

Simone Modrack

**The Protestant Work Ethic revisited: a
promising concept or an outdated idea?**

Januar 2008

ISSN Nr. 1011-9523

Wissenschaftszentrum Berlin
für Sozialforschung (WZB)
Social Science Research Center Berlin

Research Area:
Employment, Social Structure, and Welfare State

Research Unit:
Labor Market Policy and Employment
<http://www.wz-berlin.de/ars/ab/>
e-mail: modrack@wzb.eu

Order no.: SP I 2008-101

ABSTRACT

The main task of this paper consists in gauging the analytical value of Max Weber's Protestant Work Ethic, and in tackling the question of whether and how the concept is still used in current research and theory building. Reviewing existing literature, four broad areas of research are identified and discussed. It is found that the Protestant Work Ethic construct is not outdated but instead a valuable and promising approach which could add in particular to the growing research body on interactions between culture, institutions and economic outcomes.

ZUSAMMENFASSUNG

Das vorliegende Papier zielt darauf ab, den analytischen Wert der auf Max Weber zurückgehenden protestantischen Arbeitsethik zu erörtern und zu klären, ob und inwiefern das Konzept im Rahmen von aktueller Forschung und Theoriebildung noch verwendet findet. Zu diesem Zweck wird die einschlägige Literatur durchgesehen, in vier Kategorien unterteilt und diskutiert. Es zeigt sich, dass das Konzept der protestantischen Arbeitsethik keineswegs veraltet ist, sondern einen wertvollen und viel versprechenden Ansatz darstellt, der künftig insbesondere die Forschung zum Verhältnis zwischen Kultur, Institutionen und wirtschaftlichen Folgen bereichern könnte.

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1. Introduction

This paper sets out to gauge the analytical value of the famous Weberian Protestant Work Ethic (PWE). Going through relevant literature of the last ten years, the goal is to shed light on questions of whether and how the Weberian concept is still used in current research and theory building. Hence, the main task is to provide a detailed review of existing research, to demonstrate how the different approaches are connected, and to point out issues for future analysis.

The existing literature can be divided into four different, yet mutually interconnected strands of research. The first section of this paper deals with Weber's original thesis and respective empirical evidence, the second part addresses the question of how PWE is measured. The third section discusses the PWE construct from a comparative perspective, while the fourth part focuses on interrelations between PWE and other work-related concepts. The final part concludes and presents suggestions for future research.

2. Was Weber right? Differing interpretations and empirical evidence

At the core of Weber's thesis is the perception that Protestant, especially Calvinist and Puritan, ethic inspired the "spirit of capitalism" and thus, facilitated the rise of industrial capitalism. The hypothesis rests on the assumption that the Protestant reformation has led to the formation of new attitudes and new behaviors, which were explicitly favorable to economic development, and thus fostered the development of industrial capitalism. Referring to writings by Martin Luther, John Calvin and Benjamin Franklin, Weber identifies a distinct Protestant ethic. This ethic is basically grounded in Martin Luther's claim that salvation was by the grace of God, and that, contrary to medieval beliefs, religious vocations were not superior to economic ones, since it was only personal belief that mattered. Building on Luther, Calvin proposed the concept of predestination, which holds the belief that God has chosen his "elected" who are to get eternal life, while all others are damned. Success in worldly life, especially in business, was viewed as a sign of possible inclusion as one of the elect. Calvin insisted that idleness and waste of time lead to certain condemnation, while hard work and frugality gave evidence that one was among the elected. Besides, he demanded that earnings should not be spent on personal matters, but were to be reinvested instead. Unlike Luther, Calvin suggested everyone should choose the occupation that retrieved the most possible earnings.

By referring to Franklin, Weber demonstrates how central elements of a distinct Protestant Ethic had encroached upon prevalent philosophies. The thirteen virtues proposed by Franklin (temperance; silence; order; resolution; frugality; industry; sincerity; justice; moderation; cleanliness; tranquillity; chastity; and humility) exhibit central values of the Protestant Ethic. As Weber himself puts it, Franklin's ideas are centered around "the earning of more and more money, combined with the strict avoidance of all spontaneous enjoyment of life [...]. Man is dominated by the making of money, by acquisition as the ultimate purpose of his life." (Weber 1958 [1939], p. 53).

A crucial aspect of the PWE is the idea of work as a "calling", which had originally been brought up by Martin Luther. Weber states that work "is an obligation which the individual is supposed to feel and does feel towards the content of his professional activity, no matter in what it consists" (p. 54), and hence, "labour must [...] be performed as if it were an absolute end in itself" (p. 62).

Thus, at the heart of the Protestant Ethic are hard work and profit seeking, paired with strict avoidance of any worldly pleasure, idleness or waste of time¹.

In order to provide empirical evidence for Weber's claim, a number of hypotheses can be derived. At the individual level, it should be expected that Protestants were overrepresented in occupations linked to industrial capitalism (e.g., entrepreneurship). At the macro level, industrialization should consequently have developed earlier in countries and regions with predominately protestant populations.

The empirical examination of Weber's thesis has been subject to countless studies and yet, the question is still unclear. Depending on the interpretation of the original essays, the thesis has been discussed from innumerable angles and employing various methods. Hence, to cut a long story short, Weber's thesis has been "served with every kind of sauce" (Delacroix and Nielsen 2001, p. 510). Till this day, his argument continues to have both strong supporters and vigorous opponents, but nonetheless continues to be both an alluring and intangible concept.

A recent study by Cavalcanti, Parente & Zhao (2007) yields support for Weber's hypothesis. Being the first to tackle the issue by using calibration techniques, the authors find that differences between Catholic and Protestant regions can account for delays in the process of industrialization. Formal modelling suggests that if England had not been mainly Protestant, industrial development would have been lagged by 70 years. The findings thus explain why Northern Europe was industrialized prior to Southern Europe.

¹ For a detailed survey of the differences between medieval and modern capitalism, see for instance Ditz 1980.

By contrast, Delacroix & Nielsen (2001) state that there is a dominant interpretation of the Protestant Ethic which has taken a life of its own. This “common interpretation” labels the general belief that the rise of industrial capitalism had been facilitated by the PWE and consequently, predominately Protestant countries were industrialized earlier. In line with numerous existing studies on that matter, the authors, too, set out to assess the credibility of the “common interpretation” by estimating the associations between Protestantism and the development of capitalism (measured by five sets of indicators: “wealth and savings”, “institutionalization of stock trading”; “sectoral distribution of the labor force”; “development of railroads”; and “infant mortality”). The empirical results yield little factual validity for the “common interpretation”.

Going through the relevant literature, Delacroix & Nielsen demonstrate that the “common interpretation” is by no way the only possible way of perception. Three different interpretations are sketched. The “Protestant Minority Argument” holds that industrialization might have been triggered off by a small elite of Protestant entrepreneurs. Accordingly, the percentage of Protestants in the population would be unrelated to the speed of capitalist development. The “Sect versus Church Protestantism” view emphasizes the role of Protestant sects (i.e., Puritans), and distinguishes between Puritans and church Protestants (such as Anglicans or Lutherans). A third alternative interpretation, the “initial impact” argument, points out the role of Protestantism in the shift from traditional to modern modes of production. Once the new mode of action is established, non-Protestants have no choice but to embrace the “spirit of capitalism” as well. Thus, the argument stresses that Protestantism facilitated the *onset* of capitalism, and accordingly, the crucial independent variable would be the percentage of Protestant population at the *beginning* of capitalist development (Delacroix & Nielsen 2001, pp. 516f).

As a result, it is suggested that Weber’s work should be understood in a slightly different manner, namely, according to the “Protestant minority” or the “initial impact” interpretation. The empirical evidence suggests that the “sect” argument can be neglected: the percentage of sect Protestants is no more significantly related to industrial development than the percentage of Protestants as a whole (Delacroix & Nielsen, p. 516). All in all, the study differs from prior ones as far as the theoretical contribution is concerned. Unlike existing work, which is oftentimes limited to presenting evidence in favour or against the Weberian argument, Delacroix & Nielsen bring up issues of exegesis and interpretation, thus, calling the underlying assumptions of prior empirical research into question.

In general, it is safe to say that the question of whether or not Weber’s thesis is empirically justifiable, is subject to ongoing debate. However, as the remaining sections are highlighting, this is not the only controversial aspect of the PWE construct.

3. Methodological issues: Measuring Protestant Work Ethic

Assessing the notion of work ethic yearns for valid and reliable measurements. Since Weber himself was after all concerned with identifying and tracing back the sole existence of a distinct work ethic, he did not particularly address issues of conceptualization and operationalization.

A number of studies have tackled this question. Over the years, several work ethic measures have been suggested, among them the "Protestant Ethic Scale" (Goldstein and Eichhorn, 1961), the "Pro-Protestant Ethic Scale" (Blood 1969), the "Protestant Work Ethic Scale" (Mirels and Garrett, 1971), the "Spirit of Capitalism Scale" (Hammond and Williams, 1976), the "Work and Leisure Ethic Scales" (Work Ethic Subscale; Leisure Subscale) (Buchholz, 1978), the "Eclectic Protestant Ethic Scale" (Ray, 1982), and the "Australian Work Ethic Scale" (Ho and Lloyd, 1984). Any of the studies are addressing questions of conceptualization and operationalization in great detail, and all of them come up with a distinct work ethic measurement scale.

Reviewing the relevant literature, Furnham (1990a, 1990b) conducted a content, correlational and factor analytic study of the seven different work ethic measures mentioned above. More than 1,000 respondents completed all seven scales. Content analysis revealed seven dimensions, which were confirmed by correlational analysis, namely: "terminal belief in hard work"; "instrumental belief in hard work"; "leisure avoidance"; "moral beliefs"; "religious/spiritual beliefs"; "independence from others"; and "asceticism".

A subsequent factor analysis yielded five readily interpretable factors. The proposed distinction between terminal versus instrumental components of "hard work" turned out to be not significant, neither was the distinction between moral factors on the one, and religious/spiritual factors on the other hand. Thus, Furnham suggests that the PWE construct is made up of the five following dimensions: "belief in hard work"; "leisure avoidance"; "religious and moral beliefs"; "independence from others"; and "asceticism". While "leisure avoidance" refers to neglecting worldly pleasure whatsoever, "asceticism" is linked to the notion of saving instead of spending, and investing instead of saving - a concept which lies at the very heart of the Calvinist ethical matrix (Ditz 1980, p. 626f).

Departing from as well as strongly building on Furnham's contribution, Blau & Ryan (1997) set out to recommend a new measure. Although Furnham is given credit for encompassing all existing theory, his work ethic scale is criticized on two grounds. The first objection concerns the extent of the scale, which is found to be too large and impractical. The second point of critique is Furnham's suggestion to include moral and religious factors. Blau & Ryan argue that doing so is not grounded in the original Weberian concept. Furthermore, various studies as-

sessing individual attitudes towards work, yield few empirical support for religious and moral belief factors. Blau & Ryan conclude that “this dimension does not seem theoretically linked to the nomological net connecting the more secular dimensions of work ethic to other work commitment facets” (Blau & Ryan, 1997, p. 438).

For those reasons, the authors aim at providing a parsimonious, yet construct valid measure that is more accommodating than previous scales. Results of extensive factor analyses suggest an 18-item secular measure containing four dimensions: “hard work”, “nonleisure”, “independence”, and “asceticism”. In addition, a shorter-form measure that encompasses only 12 items is proposed. In sum, the study supports the dimensions identified by Furnham (1990a, 1990b), but abandons the moral and religious components.

Reviewing existing work ethic scales, Miller, Woehr & Hudspeth (2002) find that there are serious flaws which they seek to overcome by proposing yet another new measure (the “Multidimensional Work Ethic Profile”). Existing scales are accused of several shortcomings. First of all, they are claimed to provide unidimensional rather than multidimensional definitions of the construct. Second, they rest on the assumption that there exists a globally shared notion of work ethic, and are thus ignoring cultural differences. Third, existing measures fail to catch work ethic in its entirety and are instead restricted to dealing with its particular components. Finally, it is stated that for the most part, existing scales are relatively dated. Even though this does not affect their validity, there might be concern as to whether the questionnaire items are still adequate. The sex-biased language of items such as “*Hard work makes a man a better person*” (Blood, 1969), “*The man who can approach an unpleasant task with enthusiasm is the man who gets ahead*” (Mirels & Garrett, 1971) and the like seem hardly appropriate for present-day research.

In order to make up for these flaws, the authors aim at constructing a measure that assesses each of the components identified by prior research. Moreover, they seek to gauge the extent to which existing scales demonstrate convergent and discriminant validity with measures of constructs like cognitive ability, personality, and other organizationally relevant factors (e.g., job satisfaction, organizational commitment, job involvement).

Using explanatory factor analysis, the seven existing work ethic scales are analyzed. This procedure basically replicates the analysis conducted by Furnham (1990a, 1990b), however, with differing results. Other than Furnham, Miller, Woehr & Hudspeth come up with a six-factor solution, containing “hard work”; “leisure”; “centrality of work”; “wasted time”; “religion/morality”; and “self-reliance”. Beyond, the authors argue that existing measures fail to incorporate another critical component of the work ethic construct, namely, orientation towards the future, respectively, postponement of rewards (labelled as “delay of gratification”). This hitherto omitted variable enters the measure as a seventh factor. Contrary to Blau

& Ryan (1997), Miller, Woehr & Hudspeth's measure includes the controversial "religion/morality" dimension², even though it is stated that research "has failed to find a consistent relation between religious orientation and work ethic beliefs" (Miller, Woehr & Hudspeth 2002, p. 453).

In sum, the review of the methodological literature on the PWE concept yields two lessons: First, it seems to have become common sense that the PWE construct is made up of four core components (hard work, no leisure, asceticism, independence/self-reliance). Second, the question of whether or not religion and morality do matter, causes major disagreement. Discussing this exact issue is one of the tasks of the following section.

4. The Protestant Work Ethic in comparative perspective

A third strand of literature explores the PWE construct in comparative perspective. This line of inquiry can be divided into two different subfields, one dealing with PWE values *within* a distinct cultural setting, and a second one looking at differences *across* countries. While the former focuses on comparing compliance with PWE values among certain groups (for instance, self-employed versus employees; employed versus unemployed etc.), the latter investigates whether PWE is indeed stronger among countries with manifest Protestant roots.

Undoubtedly, the Weberian PWE was derived from distinct Protestant ideologies, and Weber himself claimed that "it is a fact that Protestants [...] have shown a special tendency to develop economic rationalism which cannot be observed to the same extent among Catholics [...]" (Weber 1930, p. 2). Hence, Weber explicitly draws a line between Protestant and Catholic work attitudes at the eve of industrial revolution³. While the PWE emerged in the context of Protestant ideology, it soon "escaped from the cage" (Weber 1958 [1930], p. 181), hence, the relation between Protestant belief and internalization of the PWE was no longer relevant. As Scaff puts it, "the ethos had in fact extended beyond the point of local origin in ascetic Protestantism to acquire 'universal' significance [...]" (Scaff 1989, p. 89)

² For a detailed discussion of this issue, see section 3.

³ Weber quotes a contemporary writer, who formulates the differences between Protestant's and Catholic's attitudes toward economic life as follows: "The Catholic is quieter, having less of the acquisitive impulse; he prefers a life of the greatest possible security, even with a smaller income, to a life of risk and excitement, even though it may bring the chance of gaining honor and riches. The proverb says jokingly, 'either eat well or sleep well'. In the present case the protestant prefers to eat well, the Catholic to sleep undisturbed." (Weber 1958 [1930], p. 40f)

Weber himself stresses that PWE values did soon become the underlying principles of the capitalist economic order, thus blurring the religious roots of the PWE concept. Writing at the beginning of the 20th century, he states that “the people filled with the spirit of capitalism to-day tend to be indifferent, if not hostile, to the Church. The thought of the pious boredom of paradise has little attraction for their active natures [...]” (p. 70). It turns out that even at the times of Weber’s writing, the PWE was apparently no longer distinctly Protestant. Along those lines, Blau and Ryan (1997) point out that religious and moral belief factors have been clearly deemphasized by a number of behavioral studies (Blau and Ryan 1997, p. 438).

Till this day, it is not entirely clear whether the PWE is exhibited more strongly by Protestants, or if it has become a universally shared concept instead. Departing from that controversy, a number of studies are tackling the differences in PWE values across demographic factors, cultures and nations.

Weaver (1997b) examines the “work ethic myth” about self-employed people in the United States and concludes that self-employed exhibit higher scores on PWE measures than organizational employees. Another within-group study is provided by Hassall, Muller & Hassall (2005), who compare PWE among employed and unemployed in Australia. Surprisingly, the commitment to PWE values was equally pronounced among both groups. Finally, an analysis by Wentworth and Chell (1997) investigates the demographic aspects of PWE. Analyzing data gathered from 422 American university students, the authors show that belief in PWE is greater among younger, undergraduate, and non-American students. Weaver (1997a) observes PWE support over time and finds that, contrary to common perceptions, work ethic in the United States has not declined during the 1972-1991 period.

The remainder of this section deals with the question of whether the PWE is a predominately Protestant, or instead a universally shared construct. To this day, the issue provokes considerable debate, which is not surprisingly, given the fact that it touches upon fundamental questions of modernization theory. Does political and economic change bring about shifts in values? Or do traditional values persist and cultural heritages continue to insert their influence despite profound political and economic changes?⁴

On the one hand, Ray (1982) concludes that PWE values are nowadays shared universally, regardless of religious orientations, and that all major religions are stressing the importance of work. It is claimed that even though the concept originated from a religious context, it has become secularized, and thus, universally shared rather than particularly Protestant. As a result, Ray states that the

⁴ Addressing this very question, Inglehart and Baker (2000) find evidence of both massive cultural change and the persistence of distinctive cultural traditions.

Protestant work ethic is "... certainly not dead; it is just no longer Protestant" (p. 135).

On the other hand, there is evidence contradicting the notion of a universal work ethic, and yielding support for the thesis that the PWE concept is still most strongly exhibited by Protestants, respectively, by regions with considerable Protestant heritage. Niles (1999), for instance, investigates the meaning of work in two different cultures, one "Western"/Protestant (Australia) and one "non-Western"/non-Protestant (Sri Lanka), and finds that both have similar perceptions about work. Yet, unlike Sri Lankans, Australians agree more enthusiastically with the belief that hard work leads to success. Similarly, Arslan (2001) assesses belief in PWE values among Protestant British, Catholic Irish and Muslim Turkish Managers, and comes to reason that PWE is strongest among Protestants and weakest among Muslims. Hence, it can be concluded that there are valid arguments for each of the two positions.

Given this deep disagreement, a possible strategy lies in abandoning the idea of an either distinctly Protestant or universal work ethic as a whole, and in identifying culturally specified work ethic concepts instead. This very path is followed by Ali (1988) and Yousef (2001), who suggest an Islamic Work Ethic (IWE).

In short, the IWE rests upon very similar assumptions as the PWE, however, with different ideological underpinnings. Drawing back on Islamic schools of thought, Ali (1988) describes the IWE as follows: "Work is an obligatory activity and a virtue [...] Success and progress on the job depends on hard work and commitment to one's job" (p. 577). Yousef demonstrates that IWE's assumptions can be traced back to the Quran ("The Quran is against laziness and waste of time by either remaining idle or engaging oneself in unproductive activity", p. 153). However, the IWE is not only corresponding, but also exceeding the PWE, i.e., new issues and values play a role: "The Islamic Work Ethic emphasizes cooperation in work, and consultation is seen as a way of overcoming obstacles and avoiding mistakes. Social relations at work are encouraged in order to meet one's needs and establish an equilibrium in one's individual and social life" (Yousef, p. 153)⁵. While Protestant work values stress individual achievement, IWE puts more emphasis on community and societal welfare (cf. Ali 1988, p. 577). Hence, the IWE can best be understood as a tool for capturing the complexity of work ethic in particular cultural and regional settings.

Summing up, the initial question of whether the PWE construct is still distinctly Protestant or has become universally shared instead, rests blurry and vague. However, it is safe to say that the PWE construct is an originally Protestant concept which has indeed escaped the cage and at least implicitly turned into benchmark for good work ethics in general.

⁵ As with the PWE, there is considerable debate about the operationalization of the IWE concept. Yousef assesses IWE using a 46-item scale proposed by Ali (1988).

5. Interactions with other work-related concepts

A final strand of literature tackles the relationships between PWE and other work-related concepts. The studies presented below are part of a huge research body dealing with the interactions between work and organizational commitment, attitudes and values. The overwhelming part of this literature is located in the fields of social psychology, business studies and organizational sociology.

Dose (1997) sets out to combine research from different angles, namely, vocational, management and organizational behavior literature as well as research on the PWE concept, in order to provide an analytical framework for work values in general. A two-by-two dimensional structure is suggested, ranging from personal to social consensus-type values, and from moral to preference values. The attempt to combine very diverse approaches thus leads to suggesting a structure which can be viewed as a lowest common denominator, and as a starting point for further differentiation. While Dose (1997) goes for the highest degree of simplification, Mudrack (1997) is concerned with capturing the complexity of the PWE construct, and aims at assessing its potential multidimensionality.

Using the 19-item Mirels and Garrett (1971) scale on a sample of 267 MBA-students with a mean age of 27.5 years, Mudrack conducts factor analyses of the PWE construct. Four components are revealed (hard work, asceticism, negative views of others, anti-leisure). Correlation analysis explores the relations between the four PWE facets and three distinct multidimensional work variables: time structure and purpose (present versus future orientation); work locus of control (internal versus external locus of control); and Type A behavior (acting under constant time pressure, performing multiple tasks at the same time, working and speaking rapidly, frequently exhibiting aggressiveness and competitiveness). The results implicate that the PWE is in fact a multidimensional variable.

Inspired by, as well as building on the aforementioned work by Ali (1988), Yousef (2001) sets out to identify relations between the Islamic Work Ethic and two specific work-oriented concepts, namely, organizational commitment and job satisfaction. Addressing the interrelations between IWE and other work-related constructs, he contributes to existing literature by adding a new cultural perspective.

Using the IWE measure developed by Ali (1988), data is gathered from 425 Muslim employees in the United Arab Emirates (UAE), of whom more than 50 percent were not born in the UAE, but in other Arab countries. The empirical results suggest that IWE directly influences both organizational commitment and job satisfaction. Furthermore, it is found that IWE moderates the relation between the two constructs. In a second step, Yousef examines the impact of IWE and national culture on both organizational commitment and job satisfaction. It turns out that unlike IWE, national culture does not act as a moderator, and that

support of IWE differs across age, education, work experience, national culture, organization type (manufacturing or service), and ownership (private or public). Yousef concludes that higher internalization of IWE values leads to both higher job satisfaction and greater organizational commitment. Yet, since the data was collected from a sample consisting of predominately male, highly educated employees, working in government or service organizations, the generalizability of the results could be called into question.

In a similar vein, Abu-Saad (1998) investigates the relation between Islamic work beliefs and individualism. In a first step, the IWE concept is factor analyzed, resulting in three IWE dimensions; in a second step, the relations between the three IWE components and individualism are examined. Using data from Arab teachers in Israel, it is found that while the dominant IWE factor (personal and organizational obligations) is not significantly linked to individualism, there is a moderately significant correlation between the remaining two IWE factors and the individualism index.

Yet another interaction, namely the relation between PWE and organizational citizenship behaviour, is highlighted by Ryan (2002), who departs from the question of why employees would engage in work that enhances organizational performance, but is not necessarily rewarded by the employer. It is suggested that part of the question can be answered by assessing the extent to which an employee endorses the PWE. Accordingly, the main interest focuses on the relation between PWE and organizational citizenship behaviour. By employing two separate survey data samples, it is found that there is a positive, significant relation between organizational citizenship behaviour and two PWE dimensions, namely, hard work and independence.

Christopher and Jones (2002) address the relation between PWE and the need for cognition, and find that while the PWE factor of hard work is negatively correlated with the need for cognition, there is a positive relation between the PWE factor of anti-leisure and the need for cognition. Briefly, the results point out the multidimensional structure of the PWE concept.

All of the above-cited analyses seek to shed light on the blurry concept of PWE and its interactions with other work-related concepts. The scope of research is, however, rather descriptive and aims at spotting details of the "big picture". Nevertheless, unravelling the conceptual entanglement and contributing to theoretical accuracy remains a vital task for future research.

6. Conclusions and implications for further research

Going back to the introductory question of whether and how the Weberian concept is used in current research and theory building, it is safe to say that it still draws the attention of various disciplines and thus, continues to matter. The following section concentrates on the major strengths and weaknesses of the reviewed literature and makes suggestions for further research. What is the state of the art regarding the research on the famous Weberian concept? How has the construct been interpreted, perceived and measured? Is it applicable to any context, regardless of religious or cultural predispositions? Is it, thus, a universal concept?

To cut it short, the present exercise reveals two insights, one mainly technical, and one rather conceptual.

First of all, as we have seen, existing research has tackled Weber's original thesis and its implications in great detail. Yet, when it comes to the question of whether or not the findings can be generalized, some doubts may be raised. The most serious shortcoming is certainly the fact that the overwhelming majority of the results are based upon data gathered from college students. Even though this is obviously an easy, administrable, and above all, very cost-effective method of collecting data, one should keep in mind that any findings derived from these data can hardly be generalized. Future research should make an effort to gather data from different samples, or, at least, be more explicit about the limitations and biases induced by narrow data bases.

Second of all, we do still lack a widely accepted, psychometrically sound way of measuring PWE. The main bone of contention concerns questions of religious and moral dimensions of the PWE construct: Has the Protestant Ethic become engraved into capitalist culture, has it become an underlying principle of modern (as supposed to traditional) modes of production and thus, a core value of advanced industrial societies, regardless of individual religious and moral entitlements? The goal to develop a "current, practical and psychometrically sound measure" (Miller, Woehr & Hudspeth 2002, p. 482), applicable across religious orientations, has only partially been achieved. Yes, there has been considerable work on that matter, and existing scales might be doing a better job in capturing the entirety of the work ethic concept than prior ones. Nevertheless, the ambitious task to render the measure universally valid and to ensure that it is applicable across cultures has undoubtedly not been fulfilled in a satisfactory manner. None of the reviewed studies makes visible efforts to modify or adapt the questionnaire items to a global or cross-cultural context. Miller, Woehr & Hudspeth 2002 seem to at least partially account for this problem, since they attach importance to testing the validity of their measure among groups with differing socio-economic backgrounds (university students and Airforce enlisted personnel). Those respondents are most probably representing very different religious

views and moral proveniences, but yet, the fact that empirical testing was administered only in US-American settings yields little evidence for a universal claim of the measure. In general, not one of the reviewed studies explicitly addresses the question of whether the PWE is of global range.

Why is that? As the preceding review revealed, there is considerable dispute about the theoretical conceptualization of the PWE. It is due to this very problem that methodological research has become stuck. In order to overcome this gridlock, there is no other way but to figure out the theoretical underpinnings of the PWE concept. Only by clarifying the conceptual background, questions of operationalization and measurement can be addressed. Eventually, it comes down to the complex interactions between culture, behaviour and economics. Further work on the theoretical foundations of the PWE might inspire research on the specific effects of work ethics on economic outcomes - an issue which has so far been ignored by the growing literature on interactions between culture, behaviour and economic outcomes.

Lastly, even though the idea of the PWE is nothing new, and in fact probably one of the oldest concepts in the field of social sciences, existing research centers around questions of its theoretical scope, the internal and external validity of measures, its acceptance and internalization among different groups, and its relations to other work-related concepts. Unlike Weber, the bulk of existing literature considers PWE primarily as a dependent variable: What are the core determinants of PWE? How do variables such as socio-economic status or religious predispositions intermingle with support of the PWE? To what extent does the PWE differ from other work-related constructs?

It seems, however, that research has lost sight of the possible explanatory power of the PWE concept, and thus, lost sight of the original Weberian intention. Integrating PWE as an independent variable into existing models might be a highly promising task. After all, it was Weber himself who brought up the idea of PWE as a determinant of economic development, and thus, as an explanatory rather than dependent variable.

In particular, the work ethic construct might be of use regarding the growing literature on interactions between culture, institutions and economic outcomes, which demonstrates that individuals' preferences are rooted in cultural orientations acquired through socialization within a society's historical heritage (Algan and Cahuc 2006). This line of inquiry has found that culture matters for a number of economic outcomes, such as savings across countries (Guiso et al., 2006), employment rates (Algan and Cahuc 2005, Fernandez and Fogli 2005), trust towards a third party (Guiso et al., 2004, Tabellini 2005), and fertility rates (Fernandez and Fogli 2004, Fernandez and Fogli 2005). So far, however, the notion of work ethics has not been addressed by this strand of literature, even though it might yield considerable new insights. Thinking about the possible explanatory potential of the work ethic concept, cross-country differences regarding labor

market outcomes come to mind. Why not integrating the work ethic construct as a new explanatory variable into existing models assessing labor market and employment performance? In this very vein, a recent study by Feldmann (2007) examined the relationship between Protestantism and labor force participation across countries and found that predominately Protestant countries have substantially higher labor force participation and employment rates, especially among women. Hence, there is reason to assume that the explanatory potential of the work ethic concept is increasingly being re-discovered. The Protestant Work Ethic is not, and never has been, an outdated idea, but instead continues to attract attention in a variety of contexts.

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