
ITALY				
Survey 2 (Status information)	-0.220***	0.247***	-0.027	0.001
	(3.61)	(3.74)	(049)	(0.03)
Survey 3 (Real Income Information)	-0.230***	0.062	-0.014	0.183***
	(3.71)	(0.92)	(0.30)	(4.69)
Survey 4 (Status and real income info.)	-0.277***	0.09	0.017	0.169***
	(4.47)	(1.32)	(0.36)	(4.33)
Survey 5 (reduced cost of status)	-0.034	0.142**	-0.086*	-0.022
	(58)	(2.22)	(1.91)	(0.59)
Constant	0.454***	0.349***	0.159***	0.04
	(11.3)	(7.93)	(5.30)	(1.60)
R-squared	0.06	0.03	0.01	0.09
Test Survey 2 = Survey 4	No	**	No	***
Test Survey 3 = Survey 4	No	No	No	No
Ireland				
Survey 2 (Status information)	-.075	.026	.025	.024
	(.82)	(.24)	(.26)	(.32)
Survey 3 (Real income information)	-.154	-.122	-.1048	.324
	(1.64)	(1.08)	(.48)	(4.28)
Survey 4 (Status and real income information)	-.099	.188	.049	.238
	(1.09)	(1.72)	(.50)	(3.24)
Constant	.289	.474	.237	.060
	(4.36)	(5.98)	(3.36)	(.00)
R squared	.02	.01	.01	.13
Test Survey 2 = Survey 4	No	**	No	***
Test Survey 3 = Survey 4	No	No	No	No

NOTE: the omitted variable is the indicator variable for Survey 1 (baseline). The number of observations is 1,305 for the US, 516 for Italy and 159 for Ireland. P Vules in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%.