THE “PROTESTANT ETHIC” REVISITED: A TWENTIETH-CENTURY LOOK

JAMES BRADFORD DE LONG

Harvard University and NBER

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Development and Convergence

Economists have a strong presumption that countries should rapidly “converge” to First World standards of living and levels of productivity once the foundations of development—the educational and material infrastructure necessary to take advantage of modern industrial technology—have been laid. Their logic is straightforward: The immense present-day per capita income lead of the industrial democracies over the rest of the world is principally based not on greater rates of saving but on the application of the storehouse of industrial and administrative technology created by the Industrial Revolution.[1] This storehouse is open to all: modern technology is by and large a public good. Key technologies, from double-entry bookkeeping through automatic textile machinery to petroleum cracking plants, are no one’s private property. The benefits of tapping into this open treasure house of technology are so great that every nation should strain every nerve to assimilate it. Income levels, therefore, should rapidly converge to those of industrial nations once the preconditions for modern economic development—for taking advantage of modern industrial technology—have been established.[2]

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[1]See Robert Solow, “Technical Change and the Aggregate Production Function,” *Review of Economics and Statistics* 39 (April 1957): 312-20; Robert Solow and Peter Temin, “The Inputs for Growth,” in Peter Matthias and M.M. Postan, eds., *The Cambridge Economic History of Europe*, vol. VII (Cambridge, UK: Cambridge University Press, 1979), pt. 1: 1-27.

[2]See, for example, William Baumol, “Productivity Growth, Convergence, and Welfare: What the Long Run Data Show,” *American Economic Review* 76, 5 (December 1986): 1073-85; Moses Abramovitz, “Catching Up, Forging Ahead, and Falling Behind,” *Journal of Economic History* 46, 2 (June 1986): 385-406; Angus Maddison, *Phases of Capitalist Development* (Oxford: Oxford University Press, 1982); Alexander Gerschenkron, *Economic Backwardness in Historical Perspective* (Cambridge, MA: Harvard University Press, 1962).

> [T]he larger the technological and... productivity gap between leader and follower [nations]... the faster one expects the follower's growth rate to be. Followers tend to catch up faster if they are initially more backward.[3]

If this perspective were appropriate, the principal task of development would be to clear the ground for the technological borrowing and investment that leads to "convergence." A developing nation would be like a stone at the top of a hill stuck in a rut: a good kick would be necessary to dislodge it, but once dislodged gravity would take over

Yet there is a major flaw in this picture of economic development: the historical record shows few signs of "convergence" in operation.[4] The simplest and most striking way to make this point is to step back a century to 1870 and determine the size and shape of the "First World" then. In 1870 the First World had several components.[5] One comprised the industrial and rapidly industrializing nations of Northwestern Europe—Great Britain, Belgium, Holland, France, Germany, the Austrian provinces that were to become Austria and Czechoslovakia after World War I, and Switzerland—that together formed the industrial core of the world economy; a second comprised the rich, European-settled countries that provided the industrial core with primary agricultural and mineral products—Denmark, Canada, the United States,[6] Australia, New Zealand, Argentina, Chile, and Uruguay.[7] Alongside these two groups of members of the First World in 1870 stood a group of possible future members: European countries—Ireland, Norway, Sweden, Finland, Italy, Spain, and Portugal—to which industrialization had started to spread by 1870 and

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[3] Abramovitz, "Catching Up, Forging Ahead, and Falling Behind," p. 386.

[4] See J. Bradford De Long, "Productivity Growth, Convergence, and Welfare: Comment," *American Economic Review* 78, 5 (December 1988): 1138-54.

[5] See W. Arthur Lewis, *The Evolution of the International Economic Order* (Princeton, NJ: Princeton University Press, 1978), and *Growth and Fluctuations 1870-1914* (London: Allen and Unwin, 1982) for this division of the rich countries of the world into European industrial nations and European-settled agricultural nations.

[6] The United States does not fit well into this categorization. The New England and Middle Atlantic states were part of the industrial core of the First World as it stood in 1870; the rest of the U.S. was part of the rich primary product-producing zone.

[7] See A. G. Ford, *The Gold Standard 1880-1914: Britain and Argentina* (Oxford: The Clarendon Press, 1962) for a description of the very strong economic links between the Southern Cone of South America and industrial Europe at the end of the nineteenth century. .See Carlos Díaz-Alejandro, *Essays on the Economic History of the Argentine Republic* (New Haven, CN: Yale University Press, 1970), for a strong statement of the claim that Argentina before World War I was a clear part of the First World.

which, although poor, appeared well-suited to take advantage of the logic of convergence.[8]

Now jump forward a century. What is the size and shape of the First World today? What countries today have standards of living and levels of productivity that stand head and shoulders above the rest of the world? One country—Japan—that no European in 1870 saw as a potential candidate for membership has joined the First World.[9] Japan's relative success is all the more striking given that outsiders at the turn of the century saw it as having all the standard blockages to development. Jagdish Bhagwati quotes from a report written in 1915 by an Australian expert: "My impression as to your cheap labour was soon disillusioned when I saw your people at work. No doubt they are lowly paid, but the return is equally so; to see your men at work made me feel that you are a very satisfied easy-going race who reckon time is no object. When I spoke to some managers they informed me that it was impossible to change the habits of national heritage."[10]

Several of the European nations that in 1870 had good development prospects have become members of the First World—Norway, Sweden, Finland, and Italy. Some of the European nations that in 1870 appeared possible candidates have not yet managed to converge to First World levels of productivity—Spain, Portugal, and Ireland. And one entire group of countries—the European-settled, temperate nations of the Southern Cone of South America—that had appeared firmly on the road to development in 1870 had fallen far behind the world's industrial leaders.

To make the same point in more quantitative terms, consider the set of twenty-four countries that either were members of the First World or were on the road to development in 1870. Levels of gross domestic product per head for these countries (plus Japan) are given in table 1.[11]

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[8]See Sidney Pollard, *Peaceful Conquest* (Oxford: Oxford University Press, 1982).

[9]For Japan's economic development, see Kazushi Ohkawa and Henry Rosovsky, *Japanese Economic Growth: Trend Acceleration in the Twentieth Century* (Palo Alto, CA: Stanford University Press, 1973). For a debate on how rich Japan was at the end of the Tokugawa era, see Susan Hanley, "A High Standard of Living in Nineteenth Century Japan: Fact or Fantasy?" *Journal of Economic History* 43, 1 (March 1983): 183-92; and Yasukichi Yasuba, "Standards of Living in Japan Before Industrialization," *Journal of Economic History* 46, 1 (March 1986): 217-24.

[10]Jagdish Bhagwati, "Development Economics: What Have We Learnt?" (Manilla: Asian Development Bank Distinguished Speakers Lecture, 1983); quoted in T.N. Srinivasan, "Comment on Lord Bauer," in Gerald Meier and Dudley Seers, eds., *Pioneers in Development* (Oxford: Oxford University Press for the IBRD, 1984), 53.

[11]Per capita GDP levels are given at 1988 prices in terms of the "international dollar" measure of Alan Heston, Irving Kravis, and Robert Summers. This measure compares relative productivity levels by assessing goods and services at relative prices that correspond to the average prices present worldwide and not at the prices of any one

In 1870, the standard deviation in percentage terms of their relative levels of total gross domestic product per capita was 29.7 percent. In 1979, the standard deviation in percentage terms of the relative levels of total gross domestic product per capita for the same group of nations was 31.5 percent. All nations in the group have grown richer: the citizens of Uruguay today have a standard of living equivalent in terms of material goods and services to three times the standard of living of Uruguayans in 1870, or 1.75 times the standard of living of Uruguayans in 1913. But these nations have not converged: the relative spread of their per capita income levels today is as great as it was in 1870.

SECURITY OF PROPERTY

The failure of "convergence" to show itself in the development experience over the past century of those countries that were rich in 1870 is bad news for the view that the logic of convergence will inevitably drive development once the educational and material infrastructure necessary is in place. Those countries relatively rich in 1870 were precisely those that were in the best position to take advantage of the wave of industrial technology. Yet a number of them have failed to do so at a rate sufficient to bring them up to the productivity levels of the world's industrial leaders today. First World status appears to be difficult to gain—only Japan has risen

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country. One alternative, comparing relative productivities using U.S. prices, would show smaller differences between nations in standards of living; goods and services produced by unskilled labor would be given a high relative value because of the high relative wage paid to unskilled labor in the U.S. Another alternative, comparing relative productivities at current exchange rates, would show larger differences between nations in standards of living; services in the industrial democracies would then be valued as worth much more in terms of traded commodities than services in less industrialized countries. For details of income estimation for the individual countries, see De Long, "Productivity Growth, Convergence, and Welfare," 1148-52; and J. Bradford De Long, "Have Productivity Levels Converged? Productivity Growth, Convergence, and Welfare Revisited" (Cambridge, MA: National Bureau of Economic Research Working Paper 2419, 1987). For the "international dollar measure," and for post-World War II comparisons of relative living standards and productivity levels, see Irving Kravis, Alan Heston, and Robert Summers, *The United Nations International Comparison Project: Phase II: International Comparisons of Real Product and Purchasing Power* (Baltimore, MD: Johns Hopkins University Press, 1978); and Summers, Robert, and Heston, Alan, "Improved International Comparisons of Real Product and Its Composition, 1950-1980," *Review of Income and Wealth* 30 (Summer 1984): 207-62.

from scratch to a position as one of the world's industrial leaders over the past century[12]—and depressingly easy to lose.

The central task of development thus becomes not simply the creation of the infrastructure necessary for convergence but the more difficult problem of maintaining the "social capability"[13] to take advantage of modern technology. There have for centuries been two broad schools of thought on what the principal determinants of "social capability" to seize opportunities for growth are. One school has focused on the necessity of an honest government that provides incentives for potential merchants and manufacturers to produce goods rather than to bribe bureaucrats: "security of property" is thus seen as the principal requirement for creating and maintaining an ability to take advantage of economic growth opportunities. A second school has focused on the necessity of a strong drive to accumulate on the part of entrepreneurial classes: a class inculcated with an ethic of hard work and accumulation is seen as the principal precondition for seizing growth opportunities.

The point of reference of the "security of property" school is Adam Smith:

> In those unfortunate countries, indeed, where men are continually afraid of the violence of their superiors, they frequently buy and conceal a great part of their stock [capital], in order to have it always at hand... in case of their being threatened with any of those disasters to which they consider themselves as at all times exposed. This is said to be a common practice in Turkey, in Indostan, and, I believe, in most other governments of Asia. It seems to have been a common practice among our ancestors during the violence of the feudal government...[14]

Smith attributes both the relative poverty of Asia and the prosperity of Britain to the absence or presence of security of property:

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[12] But more such examples will exist in a generation. Singapore, Hong Kong, Trinidad and Tobago, South Korea, and Taiwan are obvious possibilities. And some of the high-income oil-exporting nations—Kuwait, Libya, Saudi Arabia, and the United Arab Emirates—may well be able to turn their resource-based wealth into education- and industry-based wealth over the next thirty years.

[13] Abramovitz, "Catching Up, Forging Ahead, and Falling Behind," 387-390; and Ohkawa and Rosovsky, *Japanese Economic Growth*, chapter 9.

[14] Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations* (Oxford: Oxford University Press, 1976; originally published 1776), 285. Adam Smith's *Wealth of Nations* contains a view of economic development that was held by many of the political and historical writers of the Scottish Enlightenment. See David Hume, *Essays Moral, Political, and Literary* (London: Longmans, Green, 1898; originally published 1752), Albert Hirschman, *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph* (Princeton, NJ: Princeton University Press, 1977).

> That security which the laws of Great Britain give to every man that he shall enjoy the fruits of his own labour, is alone sufficient to make any country flourish.... The natural effort of every individual to better his own condition, when suffered to exert itself with freedom and security [of property], is so powerful a principle, that it is alone, and without any assistance, not only capable of carrying on the society to wealth and prosperity, but of surmounting a hundred impertinent obstructions with which the folly of human laws too often encumbers its operations..."[15]

In Smith's view, the "causes [of British prosperity] seem to be, the general liberty of trade... the liberty of exporting, duty free... to almost any foreign country and... the unbounded liberty of transporting [goods] ... from any one part of our own country to any other... but above all, that equal and impartial administration of justice which renders the rights of the meanest British subject respectable to the greatest, and which, by securing to every man the fruits of his own industry, gives the greatest and most effectual encouragement to every sort of industry."[16] The key to maintaining the social capability for growth lies in a secure, predictable, and unbribeable legal system; in a government that does not impose too heavy a tax burden; and in a government that does not try to direct enterprise along "mercantilist" lines[17] but instead lets individual entrepreneurs choose where they think their capital and energy will be most productive.[18] And those countries rich in 1870 that have failed to keep up with the world's industrial leaders are those countries where governments have discouraged investment and enterprise by arbitrarily

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[15] Smith, *Wealth of Nations*, 540. Smith is arguing that British prosperity does not prove that Britain's mercantilist policies are good, but only that Britain's other advantages are so great that they have no done decisive harm.

[16] Smith, *Wealth of Nations*, 610.

[17] Smith, *Wealth of Nations*, Book IV, chapters i through 8.

[18] For modern restatements of Smith's position, see Deepak Lal, *The Poverty of "Development Economics"* (Cambridge, MA: Harvard University Press, 1985), or Mancur Olson, *The Rise and Decline of Nations* (New Haven, CN: Yale University Press, 1982). P.T. Bauer provides a powerful statement of this view, criticizing government commodity marketing boards in West Africa as a case of arbitrary and oppressive taxation: "The ...arrangements...promptly developed into a system... of heavy, persistent, and discriminatory taxation...that...reduced the development of cash crops... obstructed the emergence of a prosperous African peasantry... and served as a dominant source of money and patronage for those with political power." See P.T. Bauer, "Remembrance of Studies Past," in Gerald Meier and Dudley Seers, eds., *Pioneers in Development* (Oxford: Oxford University Press for the IBRD, 1984), 39. For a similar story of the strangling of market- and export-based development for the short-run benefit of the state's personnel and the state's foreign creditors, see David Landes, *Bankers and Pashas* (Cambridge, MA: Harvard University Press, 1953).

confiscating the fruits of industry and enterprise.

The Protestant Ethic

The second school of thought finds its point of reference in the German economist Max Weber and his turn of the century essay *The Protestant Ethic and the Spirit of Capitalism.*[19] Weber's starting point was his belief that primarily Protestant communities and lineages had accumulated wealth at a faster rate than primarily Catholic communities and lineages in the two and a half centuries since the Reformation. He asked why this might be so. A first possible answer would be that the medieval church was profoundly hostile to acquisitive economic activity: *homo mercator vix aut numquam placere potest Deo*—a man acting as a merchant can do nothing pleasing to God. The Reformation carried with it the collapse of religious authority over everyday life. Freed, in Protestant areas, from religious control economic activity flourished.[20]

Weber argued that this first possible answer was wrong, for the Reformation was as much a rebellion against the lack of churchly authority over secular life as a rebellion against the church hierarchy. The first few generations of Protestants were, if anything, more hostile to secular acquisitiveness than contemporary Catholics. There was no place at all for an acquisitive secular merchant—or for anyone whose mind was not constantly focused on God—in a Puritan commonwealth like, say, New England during the middle third of the seventeenth century.[21]

Weber's view of the connection between the Protestant ethic and the spirit of capitalism was more subtle. The first step was the Calvinist idea of the "calling": God had ordained for each of us a place in the world so that we could carry out his plan. A Godly man would carry out their roles in His plan diligently and enthusiastically—whether his place was to be Governor of Massachusetts or a herring merchant. A Godly man, moreover, would not allow affairs of this world to pull his mind away from God. Secular enjoyment and consumption was therefore a

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[19] Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Charles Scribners' Sons, 1958; originally published 1904-5).
[20] This argument is made by R.H. Tawney, *Religion and the Rise of Capitalism* (London: Longmans, 1926).
[21] See Edmund S. Morgan, *The Puritan Dilemma* (??).

potential danger. The net effect of Calvinist theology on individual psychology was to break the link between production and consumption. The Godly produced because diligent application to one's calling was a duty owed to God; they did not consume too much because a second duty owed to God was to avoid excessive enjoyment of the things of this world; as a result, they accumulated.[22]

The second step was that this pattern of behavior—the belief that one has a duty both to work diligently and to abstain from excessive consumption—outlasted the religious matrix that gives it birth. Cotton Mather believes that a good man is diligent in his business and sober in his pleasure because such is his duty to God.[23] Benjamin Franklin believes that a good man is diligent in his business and sober in his pleasure because such is his duty—period.[24] As Weber says, "Economic acquisition is no longer subordinated to man as the means for the satisfaction of his material needs.... The earning of money within the modern economic order is, so long as it is done legally, the result and the expression of virtue and proficiency in a calling; and this virtue and proficiency are, as it is... not difficult to see, the real Alpha and Omega of Franklin's ethic."[25]

This, in Weber's view, is the true relationship between Protestantism and economic development. Radical Protestantism led to an ethos of diligence in one's business combined with the "avoidance of all spontaneous enjoyment of life" that outlasted the original religious impulse. The presence of entrepreneurial classes that held to this ethos played an important role in the process of accumulation. And Darwinian mechanisms (the "survival of the richest") in the marketplace ensured that those who held to this ethos would come to dominate the economy and set the tone for future generations.

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[22] Methodist founder John Wesley saw that his "religion must necessarily produce both industry and frugality, and these cannot but produce riches.... [T]he Methodists in every place grow diligent and frugal; consequently they increase in goods.... We ought not to prevent people from being diligent and frugal; we must exhort all Christians to gain all they can, and to save all they can; that is, in effect, to grow rich." Quoted by Weber, *The Protestant Ethic*, 175. Wesley worried that the wealth and prosperity that were the concomitant of his doctrines would undermine faith by leading to "pride, anger, and love of the world in all its branches.... So, although the form of religion remains, the spirit is swiftly vanishing away."

[23] Cotton Mather, *Essays to do Good* (??)

[24] Benjamin Franklin, *Advice to a Young Tradesman*, quoted in Weber, *Protestant Ethic*, p. 55.

[25] Weber, *Protestant Ethic*, 53-4.

Two important additional points deserve mention here. First, in Weber's schema the key to the growth of industrial capitalism is not the presence of a *Protestant* ethic but the presence of a *work* ethic. Any other ethic of hard work and accumulation would have served as well as the Protestant ethic from an economic point of view.[26]

Second, Weber's attitude toward the Protestant ethic is at best ambivalent, for Weber believes that those who hold to the Protestant ethic are not sane. It made sense for a believing Calvinist to perform his duties of diligence and sobriety, for only those who were diligent and sober could be counted among the blessed who would enter Heaven after the Last Judgment.[27] Hard work and the avoidance of excessive consumption thus fulfilled the important spiritual need of keeping one's hope of Heaven alive.

But it makes no sense for someone who does not believe in Calvinist theology to work hard and refrain from enjoyment. In Weber's view, divorced from the broader religious context that gave it meaning, the Protestant ethic and the economic world it supports are "an iron cage" which may end in "mechanized petrifaction, embellished with a sort of convulsive self-importance." A culture of "specialists without soul and sensualists without passion, this nullity imagines that it has attained a level of civilization never before achieved."[28] Although Weber claims that he does not want to burden his discussion with "judgments of value and of faith," in his estimation the damage resulting from the triumph of the Protestant ethic outweighs the additional material prosperity generated. And Weber's assessment was not an uncommon one in the first half of this century: John Maynard Keynes, for example, looked forward to the collapse of the Protestant ethic in an age in which mankind had "solved the economic problem" and could "value ends above means and prefer the good to the useful. We shall honour those who can teach us how

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[26] And, indeed, has done so elsewhere according to Robert Bellah, who has argued that Japanese variants of Buddhism played the same role in Japanese commercialization and industrialization as Calvinism did in European industrialization. See Robert Bellah, *Tokugawa Religion* (Cambridge, MA: Harvard University Press, 1957).

[27] And even some of the diligent and sober would be consigned to Hell. But if you were not diligent you knew that you were destined for hell. If you were diligent it was possible you might attain heaven.

[28] Weber, *Protestant Ethic,* 181-2.

to pluck the hour and the day virtuously and well..."[29]

Which of these two schools is more correct as an explanation of the failure of convergence has implications for long-run development policy. If the "security of property" school has put its finger on the only important reason for the absence of convergence, then clear conclusions follow: a good development program would help create the educational and material infrastructure for absorbing modern technology and then try to reduce the activist state as much as possible so that growth will not be stalled by government interference.

If the "work ethic" has also played a significant role, then the problems of development are much more difficult to tackle and the implications much more cloudy. Future generations would benefit from the implantation of an accumulative, acquisitive ethic in the present, and the present generation would benefit materially. But Weber and Keynes, at least, do not believe that converting someone to the ethic of accumulation is doing him a favor. Keynes especially had little but scorn for those who accumulated without ever reflecting on why they did so, living always for the future and never for the present:

> Of course [after the 'Economic Problem' is solved] there will still be many people with intense, unsatisfied purposiveness who will blindly pursue wealth—unless they can find some plausible substitute. But the rest of us will no longer be under any obligation to applaud and encourage them. For we shall inquire more curiously than is safe to-day into the true character of this 'purposiveness'.... For purposiveness means that we are more concerned with the remote future results of our actions than with their own quality or their immediate effects on our own environment. The 'purposive' man is always trying to secure a spurious and delusive immortality for his acts by pushing his interest in them forward into time. He does not love the cat, but the cat's kittens; nor, in truth, the kittens, but only the kittens' kittens, and so forward for ever to the end of cat-dom. For him jam is not jam unless it is a case of jam to-morrow and never jam to-day. Thus by pushing his jam always forward into the future, he strives to secure for his act of boiling it an immortality.[30]

By contrast, Benjamin Franklin—at least in his literary persona that gives advice to young

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[29] John Maynard Keynes, "Economic Possibilities for Our Grandchildren," in *Essays in Persuasion* (New York: W.W. Norton and Co., 1963; originally published 1932), 370-1.

[30] Keynes, "Possibilities," 371.

tradesmen—would see no problem: people have a duty to make something of themselves. But unless one believes that the accumulative ethic is good as an end in itself, whether it should be inculcated is tangled up with the question of what the present generation owes to the future. And the terms of the "partnership[s]... between those who are living, those who are dead, and those who have yet to be born" that are the nations of the world are not written down in black letters.[31]

TESTING HYPOTHESES

Some stress on "security of property" as an essential precondition for economic growth is surely justified. One clear twentieth century example of how governments can impoverish their people is given by the comparative experience of China and of emigrants from China in the twentieth century. In the Philippines, Malaysia, Hong Kong, Singapore, the United States, and many other countries, the descendants of the Chinese outmigration of the turn of the past two centuries have on average higher incomes than members of other ethnic groups. While China itself ranks twenty-third from the bottom in the World Bank's ranking of countries by per capita GNP, emigrants from China have been on average among the most economically successful of the migrant groups of the past century.

Gregory Clark argues that workers' wages and productivity depend not so much on the culture that they bring with them but on the environment in which they are placed:

> [E]vidence against the view that [textile] workers in low-wage countries were... incapable comes from the New England [textile] industry.... [I]n 1911... 27.8% of the workers... [were] Polish, Portuguese, Greek, or Italian, even though in Poland, Portugal, Greece, and Italy between three and six times as many workers were required... [to operate the same] machines.... Why did the Irish who happened to get on the boat to Lancashire exhibit lower efficiency... than those who... took the boat to New England?... Germany mills employed... migrant Poles, Swiss mills...migrant Italian[s]...and...Peruvian mills...Chinese... none of whom showed the... productivity of immigrants to... America.[32]

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[31] Edmund Burke, *Reflections on the Revolution in France* (New York: Doubleday, 1973; originally published 1792), 110.

[32] Gregory Clark, "Why Isn't the Whole World Developed? Lessons from the Cotton Mills," *Journal of Economic History* 47, 1 (March 1987): 166.

But is "security of property" and related factors the whole story? How should one judge whether difficult to alter and subtle cultural influences like those Weber tried to unravel in his *Protestant Ethic* have also played a principal role in keeping relative living standards apart?

Consider[33] the list of fourteen "candidate" countries in 1870 for future First World membership, the set of prosperous agricultural nations settled by Europeans and of barely industrializing nations of the European periphery. Examine their relative per capita income levels in 1979, along with whether they went through or were predominantly settled from countries that had undergone the Reformation and were thus exposed to the virus of the Protestant ethic. And note that the seven countries with predominantly Protestant religious establishments all have higher 1979 per capita income levels than the other seven countries.

United States (P)	$16,880
Canada (P)	$15,486
Sweden (P)	$13,566
Norway (P)	$13,321
Australia (P)	$12,673
Finland (P)	$11,603
New Zealand (P)	$9,719
Italy	$9,102
Spain	$8,735
Ireland	$7,182
Argentina	$6,417
Portugal	$5,853
Uruguay	$5,134
Chile	$4,808

If there is no systematic causal relationship between religious establishment and government policy, and if each country's political choices have no connection with those of its neighbors, then such a complete lineup by whether the country went through the Reformation is extraordinarily unlikely if the "security of property" school provides a correct and complete explanation. The odds against such a pattern emerging are 8191-1. But we do not believe that each country's politics is independent of its neighbors. Sweden, Norway, and Finland all swim in the same political currents. Factors that lead to political victories in Argentina are likely to be

[33] Leaving Japan to one side.

operating in Chile and Uruguay as well. So a better way to examine the evidence would be to accept that we have not fourteen observations, but six:

North America (P)	$16,600
Scandinavia (P)	$13,000
Australasia (P)	$12,000
Mediterranean	$8,800
Ireland	$7,200
Southern Cone	$5,600

The odds against this lineup by religion having happened purely by chance, unrelated to the possible implantation of a Protestant ethic of accumulation, are heavy but not astronomical: 63-1. If your prior view on whether the ethic of accumulation, or some similar factor correlated with the Reformation, was important or not was 50-50, and if the pattern above were completely unexpected news to you, then it would be rational to now place odds of 63-1 on the proposition that the accumulative ethic was important. And if your prior view was that you were almost certain—would give odds of 63-1—that the proposition that the ethic of accumulation or some correlated factor was of little importance, then it would now be rational to hold that the odds that such factors were at work and were important is 50-50.

The natural conclusion to draw from the pattern of relative economic growth exhibited by those nations that were rich in 1870 is that something like the Protestant, accumulative ethic has been at work promoting development. This is not to say that Weber's conceptualization of the relationship between culture and accumulation is the correct one. And it might be the case that the causal chain from the Reformation to high standards of living in 1979 runs through the channels stressed by the "security of property" school: that for some reason, Protestant countries tend to have *laissez-faire* governments.[34] But the correlation between the Reformation and twentieth century economic growth remains striking, and it appears highly likely that a correct explanation of

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[34] This possibility, however, is unlikely to be true in any straightforward sense. The prosperity of Scandinavia, coupled with its pursuit of economic policies in a "corporatist" vein that appear to have more similarities with those of the Southern Cone and Mediterranean regions than with nineteenth century Britain and the twentieth century United States, has always posed a problem to those who trace successful development to "security of property." See, for example, Olson, *Rise and Decline*, 89-92, where Olson has to strain very hard and not completely successfully to fit Scandinavia into his typology.

comparative growth performance will have to incorporate something like the accumulative ethic at a fundamental level.

CONCLUSION

The presence or absence of parasitic, development-retarding governments is, of course, a key factor in accounting for comparative economic growth performance. And whatever the role played by the "Protestant ethic" in past centuries, it is clear that if growth performance in the future turns on cultural factors it will turn on other cultural factors. Neither fast growing Japan, fast growing Italy, or fast growing Spain owes anything to the Reformation. The ethic of accumulation that may underlie some of the recent economic success of other countries of East Asia bears little resemblance to the ethic of accumulation that may have supported rapid growth in Northern Europe and its settler colonies.

Moreover, it is not clear that a recognition of the importance for development of factors like the "Protestant ethic" can carry any implications for what appropriate policies should be. And in a broad perspective it is not even clear that commitment to the Protestant ethic has been a blessing. From many standpoints—not least those of Weber and Keynes—commitment to the Protestant ethic has delivered high standards of living coupled with low qualities of life. Alternative paths to development that may not have delivered such rapid rates of accumulation and per capita income growth might have been preferable.

Nevertheless, the experience of the past century does lead to one reasonably secure conclusion. There is little ground for optimism with respect to convergence; there is no strong reason to believe that in a century the relative standards of living of the world's nations will be much closer together than they are today. More than a century ago, British economist and philosopher John Stuart Mill enunciated one of the first statements of the convergence hypothesis: that "most of the other nations of the world, including some not yet founded, will successively enter upon the same career" as the world's industrial leaders.[35] Mill would have been surprised to find that the relative spread of living standards in the world is wider in 1988 than it had been in 1848. But we, knowing what we do both about the ability of governments to block development and about the possible role played by hard-to-inculcate "ethics of accumulation" and other cultural factors in development, should not be surprised to see little reduction in the spread of relative living standards around the world in the next century or so.

[35] John Stuart Mill, *Principles of Political Economy, with Some of Their Applications to Social Philosophy* (London: Penguin, 1970; first published 1848), vol. II, p. 56.

TABLE 1
PER CAPITA INCOME LEVELS FOR COUNTRIES INDUSTRIALIZING AS OF 1870
(PLUS JAPAN)

(In 1988 “International” Dollars)

Nation	Per Capita Income (1870)	Per Capita Income (1913)	Per Capita Income (1979)	Rank (1870)	Rank (1979)
Australia	$3,954	$5,191	$12,673	1	9
UK	$2,498	$3,835	$10,628	2	16
Belgium	$2,339	$3,658	$12,504	3	10
Switzerland	$2,300	$3,839	$13,142	4	8
Netherlands	$2,271	$3,273	$11,887	5	11
USA	$2,136	$5,065	$16,880	6	1
New Zealand	$2,018	$3,341	$9,719	7	18
Denmark	$1,817	$3,547	$13,622	8	5
Canada	$1,813	$4,290	$15,486	9	2
France	$1,743	$3,411	$13,794	10	4
Uruguay	$1,724	$2,843	$5,134	11	24
Argentina	$1,568	$2,983	$6,417	12	22
Austria	$1,545	$2,954	$11,791	13	13
Italy	$1,535	$2,162	$9,102	14	18
E. Germany	$1,524	$3,598	$11,128	15	15
W. Germany	$1,504	$3,214	$13,967	16	3
Spain	$1,498	$1,757	$8,735	17	19
Czechoslovakia	$1,475	$3,011	$8,141	18	20
Norway	$1,368	$2,391	$13,321	19	7
Ireland	$1,350	$2,072	$7,182	20	21
Portugal	$1,311	$1,492	$5,853	21	23
Sweden	$1,146	$2,749	$13,566	22	6
Chile	$1,068	$2,378	$4,808	23	25
Finland	$1,041	$2,166	$11,603	24	14
Japan	$675	$1,278	$11,828	25	12