

JENA ECONOMIC RESEARCH PAPERS



2018 – 010

The effect of being Protestant on entrepreneurial choice

by

Michael Wyrwich

www.jenecon.de

ISSN 1864-7057

The JENA ECONOMIC RESEARCH PAPERS is a joint publication of the Friedrich Schiller University Jena, Germany. For editorial correspondence please contact markus.pasche@uni-jena.de.

Impressum:

Friedrich Schiller University Jena
Carl-Zeiss-Str. 3
D-07743 Jena
www.uni-jena.de

© by the author.

The effect of being Protestant on entrepreneurial choice¹

Michael Wyrwich

Abstract

This brief research note identifies a causal effect of being Protestant on entrepreneurial choice.

JEL classifications: L26; Z1; Z12

Keywords: Religion; Protestantism; Entrepreneurship

Address for correspondence:

Michael Wyrwich

Friedrich Schiller University Jena

School of Economics and Business Administration

Carl-Zeiss-Str. 3

07743 Jena

michael.wyrwich@uni-jena.de

¹ This research note was originally developed as a personal contribution to the 500th anniversary of the Reformation. I finally decided to make this piece of research available to the scientific community and other interested audience. I thank Elisabeth Bublitz for valuable comments on an earlier version which I drafted on 31st of October, 2017.

1 Setting the scene

Does Protestantism affect entrepreneurship? There is a debate about the positive influence of Protestantism on entrepreneurship that started with the seminal work by Weber (1904) on the Protestant work ethic and the spirit of capitalism (see Becker and Woessmann, 2009 and Edwards, 2017 for a critical assessment). There is empirical evidence for a positive relationship between being a Protestant and entrepreneurship (e.g., Zelekha et al., 2014; Henley, 2017). It is astonishing that entrepreneurship, which is a key factor for economic development (Schumpeter, 1934), did not yet gain scholarly attention as compared to other topics in the economics of religion and Protestantism (Iannaccone, 1998; Becker et al., 2017).²

The lack of empirical research may be explained by the key challenge of establishing a causal relationship between being a Protestant adherent and entrepreneurial choice. The challenge is to disentangle “true” adherence to ethical principles of Protestantism from church membership and self-declared religious affiliation (Spenkuch, 2017). More recently, Nunziata and Rocco (2016, 2017) show that religious minorities typically have a strong attachment to the ethical guiding principles of their religion. They make use of this pattern to identify a positive effect of Protestantism on entrepreneurship.

The present research note exploits the natural experiment of German re-unification to identify the causal effect of Protestantism on entrepreneurial choice and entrepreneurial intentions. The empirical focus is on East Germans that were exposed to four decades of socialism. The anti-clerical propaganda in the socialist German Democratic Republic (GDR) implied a massive drop in the share of church members between 1950 and 1990 (Tyndale, 2010). Given the heavy political pressure on churches and church members, people that kept on adhering to Protestantism (or Catholicism) have been a minority group. Therefore, it is safe to assume that this minority had a strong attachment to the ethical principles of their faith. Thus, the problem that ethical principles of Protestantism cannot be disentangled from church membership is solved to the extent that such a membership in the late GDR is very likely to go hand in hand with a strong attachment to the ethical guiding principles of Protestantism.

2 Historical background

Self-employment was heavily restricted in the GDR. In 1989 only 1.8 percent of the population in working age (184,599 self-employed in total and 2.1 percent of all employees) was running a private venture compared to 10 percent in West Germany. The few remaining private firms were strongly regulated and concentrated in the manufacturing trades (55 percent). Around 3.2 percent of the self-employed in 1989 have been farmers. Other groups of self-employed can be assigned to the service sector and comprises people active in domestic retail and wholesale trade (21.6 percent of all self-employed) while free professionals (e.g.,

² Balog et al. (2014) provide a review of articles from other disciplines.

writers and dentists) and “others” (e.g., proprietors of driving schools and of inland waterway carriers) made up for the remaining share (for details, see Pickel, 1992).

Before German division the share of church members was more or less similar in East and West Germany. However, the share of Protestants in the 1980s was about 25 percent; only 6 percent of the population was Catholic adherents due to anti-clerical propaganda and political pressure on church members (for details, see Tyndale, 2010). This difference in the numbers is due to the fact that most people in the area that became part of the socialist GDR after World War II were members of the Protestant church. There was no county with less than 90 percent Protestants in the year 1925 (Statistik des Deutschen Reichs, 1927) except of only one smaller region in the northwest of Thuringia (the so-called *Eichsfeld*).

Being an entrepreneur was hardly possible and remaining member of the Protestant church reveals a strong commitment to the ethical guiding principles of Protestantism. The fall of the Berlin Wall in 1989 reflected an unexpected shock to the economy that drastically changed the opportunities for entrepreneurship (Fritsch, 2004). Thus, also the opportunities for Protestants to start a firm increased tremendously. If Protestants have indeed an above-average entrepreneurial drive than being a Protestant should have a positive effect on entrepreneurial choice and entrepreneurial intention after the fall of the Berlin wall.

3 Empirical approach

For analyzing the relationship between being a Protestant and entrepreneurial choice, this study makes use of a unique survey on the social situation of individuals in the GDR. The survey was conducted in May and June 1990 which was four months before German reunification (October 3, 1990) and just six months after the fall of the Berlin Wall (November 9, 1989). The survey was the first East German wave of the representative German Socioeconomic Panel (GSOEP) (for details, see Haisken De-New and Frick, 2005). The cross-section of 1990 provides an overview about the socioeconomic conditions of East Germans at the turning point between socialism and market economy. The dataset was also used by Benz and Frey (2008) in their seminal work on job satisfaction of entrepreneurs.

In the survey, market entries since the fall of the Berlin Wall can be identified by comparing employment status and self-declared personal income of respondents in May 1989. It was asked for wage salary, self-employment income, and several further income sources (e.g., maternity leave, educational grant). If a person did not yield any income in self-employment in 1989, he or she is counted as a new entry. Additionally, people were asked whether they plan to start a venture soon. This group reveals a pronounced entrepreneurial intention. The group is referred to as nascent entrepreneurs.

The analysis relies on OLS regressions and a Logit analysis as a robustness check.³ The vector of controls comprises age, gender, gross income in 1989 (see Table A1, for summary

³ The case number in some of the logit models is significantly reduced due to perfect predictions. Therefore, it is not presented as main analysis.

statistics) as well as industry dummies because opportunities for starting a firm are typically determined by industry characteristics (Audretsch, 1995).

4 Results & Conclusions

The data analysis reveals that East Germans Protestants were more likely to start a firm or actually planned to start a firm in early 1990 as compared to non-Protestants East Germans (Table 1). The analysis also shows that there is no such effect for Catholics. The results are robust in a logit analysis (see Table A.2). Altogether, the results show that being a Protestant has a positive influence on entrepreneurial choice in the case of East Germany. The unique empirical setting allows concluding that the found relationship between adhering to Protestant ethical guiding principles and a preference for entrepreneurial choice is causal.

The empirical regularities demonstrated in this brief research note are in line with earlier research on other institutional contexts. Apart from that, this paper has implications for research on the economics of entrepreneurship and the economics of religion. First, the paper shows that effect of being Protestant on entrepreneurship is obviously also observable in an institutional environment where there is a lack of market-based entrepreneurial experience among the population and entrepreneurial role model effects. Thus, in contrast to previous work the setting rules out that a capitalist or market-based organization of the economic system was feeding back into entrepreneurial intentions of Protestants. Second, the results suggest that adhering to ethical principles of Protestantism fosters self-initiative, in terms of starting an own venture, in times of drastic socioeconomic turmoil like the transition in Eastern Germany that can be regarded as the most “dramatic episode of economic dislocation in peacetime during the twentieth century” (Burda and Hunt, 2001, p. 1). Altogether, this research note shows that the effect of being Protestant on entrepreneurial choice can be also found beyond the institutional context of established market economies.

Table 1: Regression Analysis (OLS)

	I	II	III	IV	V	VI	VII	VIII
	Planning to become self-employed		Entry 1990 (Oct 1989-May 1990)		Planning to become self-employed		Entry 1990 (Oct 1989-May 1990)	
Protestant adherent	0.019*** (0.007)	0.020*** (0.007)	0.016** (0.006)	0.014** (0.006)	0.019*** (0.007)	0.021*** (0.007)	0.018*** (0.006)	0.015** (0.006)
Age in years	0.003** (0.001)	0.002 (0.002)	-0.002 (0.002)	-0.001 (0.002)	0.003** (0.001)	0.002 (0.002)	-0.002 (0.002)	-0.001 (0.002)
Age in years (squared)	-0.000** (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000** (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Woman (Yes = 1)	-0.014*** (0.005)	-0.013* (0.007)	-0.011*** (0.004)	-0.012** (0.005)	-0.014*** (0.005)	-0.013* (0.007)	-0.012*** (0.004)	-0.012** (0.005)
Catholic adherent	N	N	N	N	0.002 (0.010)	0.003 (0.010)	0.018 (0.013)	0.009 (0.010)
Married (Yes=1)	N	0.005 (0.007)	N	0.005 (0.005)	N	0.005 (0.007)	N	0.005 (0.005)
Gross income 1989 (log)	N	0.006 (0.009)	N	-0.002 (0.007)	N	0.006 (0.009)	N	-0.002 (0.007)
Further controls	N	Y	N	Y	N	Y	N	Y
Employment Status (5 categories)	N	Y	N	N	N	Y	N	N
Education Dummies (6 categories)	N	Y	N	Y	N	Y	N	Y
Industry Dummies (61 categories)	N	Y	N	Y	N	Y	N	Y
Constant	-0.028 (0.029)	-0.094 (0.063)	0.052 (0.033)	0.031 (0.056)	-0.028 (0.029)	-0.095 (0.063)	0.051 (0.033)	0.030 (0.056)
Observations	2,955	2,827	2,943	2,812	2,955	2,827	2,943	2,812
R ²	0.008	0.026	0.006	0.106	0.008	0.026	0.007	0.106

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Heteroskedasticity is controlled for by employing the Huber White Sandwich procedure (White, 1980). The analysis is restricted to the sample population in working age (18-64 years).

References

- Audretsch, D.B. (1995), *Innovation and Industry evolution*, MIT Press: Cambridge, Mass.
- Balog, A.M.; Lakami, T. B. & A. G. Walker (2013), Religiosity and Spirituality in Entrepreneurship: A Review and Research Agenda, *Journal of Management, Spirituality & Religion*, 1-28.
- Becker, S.O.; Woessmann, L. (2009), Was Weber Wrong? A Human Capital Theory of Protestant Economic History, *Quarterly Journal of Economics*, 124, 531-596.
- Becker, S.O.; Rubin, J.C.; Pfaff, S. (2017), Causes and Consequences of the Protestant Reformation, *Explorations in Economic History*, 62, 1-25.
- Benz, M.; Frey, B.S. (2008), Being Independent is a Great Thing: Subjective Evaluations of Self-Employment and Hierarchy, *Economica*, 75, 362-383.
- Burda, M.; Hunt, H. (2001), From Reunification to Economic Integration: Productivity and the Labor Market in Eastern Germany, *Brooking Papers on Economic Activity*, 64, 1-92.
- Edwards, J. (2017), Did Protestantism promote economic prosperity via higher human capital?, *cesifo Working Papers*, 6646-2017.
- Fritsch, M. (2004), Entrepreneurship, entry and performance of new business compared in two growth regimes: East and West Germany, *Journal of Evolutionary Economics*, 14, 525-542.
- Iannaccone, L.R. (1998), Introduction to the Economics of Religion, *Journal of Economic Literature*, 36, 1465-1495.
- Haisken-DeNew, J.; Frick, J. (2005), *Desktop Companion to the German Socio-Economic Panel (SOEP)*.
- Henley, A. (2017), Does Religion influence Entrepreneurial Behaviour?, *International Small Business Journal*, 35, 597-617.
- Nunziata, L.; Rocco L. (2016), A Tale of Minorities: Evidence on Religious Ethic and Entrepreneurship, *Journal of Economic Growth*, 27, 189-224.
- Nunziata, L.; Rocco, L. (2017), The Protestant Ethic and Entrepreneurship: Evidence from Religious Minorities in the Former Holy Roman Empire, *European Journal of Political Economy*, in press.
- Pickel, A. (1992), *Radical Transitions: The Survival and Revival of Entrepreneurship in the GDR*, Boulder: Westview Press.
- Schumpeter, J.A. (1934), *The theory of economic development*. Harvard University Press, Cambridge.
- Spenkuch, J.L. (2017), Religion and Work: Micro Evidence from Contemporary Germany, *Journal of Economic Behavior & Organization*, 135, 193-214.
- Statistik des Deutschen Reichs (1927), Volks-, Berufs- und Betriebszählung vom 16. Juni 1925: Die berufliche und soziale Gliederung der Bevölkerung in den Ländern und Landesteilen. Vol. 403–Vol. 405, Berlin: Reimar Hobbing.
- Tyndale, W.R. (2010), *Protestants in Communist East Germany. In the storm of the world*, Farnham, U.K.: Ashgate Publishing.
- Weber, M. (1904), *The Protestant Ethic and the Spirit of Capitalism*, vol. reprinted 2001. Roxbury Publishing Company.
- White. H. (1980), A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity, *Econometrica*, 48, 817–838.
- Zelekha, Y.; Anvimelech, G.; Sharabi E. (2014), Religious Institutions and Entrepreneurship, *Small Business Economics*, 42, 747-767.

Appendix

Table A1: Summary Statistics

	Mean	S.D.	Min	Max
Planning to become self-employed 1990	0.02	0.13	0	1
Entry (Oct 1989-May 1990)	0.01	0.12	0	1
Protestant adherent	0.25	0.43	0	1
Catholic adherent	0.05	0.22	0	1
Age in years	39.08	11.17	18	64
Woman (Yes = 1)	0.48	0.5	0	1
Married (Yes=1)	0.77	0.42	0	1
Gross income 1989 (log)	6.87	0.45	4.38	8.37

Table A.2: Robustness check: Logit Regressions:

	I	II	III	IV	V	VI	VII	VIII
	Planning to become self-employed		Entry 1990 (Oct 1989-May 1990)		Planning to become self-employed		Entry 1990 (Oct 1989-May 1990)	
Protestant adherent	0.013*** (0.004)	0.020*** (0.006)	0.011*** (0.003)	0.011** (0.005)	0.013*** (0.004)	0.020*** (0.006)	0.012*** (0.003)	0.011** (0.005)
Catholic adherent	N	N	N	N	0.001 (0.010)	0.004 (0.014)	0.012** (0.006)	0.008 (0.008)
Controls as of Table 1 column I-VIII	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,955	1,845	2,943	1,217	2,955	1,845	2,943	1,217
Pseudo R ²	0.045	0.087	0.039	0.213	0.0453	0.087	0.047	0.216

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Heteroskedasticity is controlled for by employing the Huber White Sandwich procedure (White, 1980). The analysis is restricted to the sample population in working age (18-64 years).