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WORK ETHIC, PROTESTANTISM, AND HUMAN CAPITAL

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Max Weber's seminal contribution on Protestant work ethic as a determinant to economic success has stimulated many economists as well as other social scientists. However, the question whether a Protestant specific work ethic does exist at all is still rarely analysed. Our results indicate that work ethic is influenced by denomination-based religiosity and also education.

JEL CLASSIFICATION: Z120, I200, J240

KEYWORDS: RELIGION, WORK ETHIC, PROTESTANTISM, EDUCATION

1. INTRODUCTION

Studies addressing the influence of religion in economics have increased. They generate information about beliefs, cultural norms, and moral values which systematically influence decision-making in a society (Iannaccone, 1998). According to McCleary and Barro (2006) religion affects the economy by fostering traits such as work ethic or trust. Recently, Becker and Woessmann (2009) provided an explanation for the impact of Protestantism on economic prosperity. With county-level data from the late 19th-century Prussia they demonstrate that the difference in economic success between Catholics and Protestants can be attributed to higher literacy among Protestants and not due to denominational differences at that time. However, is work ethic influenced by denomination at all or is it also only a veil hiding an underlying impact of education?

2. WORK ETHIC AND PROTESTANTISM

Max Weber (1904/1905) is probably the most popular representative that formulated a denomination-based thesis, even though he was not the first.¹ His central argument is that Protestants have developed a distinct work ethic as a path to salvation. The roots of this distinct work ethic go back to Luther and Calvin: for the first time in history they set a cultural norm that doing a good job for its own sake has a positive moral value as a service to God. On page 53 Weber (translation of 1976) says: "In fact, the *summum bonum* of this ethic, the earning of more and more money, combined with the strict avoidance of all spontaneous enjoyment of life, is above all completely devoid of any eudaemonistic, not to say hedonistic, admixture. [...] Economic acquisition is no longer subordinated to man as the means for the satisfaction of his material needs. This reversal of what we should call the natural

¹ Becker and Woessmann (2009) cite Menschenfreund (1773) who, in the 18th-century, formulated a denomination-based thesis on Protestant's impact on economic prosperity.

relationship, so irrational from a naive point of view, is evidently as definitely a leading principle of capitalism as it is foreign to all peoples not under capitalistic influence. At the same time it expresses a type of feeling which is closely connected with certain religious ideas.”

Contrary to this, ancient Greeks or Romans viewed work as dishonourable (Hill, 1996). The ancient ideal was seen in self-sufficiency and satisfaction with life, although some extreme philosophical views also existed (for example that of the Stoics, who valued work as a means to serve society).² Very much the same holds true for the medieval times. Work was basically seen as a punishment by God for man’s original sin. However, with the formation of monasteries, monks were educated in religious and intellectual work and St. Thomas Aquinas even developed a hierarchy of work. In any case, the great move towards a new perspective on work did not evolve until Protestant reformers like Luther, Calvin or Zwingli gave hard work a divine dignity. Weber (1904/1905) points to Calvin’s predestination doctrine: a decree by God that there are certain souls that were previously appointed to salvation.³ Since the intentions of God remain hidden for all humans, everyone must act in the sense of a virtuously conducted life, as if being chosen by God. Faith in the sense *fides efficax* had to be proven by true Christian conduct to increase the glory of God (Barth, 1922). Restless diligence, austere asceticism and economic success can consequently be seen as indications of God’s eternal grace.

All in all, uncertainty about salvation is seen as the central incentive to be austere and hard-working and thereby take this as a signal to be among the God’s chosen ones (McCleary and Barro, 2006). It can of course be debated whether the Protestant work ethic was developed due to theological interpretations or due to the economic conditions specific to the sixteenth century. Bernstein (1988) argues that a rapid population increase, serious price inflation, and a high rate of unemployment at that time had an important influence on the writings and the sermons of the Protestant reformers. Being aware of the problems of poverty, Luther and Zwingli, were among the first who drafted poor-relief laws in the 1520’s. However, common to all these factors is the systematic concept of religious beliefs that had created incentives to work hard.

However, Becker and Woessmann (2009) argue that religious beliefs are only a veil: human capital formation and not Protestantism is the reason for economic success. Luther not only translated the Bible from Latin into German so that everyone could understand God’s words, but was also progressive in requesting elementary schools for every town to increase literacy. In his tract *To Town Councillors to keep Children at School*, he expressed the importance of schooling in the training of children for the church and the state (Thompson, 1984). From the early 1520’s on, literacy rates increased considerably in the German speaking areas (Haile, 1976). However, Luther’s aim was purely religious and not economic. Thus, increased

² A famous example is Marc Aurel’s mediation: “Work! But not like an unfortunate or like somebody who wants to be admired or pitied. Work or rest, as it may best please to the community”

³ Karl Bart’s lectures in Goettingen (1922), assembled in “The Theology of John Calvin” provide an important theological analysis of the Reformation in general and of John Calvin in particular.

literacy among Protestants as a by-product of Protestant reformation was only incidentally the breeding ground for economic success.⁴

3. EMPIRICAL ANALYSIS

To test the impact of Protestantism, religiosity and education on work ethic, we exploited data from the European Values Survey (EVS). We explore the third wave covering 16 countries. From the EVS survey data we have selected the following question to proxy work ethic: “Work should always come first, even if it means less spare time.” According to Weber (1904/1905) the Protestant specific work ethic can be traced back to asceticism important especially to the predestination doctrine developed by Calvin. Thus, religiosity should be important in the case of Protestantism. The data on religiosity were retrieved from the EVS, asking “Independently of whether you go to church or not, would you say you are: 1= A convinced atheist; 2= Not a religious person; 3 = A religious person”. If Protestantism is a veil hiding a possible impact of education on work ethic, education should also play a key role. We consider the following question of the EVS: “At what age did you complete or will you complete your full time education, either at school or at an institution of higher education? Please exclude apprenticeships.” We use an ordered probit model to analyse the ranking information of the scaled dependent variable. We also use *weighted* estimations to correct the samples and thus to get a reflection of the national distribution⁵.

Moreover, we calculated the marginal effects to find the quantitative effect of a variable on our dependent variable. In addition, we also cluster the standard errors by 249 official local regions based on the Eurostat NUTS level 2 (Nomenclature of Units for Territorial Statistics) classification. Such clustering on the basis of where the individuals come from will pick up any regional characteristics that are not controlled in the specification.

Specification [1] in *Table 1* shows that education has a statistically significant impact on work ethic if people are Protestant but not if they are Catholic. Similarly, specification [2] reports that there is also an interaction with religiosity. The effect of religiosity depends on the denomination. We observe that the additional effect of religiosity is only statistically significant when an individual is Protestant. In specification [3] we are interested to explore how strong both channels work together. As can be seen both interaction terms *PROTESTANT*EDUCATION* and *PROTESTANT*RELIGIOUS* are statistically significant. In sum, our results indicate that it is not only education that accounts for the gap in work ethic between Catholics and Protestants, but also religiosity.⁶ In other words, when focusing

⁴ A similar study by Boppert et al. (2008) using Swiss historical data from the 19th-century comes to the conclusion that religious denomination only in a conservative milieu exhibits a significant impact on educational performance.

⁵ The weighting variable is provided by the EVS.

⁶ It can be debated whether education is endogenously dependent on work ethic which would result in biased estimates. IV estimates with town size as the instrument for education however does not give rise to spurious results. The significant impact remains. Town size is supposed to be a good instrument as in more densely populated areas, the provision of education services is more pronounced. Results of the first-stage regression support this reasoning (The F-test statistic of excluded instruments reports a value of 32.57 ($p=0.000$)).

on work ethic instead of economic success not only human capital accumulation matters but also denomination-based religiosity.

TABLE 1: WORK ETHIC, RELIGION AND EDUCATION IN WESTERN EUROPE

<i>WEIGHTED PROBIT</i>	<i>ORDERED</i>	<i>Coeff.</i>	<i>z-Stat.</i>	<i>Marg. Effects</i>	<i>Coeff.</i>	<i>z-Stat.</i>	<i>Marg. Effects</i>	<i>Coeff.</i>	<i>z-Stat.</i>	<i>Marg. Effects</i>
<i>DEPENDENT V.: WORK ETHIC</i>		clustering over 249 regions [1]			clustering over 249 regions [2]			clustering over 249 regions [3]		
<i>Religion and Education</i>										
PROTESTANT		-0.056	-0.60	-0.010	-0.159	-1.13	-0.027	-0.355**	-2.11	-0.056
CATHOLIC		0.192*	1.80	0.034	0.216	1.41	0.039	0.256	1.26	0.046
RELIGIOUS		0.085***	3.15	0.015	0.065	1.53	0.012	0.065	1.52	0.012
EDUCATION		-0.032***	-7.78	-0.006	-0.030***	-12.28	-0.005	-0.033***	-7.76	-0.006
PROTESTANT*EDUCATION		0.010**	2.15	0.002				0.010**	2.19	0.002
CATHOLIC*EDUCATION		-0.002	-0.38	0.000				-0.002	-0.41	0.000
PROTESTANT * RELIGIOUS					0.114**	2.17	0.020	0.116**	2.20	0.021
CATHOLIC * RELIGIOUS					-0.015	-0.28	-0.003	-0.017	-0.32	-0.003
<i>Demographic Factors</i>										
AGE 30-39		-0.035	-1.19	-0.006	-0.039	-1.32	-0.007	-0.037	-1.24	-0.006
AGE 40-49		0.088**	2.54	0.016	0.086**	2.49	0.016	0.085**	2.47	0.016
AGE 50-59		0.246***	6.72	0.049	0.248***	6.74	0.049	0.245***	6.69	0.048
AGE 60-69		0.453***	8.71	0.098	0.455***	8.64	0.099	0.451***	8.61	0.098
AGE 70+		0.629***	11.12	0.149	0.630***	11.02	0.149	0.626***	10.96	0.148
FEMALE		-0.126***	-5.83	-0.023	-0.127***	-6.00	-0.023	-0.128***	-6.02	-0.023
<i>Marital Status</i>										
WIDOWED		-0.047	-1.18	-0.008	-0.043	-1.09	-0.007	-0.045	-1.14	-0.008
DIVORCED		-0.041	-0.99	-0.007	-0.041	-0.99	-0.007	-0.040	-0.95	-0.007
SEPARATED		0.045	0.66	0.008	0.046	0.67	0.008	0.045	0.65	0.008
NEVER MARRIED		-0.071**	-2.53	-0.012	-0.075***	-2.66	-0.013	-0.070**	-2.49	-0.012
<i>Employment Status</i>										
PART TIME EMPLOYEE		-0.134***	-3.75	-0.022	-0.134***	-3.77	-0.022	-0.133***	-3.73	-0.022
SELF-EMPLOYED		0.163***	4.21	0.032	0.163***	4.23	0.032	0.162***	4.18	0.032
RETIRED		0.046	1.27	0.008	0.041	1.12	0.007	0.045	1.24	0.008
AT HOME		-0.070*	-1.93	-0.012	-0.062*	-1.71	-0.011	-0.066*	-1.84	-0.011
STUDENT		-0.011	-0.19	-0.002	-0.023	-0.40	-0.004	-0.013	-0.22	-0.002
UNEMPLOYED		0.135**	2.20	0.026	0.136*8	2.23	0.026	0.134**	2.18	0.026
OTHER		-0.027	-0.33	-0.005	-0.027	-0.34	-0.005	-0.031	-0.38	-0.005
Pseudo R2		0.039			0.039			0.039		
Number of observations		17221			17221			17221		
Prob > chi2		0.000			0.000			0.000		

Notes: The reference group consists of OTHER RELIGION/NO RELIGION, AGE<30, MALE, MARRIED, FULL-TIME EMPLOYEE. Significance levels are: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. marginal effects for the highest value reported (5). Robust standard errors.

4. CONCLUSIONS

We explore whether there is a Protestant specific work ethic or if work ethic can be explained by higher education. We find that religiosity is crucial for Protestant work ethic, which is compatible with Weber's thesis, since the specific work ethic only provides incentives if the individual seeks for salvation by hard work and an ascetic lifestyle. However, we also find

that work ethic is influenced by education, pointing to the important role of education not only for economic success but also for a commitment to work ethic.

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