

ABSTRACT

Factors Affecting Positive Expectations of Social Mobility Opportunities: A Cross-Sectional Analysis

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Positive perceptions of an individual's or family's social mobility opportunities can be influenced by a variety of factors. In this study, the point of interest is the *positive perception* of social mobility opportunities rather than the *actual* social mobility potential, which has been the focus of many other analyses. We measure the effects of both Institutional level country differences and Individual level characteristics to study their effects on the overall positivity levels within given years and countries. We find that Institutional level factors such as unemployment rates and GDP per capita are, unsurprisingly, influential factors that detract from and contribute to positivity, respectively. The most influential institutional variable is the presence of a recent major economic or political shock. On the individual level, we find that a person's self-reported social position is the most influential factor for their positivity. While this study is not all-encompassing due to limited data, it does present some unexpected results that indicate the fruitfulness of further research into the subject.

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Factors Affecting Positive Expectations for Social Mobility Opportunities:
A Cross-Sectional Analysis

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DEDICATION

To my parents, Bill and Lupita Winters, for their continued support throughout my life and academic career, and to my sister, Katie Winters, for her excellent example

CHAPTER ONE

Introduction and Literature Review

Upward social mobility is defined as the movement of individuals and families from lower socioeconomic situations to higher ones. In a narrow sense it is related to household income. If the possibility of social mobility provides an incentive for quality work and high achievement, then perceptions about opportunities for such mobility are of great importance. Someone who has a positive outlook on their social mobility opportunities will see upward mobility as a viable incentive for their increased efforts and innovation, whereas someone with a negative outlook on their opportunities will not. The overall possibility of improving one's standard of living may serve as an incentive for the general population, reinforcing the importance of job-specific productivity incentives. So it is useful, on a broad level, to understand whether the possibility of social mobility is functioning properly as an incentive. In order to do so, however, one must first identify whether the population considers upward mobility to be an attainable incentive, and what determines that perception. This study hopes to identify some of the factors that influence positive perceptions of social mobility. We begin with an overview of the economic and sociological literature regarding social mobility, and then explore some of the related literature from human resource management. With that background, we perform our own empirical analysis. Our data and methods are described in Chapter 2, results are presented in Chapter 3, and Chapter 4 concludes.

Literature Review

Clark et al. (2014) develops what they coin the “Law of Social Mobility” which suggests that those achieving exceptionally high social status, and conversely, exceptionally low status, will gradually return to the mean of society over the course of generations. Individual families may take very sporadic and disorganized paths around the mean, but the average effect remains. This pattern however, does not occur for lack of effort. Despite the best efforts of parents to provide their children with the best education, most resources, and best training, social status is largely inherited and regresses back toward the mean over time.

This pattern, if fully understood, could heavily influence people’s perceptions of mobility opportunities. It could serve as a source of optimism for people in the lower and middle classes, and could cause a sense of complacency or fear among people in the upper class. However, this still provides support for the idea that social mobility opportunities can act as an incentive for labor market participants and lead to economic growth, especially in developing countries. As Mankiw’s 4th principle of Economics states: People respond to Incentives (Mankiw 2014). For those unwilling to take his word for it, a number of experimental studies have found evidence that people are indeed induced to work harder/better by performance-based pay (Cadsby et al. 2017 and Camerer & Hogarth 1999). As such, it is important to understand how to put these incentives in place for their effects to be meaningful in country- and even global-level economic development.

Numerous studies have attempted to design the best model of social mobility. McClendon (1977) argues that the “study of vertical social mobility has suffered from overreliance on

occupational mobility tables, from underutilization of occupational status scales and from failure to conceptualize social mobility as relative mobility”. Similar arguments have been made that social mobility should be broken into varying categories of absolute mobility, exchange mobility and structural mobility in order to study its determinants more specifically. Much of the debate is centered on which type of mobility should be the focus, which type is most significant, and how these should be measured and tested (Breen & Whelan 1985, Hauser 1984, Hope 1981, Wong 1992). However, most of this prior research deals only with measures of actual social mobility. We, instead, choose to focus on individual’s perceptions of social mobility. More specifically, their perceptions of their opportunities for social mobility in their lifetime – a forward-looking, rather than historical analysis approach.

Very little work has been performed in this sub-field of research and we could not find a single study that attempted to find determinants of people’s expectations regarding their social mobility prospects. Even research that focuses on policy implications uses historical measures of social mobility as the standard variables of interest. In fact, one such paper explicitly mentions this lack of research stating, “It seems, however, also reasonable to think that perceptions are formed at a macro-level by the institutional characteristics of labor markets and culture. An interesting avenue for future research will be to investigate the institutional factors that co-vary with subjective perception of mobility, and to develop a model that can explain the formation of mobility perceptions” (Dorsch 2010). Part of this, studying the effect of institutional factors on positivity levels regarding mobility opportunities, is exactly the gap that our study aims to fill. Kaldaru and Parts (2008) study the effect of social capital at micro- and macro- economic levels. Their results indicate a

significant and positive relationship between macro-level variables (such as institutions, legal systems, and governmental roles in production) and economic development. When working with perceptions, however, there are struggles. For example, there could be some instances of endogeneity issues where countries with higher social mobility expectations will form policies that also promote those goals. Miller mentions that “as Mannheim developed Marx’s interest in the class bias of ideology into a specification of influence other than class on beliefs, the concern with the influence of mobility on class consciousness has spread to study of its effects on authoritarian attitudes, on educational outlook, etc.” This indicates there could be a recursive relationship between determinants and outcomes.

In a 2011 paper, Polel and Casale look at the difference between perceived social standing versus actual position on the income distribution of individuals in South Africa and how this self-induced measure effects their subjective well-being. While similar in nature to our study, they focus on the development and effects of such self-classification (specifically life satisfaction) while we are interested in social mobility expectations – using subjective social level as a determining factor among others. They conclude that subjective social standing tends to be quite different from actual social standing (based on income distributions) and that past achievement (perceived upward mobility) has a greater impact on life satisfaction than expectations about future mobility. That said, those who perceived themselves to have made it higher up the social ladder generally had greater life satisfaction which helps to validate the merits of our research into promoting social mobility through positivity about opportunities.

Mitra and Tsujita (2015) study more individual-level characteristics that could influence social mobility among inhabitants of the Delhi Slums. Such characteristics as gender, marital status, age, income, household savings and neighborhood spillover effects are tested and their findings include a strong case for education as a determining factor of mobility as well as some biases toward gender and caste. They also find an effect of those with lower income levels having more mobility to realize their expected income as opposed to those of higher income levels experiencing a cap on their realizable income, a similar effect to our findings later on. Li and Singelmann (1998) compare gender differences in social mobility for Sweden, Germany and the US. The study begins by outlining various historical/institutional factors of each country that could contribute to potential gender disparities and they conclude that in all three countries there is less upward intergenerational mobility for women but significantly more upward mobility for married women in Sweden and Germany. In a continuation of individual-level factors, Wong (1992) studies both vertical and non-vertical social mobility with the operating characteristic of the non-vertical portion being self-employment (as an indicator of capital ownership). The argument, and results, indicate that such non-vertical factors are equally important to vertical mobility which in turn indicates that, in our study, self-employment should be an influential factor for increasing individual positivity.

It is not surprising that a major factor discussed in the literature is educational attainment. The idea that higher levels of education will open more doors to an individual in the future leads directly to opportunities for social advancement. In the United States, Pfeffer and Hertel (2015) “find a slow but steady increase in mobility across cohorts born throughout the first eight decades of the 20th century” and “the mobility-inducing effects of

educational expansion are nearly entirely accounted for by the compositional effect (the fact that the direct link between social origins and destinations is severed among those who attain a college degree); Because educational expansion has increased the share of the population with college degrees, its effects on mobility has been positive. In contrast, educational expansion did not contribute to higher rates of social class mobility by equalizing educational outcomes”. A similar educational disparity is found in Bukodi’s (2017) study of a particular British birth cohort. Members of the “managerial and professional” social level benefit most from continued education such as vocational training later in life. However, the benefit serves mostly to maintain current status by updating qualifications or improve it within their current social level if they started out their careers in a lower segment of the class than their parents due to poor academic performance. These two studies together seem to indicate that more education does not necessarily increase an individual’s chances for social mobility but rather helps to protect them from downward mobility by keeping them on equal footing with their peers (as measured by other socioeconomic factors).

More on the perception level, research has shown the strong impact of expectations, as well as the method by which expectations are developed, on individuals’ educational planning and decision making. “Recent attempts to raise aspirations and encourage young people to change their habitus and ways of hoping towards university has focused too much on targeting the individual and blaming them for education failure and lack of social mobility. Such intervention is only part of the solution and will not necessarily provide the wholesale change needed to help young people achieve their desired outcomes and the social mobility promised to them” (Grant 2016). This reiterates the idea that perception

positivity is formed by the environment in which one grows up as well as a significant degree of risk aversion when setting goals for educational attainment and career achievement. In a related study, Kearny and Levine (2017) produce results indicating that income inequality and low social mobility rates decrease perceived return on investment in education for individuals of lower socioeconomic backgrounds and subsequently offsets educational aspirations and increases high school dropout rates.

Similar effects are seen in immigrant populations as well with effects being compounded through each additional step upward. One such study states, “The multiplier effect becomes visible in two ways: (1) successful children of immigrants take more advantage of opportunities in education and on the labour market than their peers of native descent, and (2) there is an exponential effect on successful children of immigrants because moving into new socioeconomic circles offers them opportunities that were previously unavailable... Chances must be actively pursued and social contacts sought out.” (Crul et al. 2017) These results indicate that ambition and internal drive may be more important than institutional factors or systems in high-success cases of immigrant social mobility; further emphasizing the need for positive outlooks on mobility opportunities in order to spur on this ambition.

Avraamova et al. (2005) “found a definite correlation between a family’s resource potential, accessibility to an institution of higher learning, and the prospects opened by an education that is provided there. The larger a family’s resources, the greater the chances are that the children will be able to acquire an education that is in demand in today’s labor market and that provides clear material and social prospects.” In a follow up study, Avraamova (2010) studies the educational attainment goals of Russian students (and their

parents) in regard to expected career aspirations. Specifically, the study found a strong connection between career prospect outlooks of students and their plans to strive for higher education. Avraamova notes that this is an issue when such connection-based planning does not account for changing economic environments or labor markets. We can observe these effects in America over the past few decades with Bachelor's degrees becoming less viable as a signal to employers and gradually taking the place of high school diplomas and equivalents as the minimum education standard for middle class jobs.

Following college there is potential for further constraints to career and thus social advancement. In their study of career development barriers perceived by US college students, Swanson and Tokar (1991) found that interactional barriers were more frequent than attitudinal ones which were more frequent than social/interpersonal barriers. However, none of the categories (including gender) appeared as consistently perceived barriers among their subjects.

Finally, although the literature on perceptions of opportunities or barriers to social mobility is virtually non-existent, there is a related body of research regarding perceptions of corporate advancement opportunities which could be considered a microcosm of social mobility. In a study of corporate hierarchical structure, "results indicated that both types of plateauing were related to support from top management, career planning, job involvement, and education level. Furthermore, career exploration, motivation to learn, organizational tenure, and job tenure were related to perceptions of hierarchical plateauing, while supervisor support was related to job content plateauing." (Allen et al. 1999) Furthermore, Noe et al. (1988) found that employees who had higher job satisfaction were less inclined to search for and subsequently accept career mobility opportunities within

their organizations. They also found no relationship between spouse's employment status and willingness to accept mobility opportunities but question this relationship's credibility due to lack of information regarding the job types held by spouses. These studies further emphasize the importance of structurally arranged advancement opportunities as well as personal development for obtaining confidence in one's ability to move up the corporate (and hopefully social) ladder.

CHAPTER TWO

Methods and Materials

As mentioned in the literature review, the lack of studies regarding the *perceptions* of social mobility opportunities unfortunately means that very limited data are available for analysis¹. Therefore, in this study, our key measure of perception is drawn from this question in the Social Inequality Survey of the International Social Survey Program:

The way things are in [respondent's country], people like me and my family have a good chance of improving our standard of living.

Responses to this question were recorded on a scale from “strongly agree” to “strongly disagree” (1-5). While the phrase “standard of living” does not necessarily equate to “social position”, the sentiment of the statement indicates a general positivity level regarding opportunities for advancement. Arguments could be made that anyone at the “top” level of their perceived social hierarchy may answer neutrally or negatively due to a lack of upward opportunities, but maintaining one’s social position or increasing one’s resources/influence may still warrant positive responses. That said, current social position of the respondents was also controlled for in the Individual Level Factors portion of Chapter 3.

Lack of relevant data is also the major limitation to this study’s time frame. The Social Inequality Survey was collected only in 1987, 1992, 1999, and 2009, and our key question

¹ Some of the data being tested for Institutional-level variables was filled in separately from the original study data with information taken from various sources but mostly from the CIA World Factbook of 1987 and 1992.

was included only in the 1987 and 1992 surveys. We attempted to construct a proxy variable, based on a subset of related questions that appeared in all of the waves of the survey, but none of the variables – or reasonable combinations of them – proved to be sufficient indicators of mobility perceptions. Of course, this could be a basis for further study, but for now it only serves to limit the scope of our analysis.

Moreover, the 1987 round of the survey included only 10 countries – the smallest of the four rounds – and the 1992 round included only 18. For 1987, we dropped Poland from our analysis, because our key variable question was missing in that year, but was present in the 1992 data analysis. The 1992 dataset has a different set of variables, labels, and nuances, but most of the 1987 variables had at least one equivalent variable in the second round of the survey.

For the sake of clarity, we have coded equivalent variables with the same labels in our regression output tables². We performed Cross-Sectional statistical methods rather than panel or time-series methods, because our data are not true longitudinal panels – the surveys were conducted in each country and year with a different representative sample of the population. For each year (1987 and 1992), we performed a cross-country regression at the aggregate level to test for the influence of institutional factors on aggregate levels of positive expectations. For each country and year, at the individual respondent level, we tested for the influence of individual characteristics on individual levels of positive expectations.

² For example, v65 asks the respondents to provide their subjective social position in the 1987 survey. In the 1992 survey, the same question was asked and the answers recorded under variable v73. In this study's regression tables, both variables' coefficients are listed in the row labeled "Social Position"

CHAPTER THREE

Results

We begin by analyzing the two datasets separately. The following two tables display the summary statistics for our variable of interest – the level of positivity regarding social mobility opportunities (labeled v17).

1987

Summary of Positivity Levels Overall:

Summary of IMPROVE STANDARD OF LIVING					
Variable	Obs	Mean	Std.Dev.	Min	Max
v17	12,266	2.780	1.048	1	5

Summary of Positivity Levels by Country:

Summary of IMPROVE LIVING-STANDARD			
Country	Mean	Std.Dev.	Freq.
AU	2.439	0.951	1,582
DE (W)	2.924	1.036	1,250
GB	2.953	0.990	1,167
US	2.231	0.922	1,509
AT	2.825	1.036	895
HU	3.032	1.084	2,509
NL	3.154	0.938	1,420
IT	2.866	1.144	988
CH	2.461	0.840	946
Total	2.780	1.048	12,266

Summary of Positivity Levels Overall:

Summary of IMPROVE STANDARD OF LIVING					
Variable	Obs	Mean	Std.Dev.	Min	Max
v17	21,970	3.142	1.139	1	5

Summary of Positivity Levels by Country:

Summary of IMPROVE STANDARD OF LIVING			
Country	Mean	Std.Dev.	Freq.
AU	2.656	0.963	2,065
DE (W)	3.025	0.989	2,031
DE (E)	3.026	1.054	991
GB	3.175	1.046	1,033
US	2.647	1.069	1,235
AT	2.643	0.989	958
HU	3.809	1.005	1,231
IT	2.920	1.117	972
NO	3.090	0.939	1,450
SE	3.176	0.882	693
CZ	3.223	1.192	1,062
SI	3.520	1.019	965
PL	3.891	1.017	1,370
BG	3.612	1.348	1,024
RU	3.707	1.244	1,525
NZ	3.312	1.099	1,206
CA	3.029	1.102	961
PN	2.256	0.774	1,198
Total	3.142	1.139	21,970

By a simple inspection, we can see that there is very little variation between the countries in both rounds of the survey – with the response averages hovering between 2 and 4

(spanning the responses of agree – neither agree nor disagree – disagree). Taking this into account, we then standardize this variable both at a data-wide level (z17) and the country-specific level (z17_c) for subsequent regressions. In line with expectations, Hungary (under communist control in 1987) has one of the most negative outlooks in the first survey round. However, Hungary is surpassed in negativity by Norway in round one and their negativity levels actually increase in the second round (+.777) when it has transitioned to a free-market parliamentary democracy. While the US has the most positive outlook in 1987, their positivity level also declines in 1992 and is surpassed by Austria and the Philippines.

It is also clear from these preliminary checks that there is an overall decline (-.36) in positivity levels from 1987 to 1992, so a portion of our further analysis will attempt to determine the cause of this change.

Institutional Level Factors

The initial test, which was the inspiration for this study, is a comparison between the standardized levels of positivity regarding social mobility opportunities and various institutional level factors surrounding life in various countries. To begin, institutional level contributors to a populace's perceptions of opportunities include the following:

Style of Government – this may serve as an indicator of public representation and ability to influence country-level affairs. The government types were broken into Republic, Constitutional Monarchy, Communist, and Democratic. This variable also includes economy-type effects as the only communist government/economy in either dataset is Hungary 1987 while the rest are all market-style.

*Unemployment (Percentage)*³ – if relatively high, this could indicate a sense of discomfort and uncertainty in job markets and cause more negative perceptions of mobility opportunities

Life Expectancy – countries with higher life expectancies are often more developed and have higher standards of living. Having a higher life expectancy and thus longer working life could also increase the perception of mobility opportunities.

Literacy Rates (percentage) – higher literacy rates can indicate higher levels of educational attainment, and the ability to read and write often facilitates better employment opportunities and thus more chances for mobility.

³ The variables for Unemployment, Life Expectancy, Literacy rates and GDP per Capita are standardized as well.

GDP per Capita – this average often indicates the general standard of living within a country (although it is not generally a valid indicator of resource distribution) and therefore may influence individual's ability to focus on pursuing social mobility opportunities.

Dominant Religion – this factor potentially influences overall positivity and life satisfaction and therefore could have an impact on perceptions of returns to work ethic or sense of control in one's own life situation. "Majority" in this case is meant to indicate that the religion has the largest number of adherents in the country, not that the majority of the population is a member of that particular denomination. The categories are Catholic, Protestant, and Orthodox, and these cover the major religions of all participating countries.

Shock – In our analysis of the 1992 data, we added an additional dummy variable to account for major changes in political or economic situation of a given country that may strongly impact the perceptions of available opportunities (e.g. Reunification of Germany, dissolution of the Soviet Union, Independence, natural disasters, etc.).

Overall Positivity Comparisons by Year

Table 1 displays our comparison of the impacts of institutional factors in 1987 (1) and 1992 (2). The third regression (3) includes the Shock variable to explore whether the changes found in (2) are likely due to a major institutional change within a country rather than a decline across the board. While many of the significant variables remain the same between (1) and (2), the Shock variable in (3) becomes by far the most impactful factor. The majority of the institutional shocks were political and often presumed positive (e.g. German Reunification, Dissolution of the Soviet Union, Slovenian Independence, reinstitution or first institution of Free Elections (x2), and removal of communist influence (x3)) but the effect of the shock variable is positive which indicates that it lowered the sense of positivity about social mobility opportunities. There was a single instance of a strictly negative shock occurring in the Philippines which was a volcanic eruption that effected 2.1 million people and had a death toll of 487. Regression (4) is identical to regression (3) while eliminating the Philippines from the dataset in order to control for the negative shock but the coefficient remains significant and positive, albeit smaller in magnitude. The addition of the Shock variable to the regression of the entire dataset also dramatically increases the importance of life expectancy in 1992 (from insignificant in (2) to significant at the 1% level in (3)) and vastly diminishes the error constant to the point where it is insignificant even at the 10% level.

Outside of the Shock variable, nearly all the potential factors prove significant at the 1% level, although the effect is diminished by inclusion of the shock variable in some cases. The economic factor results are as expected with higher unemployment leading to more

negative outlooks and higher GDP per capita increasing positivity. Interestingly, and a bit counterintuitively, higher literacy rates appear to contribute significantly to lower positivity levels, and the effect is insignificant in (4) when the Philippines is removed. Higher Life Expectancy contributes to positivity only when the shock variable is not included in the regression.

Regression Table 1 - Institutional

VARIABLES	(1) 1987	(2) 1992a	(3) 1992b	(4) 1992c
Republic	-0.214*** (0.0491)	-0.281*** (0.0247)	-0.0513** (0.0255)	0.155*** (0.0275)
Monarchy	-0.277*** (0.0667)	-0.765*** (0.0297)	-0.118*** (0.0371)	0.219*** (0.0406)
Catholic	0.260*** (0.0399)	-0.720*** (0.0230)	-0.671*** (0.0226)	-0.299*** (0.0290)
Protestant		-0.280*** (0.0231)	-0.122*** (0.0233)	0.162*** (0.0272)
Literacy Rate	0.102*** (0.0211)	0.290*** (0.0169)	0.202*** (0.0169)	0.0125 (0.0193)
Life Expectancy	-0.0376* (0.0212)	-0.0138 (0.0164)	0.206*** (0.0179)	-0.0221 (0.0211)
Unemployment	0.180*** (0.0173)	0.207*** (0.0139)	0.0980*** (0.0142)	0.0255* (0.0147)
GDP per Capita	-0.170*** (0.0340)	-0.164*** (0.0162)	-0.317*** (0.0168)	-0.334*** (0.0169)
Shock			0.666*** (0.0235)	0.465*** (0.0255)
Constant	0.387*** (0.102)	0.770*** (0.0293)	0.000882 (0.0396)	-0.280*** (0.0420)
Observations	12,266	21,970	21,970	20,772
R-squared	0.085	0.089	0.121	0.110

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Individual Level Factors

Our second round of analysis examined the influence of individual respondent characteristics on their positivity levels. It is particularly helpful to study this subject at the individual level, because variations in many of the institutional factors were quite limited at the national levels. The individual factors taken into account in the following regressions are:

Subjective Social Level – This (standardized) measure is broken into three sub-variables due to differences in the surveys, themselves. In 1987, respondents are asked to provide their subjective social position and their subjective social class as they picture themselves within their society's socioeconomic hierarchy. In 1992, responses for both “Social Position” and “Social Class” are requested with the addition (in select countries) of selecting a section within a diagram that best depicts their social position. We gave this last measure the title, “Social Position Diagram.”⁴ Measures of current social position are especially useful in analyzing the impact of current perceived social status on prospects for improvement in status, because lower-class individuals may have more positive expectations because of their higher growth potential, while upper-class individuals may feel that they have a “capped” mobility potential.

Employment – This is a dummy variable to indicate the current employment status of each individual, condensed from a multi-option “current employment status” variable in the dataset. Anyone who responded “full-time” or “part-time” is considered employed

⁴ The scales for Subjective “Social Position”, “Social Class”, and “Social Position Diagram” are Top = 1 to Bottom = 10, Lower = 1 to Upper = 6, and Top = 1 to Bottom = 7, respectively and all three variables are standardized for magnitude comparisons

(empl = 1) and all others are considered to be unemployed. The hypothesis is that employed individuals would be more positive about mobility opportunities than those who are unemployed.

Self Employed – This is another dummy variable indicating whether an individual is currently self-employed or working for another individual/company. The idea behind this variable's inclusion is that self-employment can grant individuals higher levels of perceived agency in their careers and thus possibly higher positivity regarding potential mobility opportunities.

Male – In order to test for potential gender inequality impacts, a dummy variable for male is included in the regression as well.

Married – The dual hypothesis for this variable's inclusion is that marriage may provide a certain level of stability for individuals that increases positivity levels or perhaps act as a stumbling block for finding and acting upon advancement opportunities in the individual's life or career that would decrease positivity levels. This dummy variable was condensed from the survey question regarding "current marriage status" where a respondent is considered "married" if they responded accordingly and "unmarried" otherwise (e.g. divorced, widowed, never married, etc.).

Union – This variable explores the impact of union membership on social mobility expectations.

Church Attendance – Especially in countries with high average levels of religious adherence, frequency of church attendance could be beneficial emotionally or for one’s reputation and therefore increase positivity.

*Age*⁵ – Our hypothesis for this variable is that age will be negatively correlated with positivity levels, because older individuals may feel that they have less time remaining for upward mobility.

*Years in School*⁶ – Logically, higher educational attainment should lead to greater social mobility potential.

⁵ Age is left out of Italy’s regression for clarity of interpretation in 1992 because the survey recorded responses in age brackets rather than simply reporting the respondent’s age.

⁶ The response code for “Still in School” was “95” so those observations with “95” as a response were dropped from the sample to avoid outlier effects. Similarly to age, Italy’s survey recorded educational attainment in brackets rather than by years and was subsequently left out of the regression for clarity of interpretation.

Overall Positivity Comparisons by Year

The broad-level analysis of individual factors affecting positivity in a pool of all countries, presented in Table 2, reveals some interesting results. Spanning both years of the survey, subjective Social Position (as well as the Social Position Diagram variable in 1992) and, to a much lesser extent, Social Class, are highly significant. Social Position and the corresponding Diagram in 1992 have positive coefficients. This indicates that positivity regarding mobility opportunities decreases as a person's social position rises. As we stated earlier in the paper, this could be evidence of a perceived social advancement "cap" for those already in higher levels of their society. Conversely, there will be higher levels of positivity within lower social ranks where there is more room for growth. In this broad study, Social Class contributes positively to positivity which seems incongruous with the Social Position results.

Employment has the largest coefficient of all in 1987 (-0.339) but this effect drops sharply in 1992 (-0.061), although it remains significant and continues to improve positivity levels. Similarly, Union membership is significant in both years but with a different sign (0.0748 in 1987 vs -0.0589 in 1992). Males are more positivity prone in both rounds with the effect being greater in 1992. Unmarried people have a slight positivity advantage in 1992 but the result is only slightly significant. Age is significant in 1987 only, with the result being that older respondents have lower positivity levels than younger ones. This follows, as we suggested, logically from the fact that younger people having more time remaining in their lives to improve their situations. Church Attendance is slightly significant in round one but drops below the threshold in round two.

Regression Table 2 – Individual All Countries

VARIABLES	(1) z17 (1987)	(2) z17 (1992)
Social Position	0.177*** (0.0162)	0.0988*** (0.0163)
Employed	-0.339*** (0.0765)	-0.0610** (0.0304)
Self Employed	-0.0584 (0.0422)	-0.0403 (0.0472)
Male	-0.116*** (0.0283)	-0.154*** (0.0261)
Married	0.00704 (0.0299)	0.0553* (0.0294)
Union	0.0748** (0.0296)	-0.0589** (0.0294)
Age	0.0543*** (0.0198)	0.00815 (0.0147)
Church Atten.	0.0243* (0.0142)	-0.0165 (0.0131)
Years in School	0.000445 (0.0161)	0.0390** (0.0155)
Social Class	-0.0852*** (0.0160)	-0.0513*** (0.0149)
Soc. Pos. Diagram		0.138*** (0.0159)
Constant	0.248*** (0.0783)	0.208*** (0.0301)
Observations	4,730	5,744
R-squared	0.065	0.064

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Country Specific Positivity Comparisons

Regression Table 3 contains the 1987 country-specific regressions of individual-level positivity factors while the 1992 regressions are broken up into Tables 4 and 5. The only variable that is significant for all participating countries (with the exception of Norway in 1992) is the measure of the respondents' Social Position (as well as the Social Position Diagram in those countries that responded in 1992 – including Norway). The coefficients in 1987 range from 0.137 (Great Britain) to 0.297 (The Netherlands). In 1992, the range is from 0.0854 (Philippines) at the lowest to 0.313 (West Germany), all of which are positive – affirming again the mobility cap hypothesis. Employment is significant in four of the 1987 countries, most notably West Germany and the Netherlands and six of the 1992, the strongest significance being in West Germany again. Being Self-Employed is significant in five of the 1987 countries, and five of the 1992 countries: although not necessarily the same ones as for Employment. The strongest significances are found for Austria in 1987 and Russia in 1992. A reasonable explanation for these phenomena could be that having a job provides a sense of financial security and thus confidence in one's potential for career and social advancement. Similarly, self-employment allows for greater control and flexibility in one's work and lifestyle which potentially fosters more positivity about the future.

There is a statistically significant ($p < 0.01$), gender disparity in the Netherlands (1987) and in Austria, East Germany, the US, Czechoslovakia, Great Britain, and Russia (all 1992), with males being more positive about their mobility opportunities. The "Male" variable is also significant in a number of other countries, but to a lesser degree. In Great Britain and

Hungary in 1987, Union Membership seems to significantly reduce positivity levels, possibly indicating the ineffectiveness of unions in providing worker protections and opportunities. In Russia and New Zealand during 1992, however, Union Membership increases positivity levels; perhaps indicating the presence of more effective union systems. Church Attendance's effect is only strongly significant ($p < 0.01$) in Austria during 1987 and the US in 1992. Contrary to our initial hypothesis, this variable lowers positivity levels to a fairly strong degree in both cases. Another surprising result is that educational attainment (as described by years spent in school) is only a significant factor in Hungary (1987), East Germany (1992), and the United States (1992) with its very small effect actually being detriment to positivity in two out of the three cases. This matches up with some of the literature that indicates educational quality is much more important than quantity, if it happens to affect mobility at all.

Regression Table 3 – Individual by Country 1987

VARIABLES	(1) AU	(2) DE (W)	(3) GB	(4) US	(5) AT	(6) HU	(7) NL	(8) IT	(9) CH
Social Position	0.211*** (0.0396)	0.195*** (0.0533)	0.137** (0.0618)	0.213*** (0.0362)	0.161*** (0.0500)	0.198*** (0.0257)	0.297*** (0.0533)	0.167*** (0.0498)	0.147*** (0.0499)
Employed	0.516** (0.207)	-0.749*** (0.214)	-0.106 (0.180)	-0.190 (0.181)	-0.482* (0.255)	(0.0257)	-0.581*** (0.173)		0.302 (0.585)
Self Employed	-0.443** (0.178)	-0.0165 (0.166)	-0.227 (0.207)	-0.204** (0.0968)	0.673*** (0.135)	-0.304** (0.132)	-0.298** (0.121)	-0.114 (0.113)	-0.0452 (0.100)
Male	-0.0527 (0.0699)	-0.205** (0.0993)	-0.109 (0.0971)	-0.129** (0.0628)	-0.0933 (0.0906)	0.0788* (0.0467)	-0.359*** (0.0813)	-0.223** (0.0946)	-0.132 (0.103)
Married	0.0128 (0.0723)	-0.188* (0.104)	0.0386 (0.120)	-0.0808 (0.0635)	-0.300*** (0.0980)	0.00496 (0.0575)	0.128 (0.0876)	0.160 (0.0975)	-0.273*** (0.103)
Union	-0.0295 (0.0714)	0.111 (0.101)	0.364*** (0.0980)	0.104 (0.0829)	-0.0980 (0.0958)	0.129** (0.0534)	-0.0746 (0.0839)	0.0478 (0.0999)	-0.00348 (0.0863)
Age	0.0270 (0.0488)	-0.0523 (0.0723)	-0.0112 (0.0736)	-0.0405 (0.0452)	0.240*** (0.0638)	-0.0359 (0.0374)	0.318*** (0.0609)		0.111* (0.0607)
Church Attend.	0.00533 (0.0369)	0.0302 (0.0505)	0.0429 (0.0507)	0.0205 (0.0319)	0.133*** (0.0471)		-0.0110 (0.0401)	0.0777* (0.0444)	-0.0584 (0.0442)
Years in School	0.0389 (0.0387)	0.223 (0.162)	0.436 (0.352)	0.0267 (0.0381)	0.0202 (0.0469)	0.230*** (0.0263)	0.0594 (0.0407)		-0.0396 (0.0420)
Social Class	-0.131*** (0.0411)	-0.122** (0.0579)	-0.221*** (0.0607)	-0.114*** (0.0358)	-0.0893* (0.0533)		-0.0981** (0.0475)	-0.0644 (0.0513)	-0.0988** (0.0475)
Constant	-0.410* (0.211)	0.883*** (0.214)	-0.0349 (0.208)	0.280 (0.185)	0.711*** (0.253)	-0.167** (0.0709)	0.776*** (0.184)	-0.0343 (0.101)	-0.00731 (0.585)
Observations	836	426	401	973	472	1,562	589	445	588
R-squared	0.081	0.160	0.119	0.089	0.176	0.087	0.177	0.066	0.072

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Regression Table 4 – Individual by Country 1992 (Part 1)

VARIABLES	(1) AU	(2) DE (E)	(3) DE (W)	(4) GB	(5) US	(6) AT	(7) HU	(8) IT	(9) NO
Social Position	0.0987*** (0.0311)	0.217*** (0.0263)	0.313*** (0.0350)	0.258*** (0.0519)	0.184*** (0.0308)	0.162*** (0.0365)	0.210*** (0.0375)	0.125*** (0.0378)	0.0357 (0.0463)
Employed	-0.0467 (0.0617)	-0.116** (0.0552)	-0.274*** (0.0770)	-0.0733 (0.115)	0.115* (0.0664)	-0.165*** (0.0792)	0.0325 (0.0663)	-0.176** (0.0803)	0.0906 (0.0764)
Self Employed	-0.0796 (0.0914)	0.0210 (0.117)	-0.158 (0.143)	-0.237 (0.169)	-0.113 (0.0947)	0.302** (0.149)	0.155 (0.139)	0.0928 (0.105)	-0.165 (0.120)
Male	-0.134*** (0.0502)	-0.234*** (0.0494)	-0.158*** (0.0654)	0.0166 (0.0984)	-0.165*** (0.0595)	-0.0801 (0.0677)	-0.151** (0.0600)	-0.00784 (0.0668)	-0.0651 (0.0659)
Married	0.116** (0.0573)	0.00227 (0.0475)	0.0622 (0.0705)	0.0644 (0.101)	-0.0613 (0.0577)	-0.0894 (0.0678)	0.141** (0.0629)	0.131** (0.0652)	0.0532 (0.0796)
Union	0.0264 (0.0579)	-0.000243 (0.0577)	0.0998 (0.0681)	0.0846 (0.112)	0.0955 (0.0883)	-0.00787 (0.0768)	0.0965 (0.0685)	-0.0338 (0.102)	0.0152 (0.0729)
Age	-0.00921 (0.0288)	0.0326 (0.0275)	0.0820** (0.0372)	-0.119** (0.0551)	-0.00284 (0.0330)	0.0800** (0.0373)	0.0247 (0.0338)		-0.0539 (0.0383)
Church Attend.	-0.0481** (0.0242)	0.0471** (0.0238)	0.0747** (0.0321)	-0.0223 (0.0483)	0.145*** (0.0293)	-0.0312 (0.0334)	0.0132 (0.0300)	0.0435 (0.0319)	-0.0442 (0.0357)
Years in School	0.0319 (0.0273)	-0.0547** (0.0266)	0.0592 (0.0361)	-0.0188 (0.0587)	0.0704** (0.0330)	-0.0167 (0.0373)	0.0342 (0.0366)		-0.0724* (0.0390)
Social Class	0.0386 (0.0278)	-0.0716*** (0.0272)	-0.0694* (0.0373)	-0.0939* (0.0518)	-0.0466 (0.0318)	-0.0906** (0.0390)	-0.0206 (0.0352)	-0.121*** (0.0374)	0.00715 (0.0387)
Soc. Pos. Diagram	0.206*** (0.0311)						0.122*** (0.0360)	0.120*** (0.0404)	0.191*** (0.0462)
Constant	0.00488 (0.0611)	0.195*** (0.0466)	0.137* (0.0717)	-0.00992 (0.103)	0.0362 (0.0590)	0.151** (0.0636)	-0.0943 (0.0629)	0.000823 (0.0641)	-0.0735 (0.0803)
Observations	1,657	1,752	826	446	1,179	884	1,109	958	924
R-squared	0.080	0.107	0.184	0.109	0.077	0.094	0.100	0.108	0.055

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Regression Table 5 – 1992 (Part 2)

VARIABLES	(1) SE	(2) CZ	(3) SI	(4) PL	(5) GB	(6) RU	(7) NZ	(8) CA	(9) PN
Social Position	0.230*** (0.0377)	0.145*** (0.0371)	0.258*** (0.0345)	0.0937*** (0.0349)	0.173*** (0.0366)	0.215*** (0.0281)	0.119*** (0.0412)	0.151*** (0.0573)	0.0854*** (0.0304)
Employed		0.127* (0.0748)	0.108 (0.0914)	-0.0177 (0.0692)	-0.0410 (0.0821)	-0.0189 (0.0647)	-0.0789 (0.0775)	0.0359 (0.0974)	-0.0794 (0.0703)
Self Employed	-0.0293 (0.120)	-0.353*** (0.144)	0.00540 (0.174)	-0.217*** (0.0848)	-0.295*** (0.120)	-0.505*** (0.136)	-0.137 (0.0947)	0.148 (0.126)	0.0445 (0.0735)
Male	-0.0683 (0.0754)	-0.200*** (0.0615)	-0.120* (0.0664)	-0.0987 (0.0611)	-0.227*** (0.0646)	-0.356*** (0.0518)	-0.149*** (0.0597)	-0.0345 (0.0867)	0.0232 (0.0624)
Married	0.0214 (0.0814)	0.0169 (0.0718)	-0.0173 (0.0808)	0.153** (0.0669)	0.0432 (0.0769)	0.0382 (0.0558)	0.0669 (0.0647)	0.108 (0.0923)	-0.0517 (0.0696)
Union		-0.0683 (0.0656)	-0.0156 (0.0840)	0.0133 (0.0813)	-0.0134 (0.0838)	0.144** (0.0697)	0.143* (0.0809)	-0.0228 (0.102)	-0.162 (0.248)
Age	-0.0404 (0.0404)	0.132*** (0.0334)	-0.0224 (0.0403)	-0.0660* (0.0356)	0.131*** (0.0402)	0.169*** (0.0271)	0.0231 (0.0340)	0.0394 (0.0453)	0.0376 (0.0313)
Church Attend.		-0.0356 (0.0305)		0.0227 (0.0300)	-0.0118 (0.0324)			0.0780* (0.0442)	0.0239 (0.0303)
Years in School		-0.00823 (0.0413)	0.0444 (0.0358)	0.00976 (0.0391)	-0.0141 (0.0340)	-0.00209 (0.0278)	-0.00629 (0.0313)		0.0906*** (0.0313)
Social Class		-0.136*** (0.0351)		-0.115*** (0.0348)	-0.143*** (0.0355)	-0.0231 (0.0290)	-0.0687* (0.0386)	0.0594 (0.0523)	
Soc. Pos. Diagram		0.117*** (0.0361)		0.139*** (0.0335)			0.187*** (0.0425)	0.204*** (0.0578)	
Constant	0.0257 (0.0712)	0.0296 (0.0805)	0.0213 (0.0768)	-0.00188 (0.0664)	0.128* (0.0769)	0.0689 (0.0642)	0.0694 (0.0661)	-0.0462 (0.0930)	0.0563 (0.0694)
Observations	693	974	864	1,080	881	1,362	1,039	551	1,182
R-squared	0.054	0.143	0.068	0.081	0.147	0.163	0.144	0.090	0.014

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

CHAPTER FOUR

Discussion and Conclusions

It has long been accepted that proper incentives are required for individuals to put forth their best efforts in their work as well as to spark innovation and improvements for the greater population. The potential to advance socially, improving one's standard of living and influence, is arguably one of the most important overall life incentives. Therefore, having a positive outlook about one's ability to move up in the world is a critical driver of global socioeconomic progress. In order to promote and maintain this necessary positivity, we must first understand the factors that bring about this positivity.

Using International Social Survey Program data from the 1987 and 1992 waves of the Social Inequality Survey, we test various institutional and individual level factors for their potential influence on social mobility expectation positivity levels. We analyze the data at a broad, multi-country level for both institutional and individual factors, and also at a country-specific level for individual factors. At the institutional level, we find that Unemployment Rates and GDP per Capita are significant in both surveys. However, the presence of an economic/political "Shock" is the most influential factor to positivity levels in 1992 (with shocks being events that occurred within 2 years before the survey was conducted). At an individual level, the results are more mixed – with some variables being significant for particular country-year combinations but not others. Across the board, with the exception of Norway, respondents subjective Social Position (along with the Social Position Diagram when it is included) is a significant influencing factor for positivity with higher social position leading to lower positivity levels and indicating the presence of a

perceived social mobility “cap” for those at higher social levels. In addition, the respondent’s subjective Social Class is also significant for most countries – although the two variables have opposing influences. While they are less consistent between countries, Employment and Self-Employment are also significant contributors to positivity levels, possibly due to their providing a sense of financial security and career flexibility/autonomy, respectively. Both in the overall regressions (both years) and the country-specific regressions (5 out of 9 in 1987 and 11 out of 18 in 1992), there is a statistically significant gender disparity, with males generally being more positive about their opportunities.

Continued study of these and additional factors is needed on this subject. Before this can occur, however, more data must be gathered and the specific, key-variable question must be more included more precisely in the surveys. For a more robust study of institutional factors, especially, it would be extremely valuable to collect data from a greater variety of countries – both Western and Eastern – with greater variation in governmental and economic institutions. On an individual level, it is critical that a greater proportion of respondents answer the questions regarding characteristics with the possible inclusion of income levels and comparisons of their subjective social levels with those of their parents. Another interesting extension would be a comparison of positivity levels, based on longitudinal data, with actual historical social mobility. Overall, this is a rich and understudied field within the broader category of Social Mobility studies that could provide valuable insight into human psychology and behavior.

Appendix

A1 – Overall Positivity Regression for 1987 – Institutional Factors

```
. reg z17 gov_rep gov_mon rel_c zlit zlife zU zGDP
```

Source	SS	df	MS	Number of obs	=	12,266
Model	1036.64685	7	148.092408	F(7, 12258)	=	161.67
Residual	11228.3622	12,258	.916002794	Prob > F	=	0.0000
				R-squared	=	0.0845
				Adj R-squared	=	0.0840
Total	12265.0091	12,265	1.00000074	Root MSE	=	.95708

z17	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gov_rep	-.2144393	.0491179	-4.37	0.000	-.3107182	-.1181605
gov_mon	-.2770656	.0666857	-4.15	0.000	-.40778	-.1463512
rel_c	.2601201	.0398944	6.52	0.000	.1819207	.3383195
zlit	.1020938	.0210977	4.84	0.000	.0607389	.1434487
zlife	-.0376134	.0212491	-1.77	0.077	-.0792651	.0040382
zU	.1796465	.0173308	10.37	0.000	.1456754	.2136176
zGDP	-.1701077	.0339931	-5.00	0.000	-.2367395	-.1034758
_cons	.3868222	.1017681	3.80	0.000	.1873408	.5863037

A2 – Overall Positivity Regression for 1992 – Institutional Factors

```
. reg z17 gov_rep gov_mon rel_c rel_p zlit zlife zU zGDP shock
```

Source	SS	df	MS	Number of obs	=	21,970
Model	2665.98343	9	296.220381	F(9, 21960)	=	336.99
Residual	19303.0071	21,960	.87900761	Prob > F	=	0.0000
				R-squared	=	0.1214
				Adj R-squared	=	0.1210
Total	21968.9905	21,969	.999999569	Root MSE	=	.93755

z17	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gov_rep	-.0513087	.0255469	-2.01	0.045	-.1013825	-.0012349
gov_mon	-.1184963	.0370805	-3.20	0.001	-.1911768	-.0458158
rel_c	-.6708451	.0226292	-29.65	0.000	-.7151999	-.6264902
rel_p	-.1220398	.023342	-5.23	0.000	-.1677918	-.0762877
zlit	.2021674	.0169168	11.95	0.000	.1690094	.2353255
zlife	.206224	.0178878	11.53	0.000	.1711626	.2412855
zU	.0979807	.0142237	6.89	0.000	.0701012	.1258601
zGDP	-.3168854	.0167764	-18.89	0.000	-.3497683	-.2840024
shock	.6662602	.0235239	28.32	0.000	.6201516	.7123688
_cons	.0008816	.0395594	0.02	0.982	-.0766577	.0784209

A3 – Overall Positivity Regression 1987 – Individual Factors

```
. regress z17 std_pos empl self_emp male married union std_age std_church std_sc
> h std_class
```

Source	SS	df	MS	Number of obs	=	4,730
				F(10, 4719)	=	32.56
Model	278.412385	10	27.8412385	Prob > F	=	0.0000
Residual	4035.50975	4,719	.855162058	R-squared	=	0.0645
				Adj R-squared	=	0.0626
Total	4313.92214	4,729	.912227139	Root MSE	=	.92475

z17	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1766128	.0161751	10.92	0.000	.1449021	.2083234
empl	-.3390548	.0764654	-4.43	0.000	-.4889627	-.1891469
self_emp	-.0584025	.0421924	-1.38	0.166	-.1411193	.0243142
male	-.1163815	.0282773	-4.12	0.000	-.1718182	-.0609448
married	.0070425	.0299458	0.24	0.814	-.0516653	.0657503
union	.0747939	.0296242	2.52	0.012	.0167165	.1328712
std_age	.0542524	.0198335	2.74	0.006	.0153695	.0931353
std_church	.0242996	.0142465	1.71	0.088	-.0036301	.0522294
std_sch	.0004449	.0160879	0.03	0.978	-.0310949	.0319847
std_class	-.0851687	.0160413	-5.31	0.000	-.1166172	-.0537202
_cons	.2477198	.0783269	3.16	0.002	.0941625	.4012771

A4 – Australia Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==1
```

Source	SS	df	MS	Number of obs	=	836
				F(10, 825)	=	7.25
Model	69.4718819	10	6.94718819	Prob > F	=	0.0000
Residual	790.943205	825	.958719037	R-squared	=	0.0807
				Adj R-squared	=	0.0696
Total	860.415087	835	1.03043723	Root MSE	=	.97914

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2105601	.039554	5.32	0.000	.1329217	.2881985
empl	.5161891	.2068044	2.50	0.013	.1102645	.9221138
self_emp	-.4428583	.1784849	-2.48	0.013	-.7931961	-.0925204
male	-.0527397	.0699435	-0.75	0.451	-.1900279	.0845485
married	.0128218	.0722538	0.18	0.859	-.1290012	.1546448
union	-.029544	.0714016	-0.41	0.679	-.1696942	.1106063
std_age	.026955	.048841	0.55	0.581	-.0689123	.1228223
std_church	.0053344	.0368926	0.14	0.885	-.06708	.0777489
std_sch	.0388593	.0387008	1.00	0.316	-.0371043	.1148229
std_class	-.1309376	.0411302	-3.18	0.002	-.2116698	-.0502055
_cons	-.4100091	.2108823	-1.94	0.052	-.823938	.0039198

A5 – West Germany Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==2
```

Source	SS	df	MS	Number of obs	=	426
				F(10, 415)	=	7.90
Model	67.7661605	10	6.77661605	Prob > F	=	0.0000
Residual	355.907488	415	.857608406	R-squared	=	0.1599
				Adj R-squared	=	0.1397
Total	423.673649	425	.996879174	Root MSE	=	.92607

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1952782	.0532913	3.66	0.000	.0905237	.3000327
empl	-.7488959	.2141203	-3.50	0.001	-1.169792	-.3280003
self_emp	-.0165211	.1661362	-0.10	0.921	-.3430945	.3100524
male	-.204846	.0992649	-2.06	0.040	-.3999708	-.0097212
married	-.1882551	.103622	-1.82	0.070	-.3919445	.0154342
union	.1112628	.1010393	1.10	0.271	-.0873498	.3098754
std_age	-.052298	.0723259	-0.72	0.470	-.1944687	.0898728
std_church	.0302332	.0504957	0.60	0.550	-.0690259	.1294924
std_sch	.2231957	.1616846	1.38	0.168	-.0946273	.5410186
std_class	-.1223904	.0579345	-2.11	0.035	-.2362721	-.0085088
_cons	.8825298	.2139029	4.13	0.000	.4620616	1.302998

A6 – Great Britain Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==3
```

Source	SS	df	MS	Number of obs	=	401
				F(10, 390)	=	5.25
Model	46.2614143	10	4.62614143	Prob > F	=	0.0000
Residual	343.388092	390	.880482288	R-squared	=	0.1187
				Adj R-squared	=	0.0961
Total	389.649507	400	.974123767	Root MSE	=	.93834

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1370071	.0617608	2.22	0.027	.0155813	.258433
empl	-.1062502	.1801898	-0.59	0.556	-.460515	.2480146
self_emp	-.2265618	.2065708	-1.10	0.273	-.6326936	.1795699
male	-.1094038	.0971451	-1.13	0.261	-.3003975	.0815898
married	.0385743	.1196796	0.32	0.747	-.1967236	.2738722
union	.3636431	.0980309	3.71	0.000	.1709078	.5563783
std_age	-.0112024	.073635	-0.15	0.879	-.1559736	.1335688
std_church	.0429003	.0507136	0.85	0.398	-.0568059	.1426065
std_sch	.4355925	.3518644	1.24	0.216	-.2561958	1.127381
std_class	-.2205626	.0607493	-3.63	0.000	-.3399996	-.1011255
_cons	-.0348884	.2080048	-0.17	0.867	-.4438395	.3740628

A7 – United States Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==4
```

Source	SS	df	MS	Number of obs	=	973
				F(10, 962)	=	9.38
Model	85.4810565	10	8.54810565	Prob > F	=	0.0000
Residual	876.284074	962	.910898205	R-squared	=	0.0889
				Adj R-squared	=	0.0794
Total	961.76513	972	.989470298	Root MSE	=	.95441

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.213189	.0362454	5.88	0.000	.1420599	.2843181
empl	-.1903923	.1810412	-1.05	0.293	-.5456736	.164889
self_emp	-.2036496	.0968392	-2.10	0.036	-.3936901	-.0136092
male	-.129294	.0628201	-2.06	0.040	-.2525743	-.0060138
married	-.0807911	.0634853	-1.27	0.203	-.2053767	.0437945
union	.1042416	.0828777	1.26	0.209	-.0584003	.2668834
std_age	-.0404794	.0452187	-0.90	0.371	-.1292182	.0482593
std_church	.020548	.0319369	0.64	0.520	-.0421261	.0832221
std_sch	.0266509	.0380671	0.70	0.484	-.0480532	.101355
std_class	-.1140319	.035758	-3.19	0.001	-.1842045	-.0438592
_cons	.2800662	.1846538	1.52	0.130	-.0823045	.642437

A8 – Austria Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==5
```

Source	SS	df	MS	Number of obs	=	472
				F(10, 461)	=	9.83
Model	85.5351654	10	8.55351654	Prob > F	=	0.0000
Residual	401.070476	461	.870001033	R-squared	=	0.1758
				Adj R-squared	=	0.1579
Total	486.605642	471	1.033133	Root MSE	=	.93274

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1610838	.0500489	3.22	0.001	.0627316	.259436
empl	-.4819131	.2552645	-1.89	0.060	-.9835394	.0197131
self_emp	.6734164	.1346774	5.00	0.000	.4087588	.938074
male	-.0933032	.090644	-1.03	0.304	-.2714299	.0848234
married	-.2997648	.0979992	-3.06	0.002	-.4923454	-.1071843
union	-.0979981	.0957716	-1.02	0.307	-.286201	.0902049
std_age	.2404101	.0638168	3.77	0.000	.1150022	.365818
std_church	.1333784	.0470606	2.83	0.005	.0408985	.2258583
std_sch	.0202379	.0468676	0.43	0.666	-.0718627	.1123386
std_class	-.089344	.0532668	-1.68	0.094	-.1940198	.0153318
_cons	.7109377	.2530593	2.81	0.005	.213645	1.20823

A9 – Hungary Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos self_emp male married union std_age std_sch if v3==6
```

Source	SS	df	MS	Number of obs	=	1,562
				F(7, 1554)	=	21.18
Model	123.118007	7	17.5882867	Prob > F	=	0.0000
Residual	1290.28808	1,554	.830301209	R-squared	=	0.0871
				Adj R-squared	=	0.0830
Total	1413.40609	1,561	.905449126	Root MSE	=	.91121

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1982024	.0257167	7.71	0.000	.1477593	.2486455
self_emp	-.3037189	.1324867	-2.29	0.022	-.5635905	-.0438473
male	.0788225	.0467143	1.69	0.092	-.0128071	.1704522
married	.0049622	.0575447	0.09	0.931	-.1079113	.1178357
union	.1287204	.0534041	2.41	0.016	.0239686	.2334722
std_age	-.0358503	.037439	-0.96	0.338	-.1092867	.037586
std_sch	.2301103	.0263401	8.74	0.000	.1784444	.2817762
_cons	-.1666882	.0709044	-2.35	0.019	-.3057666	-.0276099

A10 – Netherlands Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==7
```

Source	SS	df	MS	Number of obs	=	589
				F(10, 578)	=	12.43
Model	98.1798934	10	9.81798934	Prob > F	=	0.0000
Residual	456.42695	578	.789666004	R-squared	=	0.1770
				Adj R-squared	=	0.1628
Total	554.606844	588	.943208918	Root MSE	=	.88863

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.297006	.0532536	5.58	0.000	.1924119	.4016001
empl	-.5805686	.1731228	-3.35	0.001	-.9205951	-.2405421
self_emp	-.2976825	.121197	-2.46	0.014	-.5357227	-.0596424
male	-.3586642	.081262	-4.41	0.000	-.518269	-.1990594
married	.1281132	.0875617	1.46	0.144	-.0438646	.300091
union	-.0745756	.0839008	-0.89	0.374	-.2393631	.090212
std_age	.317755	.0608962	5.22	0.000	.1981503	.4373598
std_church	-.0110405	.0401182	-0.28	0.783	-.0898357	.0677546
std_sch	.0594449	.0406576	1.46	0.144	-.0204097	.1392995
std_class	-.0981427	.0474755	-2.07	0.039	-.1913883	-.0048972
_cons	.7755359	.1842218	4.21	0.000	.4137103	1.137362

A11 – Italy Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos self_emp male married union std_church std_class if v3==
> 8
```

Source	SS	df	MS	Number of obs	=	445
				F(7, 437)	=	4.39
Model	24.7454549	7	3.53506499	Prob > F	=	0.0001
Residual	351.974463	437	.805433554	R-squared	=	0.0657
				Adj R-squared	=	0.0507
Total	376.719918	444	.848468284	Root MSE	=	.89746

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1671215	.0498255	3.35	0.001	.0691941	.2650489
self_emp	-.113748	.1130743	-1.01	0.315	-.335985	.1084891
male	-.2229436	.0945644	-2.36	0.019	-.4088011	-.0370861
married	.1604833	.0975162	1.65	0.101	-.0311757	.3521423
union	.0477569	.0998623	0.48	0.633	-.1485131	.244027
std_church	.0776526	.0443849	1.75	0.081	-.0095818	.1648869
std_class	-.0644368	.0512825	-1.26	0.210	-.1652277	.0363542
_cons	-.0343257	.1006018	-0.34	0.733	-.2320493	.1633978

A12 – Switzerland Positivity Regression 1987 – Individual Factors

```
. regress z17_c std_pos empl self_emp male married union std_age std_church std_
> sch std_class if v3==11
```

Source	SS	df	MS	Number of obs	=	588
				F(10, 577)	=	4.48
Model	44.4202021	10	4.44202021	Prob > F	=	0.0000
Residual	571.546207	577	.99054802	R-squared	=	0.0721
				Adj R-squared	=	0.0560
Total	615.966409	587	1.04934652	Root MSE	=	.99526

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1471631	.0498864	2.95	0.003	.0491819	.2451442
empl	.3015785	.5846855	0.52	0.606	-.8467929	1.44995
self_emp	-.0452309	.1003435	-0.45	0.652	-.2423141	.1518522
male	-.1320478	.1028006	-1.28	0.199	-.3339568	.0698611
married	-.2730329	.1034005	-2.64	0.009	-.4761202	-.0699456
union	-.003485	.0863052	-0.04	0.968	-.1729957	.1660257
std_age	.1105608	.0607202	1.82	0.069	-.0086988	.2298203
std_church	-.058411	.0441562	-1.32	0.186	-.1451375	.0283154
std_sch	-.0395603	.0419956	-0.94	0.347	-.1220431	.0429225
std_class	-.0987645	.0474908	-2.08	0.038	-.1920403	-.0054887
_cons	-.0073129	.5847542	-0.01	0.990	-1.155819	1.141193

A13 – Overall Positivity Regression 1992 – Individual Factors

```
. regress z17 std_pos empl self_empl male married union std_age std_church std_s
> ch std_class std_diag
```

Source	SS	df	MS	Number of obs	=	5,744
				F(11, 5732)	=	35.67
Model	362.778087	11	32.9798261	Prob > F	=	0.0000
Residual	5299.11673	5,732	.924479541	R-squared	=	0.0641
				Adj R-squared	=	0.0623
Total	5661.89482	5,743	.985877558	Root MSE	=	.9615

z17	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.0988233	.0162887	6.07	0.000	.0668913	.1307552
empl	-.0610441	.0303745	-2.01	0.045	-.1205896	-.0014986
self_empl	-.0403014	.0472188	-0.85	0.393	-.1328681	.0522652
male	-.1535935	.0261313	-5.88	0.000	-.2048207	-.1023662
married	.0553266	.0293641	1.88	0.060	-.002238	.1128913
union	-.0589168	.0293762	-2.01	0.045	-.1165052	-.0013283
std_age	.0081496	.0146588	0.56	0.578	-.0205872	.0368864
std_church	-.0164533	.0131096	-1.26	0.210	-.042153	.0092465
std_sch	.0390266	.0154747	2.52	0.012	.0086903	.0693628
std_class	-.0512555	.0149004	-3.44	0.001	-.080466	-.0220451
std_diag	.1380889	.0159376	8.66	0.000	.1068453	.1693326
_cons	.2084715	.0301347	6.92	0.000	.1493962	.2675469

A14 – Australia Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class std_diag if v3==1
```

Source	SS	df	MS	Number of obs	=	1,657
				F(11, 1645)	=	12.97
Model	131.60741	11	11.96431	Prob > F	=	0.0000
Residual	1517.73474	1,645	.922635099	R-squared	=	0.0798
				Adj R-squared	=	0.0736
Total	1649.34215	1,656	.995979558	Root MSE	=	.96054

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.0987116	.0311365	3.17	0.002	.0376403	.1597829
empl	-.0466697	.0617187	-0.76	0.450	-.1677253	.0743859
self_empl	-.0795814	.0914263	-0.87	0.384	-.2589056	.0997428
male	-.1336832	.0502245	-2.66	0.008	-.2321939	-.0351724
married	.1157656	.0572624	2.02	0.043	.0034508	.2280804
union	.0264287	.0579016	0.46	0.648	-.0871399	.1399972
std_age	-.0092146	.0288243	-0.32	0.749	-.0657509	.0473217
std_church	-.0480947	.0241804	-1.99	0.047	-.0955224	-.0006671
std_sch	.0319443	.0272914	1.17	0.242	-.0215852	.0854739
std_class	.0385874	.0278455	1.39	0.166	-.016029	.0932038
std_diag	.2055071	.031107	6.61	0.000	.1444936	.2665207
_cons	.0048784	.0610816	0.08	0.936	-.1149276	.1246844

A15 – East Germany Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==2
```

Source	SS	df	MS	Number of obs	=	1,752
				F(10, 1741)	=	20.95
Model	190.285106	10	19.0285106	Prob > F	=	0.0000
Residual	1581.45572	1,741	.908360554	R-squared	=	0.1074
				Adj R-squared	=	0.1023
Total	1771.74083	1,751	1.01184513	Root MSE	=	.95308

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2172531	.0263268	8.25	0.000	.1656176	.2688885
empl	-.1163932	.0551818	-2.11	0.035	-.2246228	-.0081636
self_empl	.0210021	.1169952	0.18	0.858	-.2084639	.2504681
male	-.234442	.0493802	-4.75	0.000	-.3312928	-.1375912
married	.0022694	.047525	0.05	0.962	-.0909428	.0954815
union	-.000243	.0576868	-0.00	0.997	-.1133858	.1128997
std_age	.0325857	.0274967	1.19	0.236	-.0213443	.0865158
std_church	.0470537	.0237649	1.98	0.048	.0004429	.0936645
std_sch	-.0547154	.0265852	-2.06	0.040	-.1068577	-.002573
std_class	-.0716408	.0272024	-2.63	0.009	-.1249936	-.0182881
_cons	.1950671	.0465879	4.19	0.000	.1036929	.2864413

A16 – West Germany Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==3
```

Source	SS	df	MS	Number of obs	=	826
				F(10, 815)	=	18.40
Model	149.765294	10	14.9765294	Prob > F	=	0.0000
Residual	663.307021	815	.813873646	R-squared	=	0.1842
				Adj R-squared	=	0.1742
Total	813.072315	825	.985542201	Root MSE	=	.90215

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.3128378	.0350496	8.93	0.000	.2440397	.3816359
empl	-.2743276	.0770117	-3.56	0.000	-.4254922	-.123163
self_empl	-.157902	.1432583	-1.10	0.271	-.4391007	.1232967
male	-.1581599	.0654036	-2.42	0.016	-.2865392	-.0297806
married	.0621741	.0705299	0.88	0.378	-.0762677	.2006159
union	.0997795	.068127	1.46	0.143	-.0339455	.2335045
std_age	.0819875	.0371937	2.20	0.028	.0089807	.1549943
std_church	.0746508	.0321488	2.32	0.020	.0115466	.137755
std_sch	.0591885	.0360851	1.64	0.101	-.0116422	.1300193
std_class	-.0694379	.0372549	-1.86	0.063	-.1425649	.003689
_cons	.1371263	.071714	1.91	0.056	-.0036396	.2778923

A17 – Great Britain Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==4
```

Source	SS	df	MS	Number of obs	=	446
				F(10, 435)	=	5.30
Model	50.8849567	10	5.08849567	Prob > F	=	0.0000
Residual	417.335173	435	.959391203	R-squared	=	0.1087
				Adj R-squared	=	0.0882
Total	468.22013	445	1.05218007	Root MSE	=	.97949

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2582263	.0519344	4.97	0.000	.1561527	.3602999
empl	-.0733493	.114687	-0.64	0.523	-.298759	.1520603
self_empl	-.2365939	.1687749	-1.40	0.162	-.5683095	.0951217
male	.0165861	.0983962	0.17	0.866	-.1768051	.2099773
married	.0644348	.1009706	0.64	0.524	-.1340161	.2628858
union	.0846178	.1118021	0.76	0.450	-.1351216	.3043573
std_age	-.118588	.0550587	-2.15	0.032	-.2268021	-.0103739
std_church	-.0223255	.0482542	-0.46	0.644	-.1171659	.0725149
std_sch	-.018795	.0587208	-0.32	0.749	-.1342067	.0966167
std_class	-.0939187	.0518446	-1.81	0.071	-.1958157	.0079783
_cons	-.0099222	.1031453	-0.10	0.923	-.2126474	.192803

A18 – United States Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==5
```

Source	SS	df	MS	Number of obs	=	1,179
				F(10, 1168)	=	9.73
Model	91.0446094	10	9.10446094	Prob > F	=	0.0000
Residual	1092.93888	1,168	.93573534	R-squared	=	0.0769
				Adj R-squared	=	0.0690
Total	1183.98349	1,178	1.00507936	Root MSE	=	.96733

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1843743	.0307573	5.99	0.000	.1240286	.24472
empl	.1149929	.0664319	1.73	0.084	-.0153464	.2453321
self_empl	-.1130599	.0947142	-1.19	0.233	-.2988889	.072769
male	-.1650917	.0594629	-2.78	0.006	-.2817578	-.0484256
married	-.0613324	.0576838	-1.06	0.288	-.1745078	.051843
union	.0955223	.0882831	1.08	0.279	-.0776889	.2687336
std_age	-.0028446	.0330143	-0.09	0.931	-.0676186	.0619294
std_church	.1449833	.0292658	4.95	0.000	.0875639	.2024027
std_sch	.0704318	.0329746	2.14	0.033	.0057358	.1351278
std_class	-.0465817	.0318298	-1.46	0.144	-.1090316	.0158683
_cons	.0362049	.0590061	0.61	0.540	-.0795648	.1519746

A19 – Austria Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==6
```

Source	SS	df	MS	Number of obs	=	884
				F(10, 873)	=	9.05
Model	81.7912953	10	8.17912953	Prob > F	=	0.0000
Residual	789.292787	873	.904115449	R-squared	=	0.0939
				Adj R-squared	=	0.0835
Total	871.084082	883	.986505189	Root MSE	=	.95085

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1620752	.0365354	4.44	0.000	.0903677	.2337827
empl	-.1651154	.0792257	-2.08	0.037	-.3206105	-.0096204
self_empl	.3020297	.1489051	2.03	0.043	.0097758	.5942835
male	-.0801272	.0676846	-1.18	0.237	-.2129707	.0527163
married	-.089401	.0678493	-1.32	0.188	-.2225678	.0437657
union	-.007874	.076839	-0.10	0.918	-.1586849	.1429368
std_age	.0800277	.0373132	2.14	0.032	.0067935	.1532618
std_church	-.0312172	.0333842	-0.94	0.350	-.0967399	.0343056
std_sch	-.0167202	.037267	-0.45	0.654	-.0898635	.0564232
std_class	-.0906008	.0390457	-2.32	0.021	-.1672352	-.0139664
_cons	.1506049	.063613	2.37	0.018	.0257525	.2754572

A20 – Hungary Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class std_diag if v3==7
```

Source	SS	df	MS	Number of obs	=	1,109
				F(11, 1097)	=	11.10
Model	111.255044	11	10.1140949	Prob > F	=	0.0000
Residual	999.21828	1,097	.91086443	R-squared	=	0.1002
				Adj R-squared	=	0.0912
Total	1110.47332	1,108	1.00223224	Root MSE	=	.95439

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2101774	.0375403	5.60	0.000	.1365185	.2838363
empl	.0325359	.0663298	0.49	0.624	-.0976117	.1626835
self_empl	.154625	.1387227	1.11	0.265	-.1175667	.4268167
male	-.151021	.0599872	-2.52	0.012	-.2687236	-.0333184
married	.1407997	.0628874	2.24	0.025	.0174065	.2641929
union	.0965282	.0684671	1.41	0.159	-.0378131	.2308696
std_age	.0247302	.0337765	0.73	0.464	-.0415436	.0910039
std_church	.0131623	.0299906	0.44	0.661	-.0456831	.0720078
std_sch	.03423	.0365952	0.94	0.350	-.0375744	.1060345
std_class	-.0205715	.0351529	-0.59	0.559	-.089546	.048403
std_diag	.1220804	.036006	3.39	0.001	.051432	.1927288
_cons	-.0942715	.062915	-1.50	0.134	-.2177189	.0291759

A21 – Italy Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_church std_class s
> td_diag if v3==8
```

Source	SS	df	MS	Number of obs	=	958
				F(9, 948)	=	12.72
Model	103.625364	9	11.5139293	Prob > F	=	0.0000
Residual	857.943057	948	.905003225	R-squared	=	0.1078
				Adj R-squared	=	0.0993
Total	961.568421	957	1.00477369	Root MSE	=	.95132

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1248694	.0377573	3.31	0.001	.0507718	.198967
empl	-.1761317	.0803474	-2.19	0.029	-.333811	-.0184524
self_empl	.0927608	.1052966	0.88	0.379	-.1138806	.2994023
male	-.0078371	.0668133	-0.12	0.907	-.1389561	.123282
married	.1305386	.065229	2.00	0.046	.0025286	.2585486
union	-.0338264	.1024909	-0.33	0.741	-.2349617	.1673089
std_church	.0435491	.031862	1.37	0.172	-.0189791	.1060773
std_class	-.1209419	.0373619	-3.24	0.001	-.1942634	-.0476203
std_diag	.11963	.0403792	2.96	0.003	.040387	.1988729
_cons	.0008233	.0641299	0.01	0.990	-.1250298	.1266763

A22 – Norway Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class std_diag if v3==9
```

Source	SS	df	MS	Number of obs	=	924
				F(11, 912)	=	4.81
Model	50.7979845	11	4.61799859	Prob > F	=	0.0000
Residual	876.376162	912	.960938774	R-squared	=	0.0548
				Adj R-squared	=	0.0434
Total	927.174146	923	1.00452237	Root MSE	=	.98027

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.0357274	.0462865	0.77	0.440	-.0551131	.1265678
empl	.0905982	.0763991	1.19	0.236	-.0593402	.2405367
self_empl	-.1654867	.1195319	-1.38	0.167	-.4000763	.0691029
male	-.0651093	.0658526	-0.99	0.323	-.1943494	.0641309
married	.0531632	.0796472	0.67	0.505	-.1031499	.2094763
union	.0151852	.0728819	0.21	0.835	-.1278505	.1582209
std_age	-.0538769	.0382976	-1.41	0.160	-.1290385	.0212847
std_church	-.0442091	.0356669	-1.24	0.215	-.1142078	.0257897
std_sch	-.0724356	.0389759	-1.86	0.063	-.1489284	.0040572
std_class	.007152	.0386819	0.18	0.853	-.0687639	.0830679
std_diag	.1907329	.0462197	4.13	0.000	.1000234	.2814423
_cons	-.0735307	.0802914	-0.92	0.360	-.231108	.0840466

A23 – Sweden Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos self_empl male married std_age if v3==10
```

Source	SS	df	MS	Number of obs	=	693
				F(5, 687)	=	7.90
Model	37.6225391	5	7.52450782	Prob > F	=	0.0000
Residual	654.377492	687	.952514545	R-squared	=	0.0544
				Adj R-squared	=	0.0475
Total	692.000032	692	1.00000005	Root MSE	=	.97597

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2300707	.0377264	6.10	0.000	.1559978	.3041436
self_empl	-.0293214	.1196743	-0.25	0.807	-.2642927	.2056499
male	-.0682559	.0753665	-0.91	0.365	-.2162322	.0797204
married	.0214423	.0814285	0.26	0.792	-.1384364	.1813209
std_age	-.0403999	.0403936	-1.00	0.318	-.1197097	.0389099
_cons	.0257398	.0712021	0.36	0.718	-.1140601	.1655397

A24 – Czechoslovakia Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class std_diag if v3==11
```

Source	SS	df	MS	Number of obs	=	974
				F(11, 962)	=	14.63
Model	138.185042	11	12.5622766	Prob > F	=	0.0000
Residual	826.043329	962	.858672899	R-squared	=	0.1433
				Adj R-squared	=	0.1335
Total	964.228372	973	.990984966	Root MSE	=	.92665

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1449616	.0370806	3.91	0.000	.0721935	.2177298
empl	.1268958	.0748014	1.70	0.090	-.0198968	.2736885
self_empl	-.352825	.1440069	-2.45	0.014	-.6354289	-.070221
male	-.1998725	.0615185	-3.25	0.001	-.3205984	-.0791466
married	.0169317	.0717616	0.24	0.814	-.1238955	.1577589
union	-.068286	.0656094	-1.04	0.298	-.19704	.060468
std_age	.1320764	.0333938	3.96	0.000	.0665434	.1976094
std_church	-.0355642	.0304638	-1.17	0.243	-.0953474	.0242189
std_sch	-.008229	.0412758	-0.20	0.842	-.08923	.072772
std_class	-.1364127	.0350907	-3.89	0.000	-.205276	-.0675495
std_diag	.1165153	.0360954	3.23	0.001	.0456806	.1873501
_cons	.0295587	.0804723	0.37	0.713	-.1283629	.1874802

A25 – Slovenia Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_sch if v3=
> =12
```

Source	SS	df	MS	Number of obs	=	864
Model	57.929931	8	7.24124138	F(8, 855)	=	7.77
Residual	797.008703	855	.932173922	Prob > F	=	0.0000
				R-squared	=	0.0678
				Adj R-squared	=	0.0590
Total	854.938634	863	.990658904	Root MSE	=	.96549

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2575205	.034488	7.47	0.000	.1898294	.3252116
empl	.1083784	.0914249	1.19	0.236	-.0710651	.2878219
self_empl	.0054012	.1742077	0.03	0.975	-.3365236	.347326
male	-.1203488	.0663943	-1.81	0.070	-.2506637	.0099661
married	-.0173312	.0808404	-0.21	0.830	-.1760001	.1413376
union	-.0156126	.0840357	-0.19	0.853	-.1805531	.1493278
std_age	-.0224397	.0403277	-0.56	0.578	-.1015926	.0567131
std_sch	.0443719	.0357886	1.24	0.215	-.0258719	.1146157
_cons	.0212735	.0767841	0.28	0.782	-.129434	.1719809

A26 – Poland Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class std_diag if v3==13
```

Source	SS	df	MS	Number of obs	=	1,080
Model	86.9149396	11	7.90135815	F(11, 1068)	=	8.58
Residual	983.2768	1,068	.920671161	Prob > F	=	0.0000
				R-squared	=	0.0812
				Adj R-squared	=	0.0718
Total	1070.19174	1,079	.991836645	Root MSE	=	.95952

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.0936927	.0348701	2.69	0.007	.0252709	.1621145
empl	-.0177084	.0691835	-0.26	0.798	-.1534594	.1180425
self_empl	-.2170549	.0848158	-2.56	0.011	-.3834794	-.0506304
male	-.098689	.0610806	-1.62	0.106	-.2185406	.0211626
married	.1529465	.066926	2.29	0.022	.0216251	.2842678
union	.0132794	.0813123	0.16	0.870	-.1462706	.1728294
std_age	-.0659742	.0356382	-1.85	0.064	-.135903	.0039546
std_church	.0226737	.0300407	0.75	0.451	-.0362717	.0816192
std_sch	.0097593	.0391002	0.25	0.803	-.0669628	.0864813
std_class	-.1151197	.0348008	-3.31	0.001	-.1834053	-.0468341
std_diag	.1389007	.0334592	4.15	0.000	.0732475	.204554
_cons	-.0018779	.0664491	-0.03	0.977	-.1322635	.1285076

A27 – Bulgaria Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch std_class if v3==14
```

Source	SS	df	MS	Number of obs	=	881
Model	128.307935	10	12.8307935	F(10, 870)	=	14.99
Residual	744.832385	870	.856129178	Prob > F	=	0.0000
				R-squared	=	0.1469
				Adj R-squared	=	0.1371
Total	873.140319	880	.992204908	Root MSE	=	.92527

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1728733	.036557	4.73	0.000	.1011232	.2446234
empl	-.0410498	.0820599	-0.50	0.617	-.2021083	.1200087
self_empl	-.2950289	.1195076	-2.47	0.014	-.5295857	-.0604721
male	-.2274022	.0645897	-3.52	0.000	-.354172	-.1006324
married	.0431805	.0768668	0.56	0.574	-.1076855	.1940466
union	-.0133822	.0838307	-0.16	0.873	-.1779161	.1511518
std_age	.1306515	.0402343	3.25	0.001	.0516839	.2096192
std_church	-.0118157	.0323811	-0.36	0.715	-.0753699	.0517385
std_sch	-.0141272	.033957	-0.42	0.677	-.0807743	.05252
std_class	-.1428612	.0355177	-4.02	0.000	-.2125717	-.0731508
_cons	.1283513	.0769446	1.67	0.096	-.0226673	.27937

A28 – Russia Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_sch std_cl
> ass if v3==15
```

Source	SS	df	MS	Number of obs	=	1,362
Model	219.518517	9	24.3909463	F(9, 1352)	=	29.21
Residual	1128.80399	1,352	.834914192	Prob > F	=	0.0000
				R-squared	=	0.1628
				Adj R-squared	=	0.1572
Total	1348.3225	1,361	.990685161	Root MSE	=	.91374

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.2154732	.0281052	7.67	0.000	.1603385	.2706078
empl	-.0189037	.0646939	-0.29	0.770	-.1458151	.1080077
self_empl	-.5045913	.1361607	-3.71	0.000	-.7717004	-.2374822
male	-.3559929	.051809	-6.87	0.000	-.4576277	-.2543582
married	.0382173	.0557918	0.68	0.493	-.0712306	.1476651
union	.1443403	.0696916	2.07	0.039	.007625	.2810557
std_age	.1688617	.0270644	6.24	0.000	.1157689	.2219546
std_sch	-.0020855	.0277613	-0.08	0.940	-.0565454	.0523745
std_class	-.0231068	.0290354	-0.80	0.426	-.0800662	.0338525
_cons	.0688971	.0642421	1.07	0.284	-.0571278	.1949221

A29 – New Zealand Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_sch std_cl
> ass std_diag if v3==16
```

Source	SS	df	MS	Number of obs	=	1,039
				F(10, 1028)	=	17.26
Model	147.957027	10	14.7957027	Prob > F	=	0.0000
Residual	880.973751	1,028	.856978357	R-squared	=	0.1438
				Adj R-squared	=	0.1355
Total	1028.93078	1,038	.991262792	Root MSE	=	.92573

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1194901	.0411578	2.90	0.004	.0387271	.200253
empl	-.0788828	.0775258	-1.02	0.309	-.2310097	.0732442
self_empl	-.1368465	.0946816	-1.45	0.149	-.3226377	.0489447
male	-.1487008	.0596819	-2.49	0.013	-.265813	-.0315886
married	.0669018	.0646639	1.03	0.301	-.0599865	.1937901
union	.1434165	.0809338	1.77	0.077	-.0153977	.3022308
std_age	.0230806	.0340409	0.68	0.498	-.0437171	.0898782
std_sch	-.0062871	.0313049	-0.20	0.841	-.0677158	.0551417
std_class	-.0687147	.0385646	-1.78	0.075	-.1443891	.0069597
std_diag	.1874805	.0425343	4.41	0.000	.1040166	.2709444
_cons	.0694145	.0661159	1.05	0.294	-.0603231	.1991521

A30 – Canada Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _class std_diag if v3==17
```

Source	SS	df	MS	Number of obs	=	551
				F(10, 540)	=	5.34
Model	51.3290533	10	5.13290533	Prob > F	=	0.0000
Residual	519.237275	540	.961550509	R-squared	=	0.0900
				Adj R-squared	=	0.0731
Total	570.566328	550	1.03739332	Root MSE	=	.98059

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.1514207	.0572967	2.64	0.008	.0388689	.2639725
empl	.0359264	.0974444	0.37	0.713	-.1554901	.2273428
self_empl	.148346	.1256296	1.18	0.238	-.0984366	.3951287
male	-.0345408	.08672	-0.40	0.691	-.2048906	.135809
married	.1076322	.0922808	1.17	0.244	-.0736411	.2889056
union	-.0227981	.1024215	-0.22	0.824	-.2239916	.1783953
std_age	.0393929	.0453482	0.87	0.385	-.0496876	.1284735
std_church	.0780003	.0441871	1.77	0.078	-.0087995	.1648
std_class	.0594296	.0522614	1.14	0.256	-.043231	.1620901
std_diag	.2036654	.0578407	3.52	0.000	.090045	.3172857
_cons	-.0462477	.0930263	-0.50	0.619	-.2289854	.1364901

A31 – Philippines Positivity Regression 1992 – Individual Factors

```
. regress z17_c std_pos empl self_empl male married union std_age std_church std
> _sch if v3==18
```

Source	SS	df	MS	Number of obs	=	1,182
				F(9, 1172)	=	1.81
Model	16.1613604	9	1.79570671	Prob > F	=	0.0622
Residual	1162.51854	1,172	.991910019	R-squared	=	0.0137
				Adj R-squared	=	0.0061
Total	1178.6799	1,181	.99803548	Root MSE	=	.99595

z17_c	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
std_pos	.0853793	.0303557	2.81	0.005	.0258218	.1449369
empl	-.0793789	.0703285	-1.13	0.259	-.2173627	.0586048
self_empl	.0444979	.0734677	0.61	0.545	-.099645	.1886408
male	.0232481	.0624243	0.37	0.710	-.0992277	.1457239
married	-.051673	.0695721	-0.74	0.458	-.1881727	.0848268
union	-.1620897	.2481556	-0.65	0.514	-.6489685	.3247891
std_age	.0375992	.0312501	1.20	0.229	-.0237132	.0989116
std_church	.0239375	.0303116	0.79	0.430	-.0355336	.0834086
std_sch	.0905618	.0312844	2.89	0.004	.029182	.1519415
_cons	.0562754	.0693567	0.81	0.417	-.0798018	.1923526

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