

**E**CONOMISTS HAVE LONG BEEN INTERESTED IN WHY SOME COUNTRIES ARE RICH AND WHY SOME COUNTRIES ARE POOR. Differences in labor productivity, inflation, and saving and investment rates are traditional economic explanations for variations in wealth across countries. But when these explanations fall short, researchers sometimes turn to noneconomic factors. Two such factors are a country's legal and social institutions. Religious factors can also help explain variations in economic growth, many economists are increasingly finding. In particular, in countries where large percentages of the population believe in hell, there seem to be less corruption and a higher standard of living.

### Conventional Theories

Over time, a country's economic growth is ultimately a function of growth rates in population and labor productivity (output per hour worked). But since population growth tends to change slowly, a nation's labor productivity growth is what ultimately determines whether it will be rich (high productivity growth) or poor (low productivity growth).

What causes productivity growth rates to speed up or slow down? Improvements in the quality of labor, such as a more educated workforce, seem to matter, as do the quantity and quality of the tools and equipment that each worker uses. Also generally deemed important is a country's saving rate, since saving is used to finance investment in capital goods. Other factors that improve a country's prospects, but which are not readily captured by measured labor and capital inputs, are improvements in the distribution of goods and services that arise from just-in-time inventory processes.

Another significant influence seems to be a country's public and private institutions. These include laws and regulations that enforce contracts, guarantee property rights and promote well-developed financial markets.<sup>1</sup> Secure property rights, such as patents and software piracy laws, provide individuals and firms the needed incentive to take economic risks, while deep capital markets better enable financial resources to flow toward promising but unproven technologies.<sup>2</sup> Also critical are laws that promote good corporate governance by imposing harsh penalties against firms or



government officials that have enriched themselves from illegal or immoral activities. When these public and private institutions are lacking, or not very well-developed, there tend to be high levels of corruption and financial malfeasance, which can create economic uncertainty and destroy wealth. Recent examples of corruption and other misconduct can be found even in advanced economies, as in the United States (Enron, Tyco and WorldCom), Italy (Parmalat) and the Netherlands (Ahold).

While traditional growth theories go far in explaining cross-country patterns of economic growth, some economists believe they do not go far enough. Instead, many researchers are increasingly turning to noneconomic factors, such as religion.

### Religion's Early Role

Adam Smith wrote that one of religion's most important contributions to

the economic development process is its value as a moral enforcement mechanism.<sup>3</sup> He argued that, in a society imbued with these religious mechanisms, fewer resources will be devoted to determining the veracity of an individual's or firm's business ethics—what economists call the credit or default risk associated with lending to an unknown individual. In short, argued Smith, in societies where there is a widespread belief in God, the values of honesty and integrity are more prevalent.

In a similar fashion, Alexis de Tocqueville, writing about early 19th century America, said that "religion . . . for if it did not impart a taste for freedom, it facilitates the use of free institutions," so that Americans held it "to be indispensable to the maintenance of republican institutions."<sup>4</sup> To de Tocqueville, a religious country lessened its dependence on the public sector, which not only left a larger amount of resources for the private sector but enhanced the country's moral fiber.

German sociologist Max Weber argued that the work ethic that was inspired by the Protestant Reformation helped to explain the rise of capitalism in Western Europe and America.<sup>5</sup> According to Weber, capitalism existed in antiquity—for example, in China, India, Rome and Babylon—and even during the Middle Ages, but it couldn't have matched the rise and sustainability of Western European and American capitalism because a "particular ethos was lacking." The ethos that set the Protestant apart from all other religions, and which facilitated economic growth, was an intense commitment to work, dependability, diligence, self-denial, austerity, thrift, punctuality, fulfillment of promises and fidelity to group interests.<sup>6</sup> Weber's critics instead argued that the Protestants, rather than helping to spur the rise of Western capitalism, were much better than other religious adherents in adapting to this newfound economic structure.<sup>7</sup>

### Current Topics, Controversies

According to the secularization hypothesis, as a country's inhabitants become richer and more educated, their faith in religion and religious institutions wanes, and they attend church less regularly. Economists Edward Glaeser and Bruce Sacerdote find some support for this hypothesis. They wrote in 2002 that increased education results in a decrease in the extent of religious beliefs, perhaps

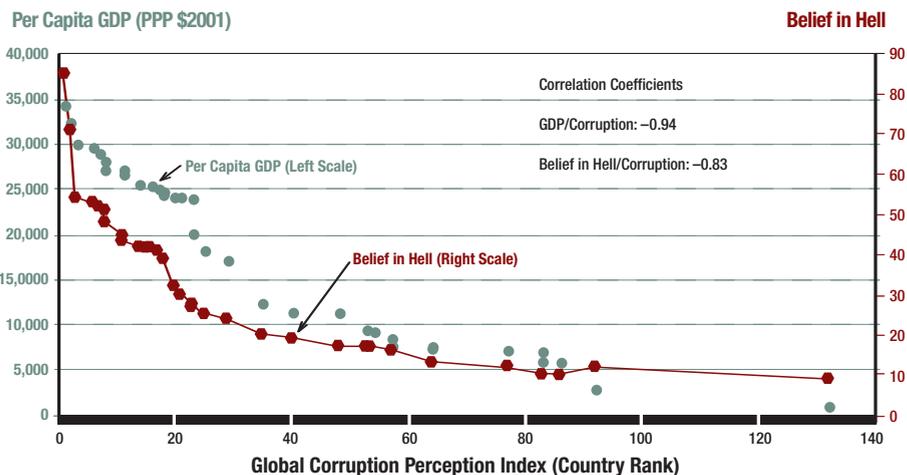
because public school systems tend to reinforce secular education that, the economists argue, conflicts with traditional religious beliefs. By contrast, economist Laurence Iannaccone wrote in 1998 that church attendance rises with education, which suggests that rich Western countries should have higher rates of church attendance. Ultimately, then, the issue is whether religious beliefs, as Weber and Smith argued, can be shown to have an effect on a country's economic growth.

In a paper last year, economists Robert Barro and Rachel McCleary provided evidence that church attendance and economic growth are negatively related, but a belief in hell—their meas-

and that the penalty of breaking this trust was so severe that economic commerce was to a large extent self-regulating.<sup>8</sup> This parallels de Tocqueville's argument that a minimalist government can prosper in a more-religious society. One extension of this argument is whether more-religious societies are less corrupt. Corruption and graft, which tend to increase economic inefficiencies, act as taxes on economic growth.

As seen in the graph, there is some evidence that countries that have higher levels of per capita real GDP also tend to have lower levels of corruption.<sup>9</sup> Moreover, the 1990-1993 World Values Survey asked people in 35 countries the following question: "Do you believe in hell?"

## CONNECTING GLOBAL CORRUPTION WITH RELIGIOUS BELIEFS AND ECONOMIC OUTCOMES



SOURCE: Inglehart et al. and United Nations Human Development Report (2003).

See the online version of this issue for a list of the 35 countries in the World Values Survey, along with their per capita GDP and percentage of citizens who believe in hell. Go to [www.stlouisfed.org/publications/re/2004/c/default.html](http://www.stlouisfed.org/publications/re/2004/c/default.html).

ure of religious beliefs—was positively related to increased economic growth. According to Barro and McCleary, increased church attendance could lower growth because of more resources flowing to the religious sector. However, the net effect would be uncertain because increased church attendance may also increase religious beliefs, which, as Weber believed, raises economic growth by spurring individual behavior and actions that are thought to encourage productivity. Interestingly, Barro and McCleary also found that economic performance was largely unrelated to the dominant religious theology of the nation.

In a recent speech about corporate governance and financial market malfeasance, Federal Reserve Chairman Alan Greenspan argued that trust and reputation were such valued assets to bankers and firms in the 19th century

Belief in hell is the proxy for religious beliefs used by Barro and McCleary. As also seen in the graph, countries that tend to have higher percentages of their population that believe in hell also tend to be less corrupt.<sup>10</sup> These correlations are quite strong. Although they do not provide evidence that one causes the other (causality), they are nonetheless consistent with the Barro and McCleary result that religious beliefs can influence economic outcomes.

What we also see from the graph is that the greater the belief in hell (religious beliefs), the less corrupt a country's public and private institutions tend to be perceived; this perception, in turn, can affect economic growth.

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### ENDNOTES

- See Claessens and Laeven (2003) and Rosenberg and Birdzell (1986).
- See North and Weingast (1989).
- See Anderson (1988).
- Quoted in Johnson (1997), p. 390.
- See Weber (1996).
- Noted in Rosenberg and Birdzell (1986).
- See Tawney (1998).
- "Capitalizing Reputation," April 16, 2004. See [www.federalreserve.gov/boarddocs/speeches/2004/20040416/default.htm](http://www.federalreserve.gov/boarddocs/speeches/2004/20040416/default.htm).
- Real GDP per capita, measured in purchasing power parity terms (\$2001), is from the United Nations *Human Development Report 2003*. See <http://hdr.undp.org/reports/global/2003/>.
- Countries (and responses) are listed in Table V170 in the 1990-1993 World Values Survey (Inglehart et al.). The global corruption perceptions index is constructed from a series of polls and surveys posed to a country's residents and business persons, as well as country analysts. Data are from the Global Corruption Report 2004. See [www.globalcorruptionreport.org/download/gcr2004/12\\_Corruption\\_research\\_I.pdf](http://www.globalcorruptionreport.org/download/gcr2004/12_Corruption_research_I.pdf).

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