

RELIGIOUS FREEDOM AND
ECONOMIC PROSPERITY
Ilan Alon and Gregory Chase

Let there be no compulsion in religion.

—*The Qu'ran*, Surah 2, verse 256

The basic notion that an individual's freedom to choose will advance society at large is a cornerstone of political philosophy and of the economic theory of the Western world. Early political philosophers such as John Stuart Mill and legendary economists such as Adam Smith have advocated a utilitarian approach to political and economic life, in which the advancement of one's own interests also helps others. Freedom is multidimensional: economic, political, and social aspects are related to one another, but do not exhibit perfect correspondence. For example, there are countries—such as China and Singapore—in which economic freedom has been advanced ahead of political freedom.

This article contributes to the literature by measuring and discussing the impact of religious freedom—a basic civil right that includes freedom to worship, freedom from religious persecution, freedom of religious press, freedom of religious expression, and freedom of religious organization and affiliation. International businesses should be concerned about religious freedom because it affects the general business environment, political relationships among countries, and consumer sentiment of companies doing business in countries that suppress religious freedom. Recently, the Chinese National Petroleum company, working with Goldman Sachs, had to downsize its plan to raise money with American investors by about \$7 billion because of

Cato Journal, Vol. 25, No. 2 (Spring/Summer 2005). Copyright © Cato Institute. All rights reserved.

Ilan Alon is Associate Professor of International Business at the Crummer Graduate School of Business, Rollins College, and Gregory Chase is Assistant Professor of Business Administration at Brenau University.

the company's ties to Sudan, a country the U.S. government has called the largest violator of religious freedom in the world (Shea 2000).

Religious Freedom, Country Risk, and Culture

Several studies have examined the impact of religious freedom and culture on the business climate. Alon and Spitzer (2003) looked at the effect religious freedom has on various types of country risk. They compared the level of country risk with the level of religious freedom along with several other variables. Their findings indicated that religious freedom affects country risk as perceived by businesses, but not as perceived by banks. Lavoie and Chamlee-Wright (2000) placed religion in a broader cultural context and examined the relationship between culture and market incentives. They argue that more attention needs to be given to the "spiritual" realm of the economy and other elements of culture, such as an "enterprising spirit."

Johnson and Lenartowicz (1998), in a study of economic growth, found a statistically significant relationship between two measures of culture and an index of economic freedom. Finally, Easterly and Levine (1997) examined the differences in countries with high levels of ethnic diversity (an element of the social environment related to religion) and found that ethnic-group polarization leads to rent-seeking behavior and reduces economic performance.

Freedom and Prosperity

In this article, we use several regression models to see how much of the cross-country variation in per capita GDP (in terms of PPP) can be "explained" by religious freedom and the other freedoms. Multicollinearity that affects the regression analyses, as measured by the Variance Inflationary Factor (VIF), was tested and was generally not an issue except where indicated. Following Barro and McCleary (2003), all the variables were logarithmically transformed to reduce possible heteroscedasticity (i.e., unequal distribution of the variance) and to convert the regression coefficients into elasticity measures. The values for economic freedom were inverted for intuitive interpretation of the results so that a coefficient with a positive number denotes a positive relationship between economic freedom and the dependent variable.

We used the Fraser Institute's measure of economic freedom for 123 countries. The economic freedom index includes five major components: size of government; legal structures and security of property

rights; sound money; freedom to trade with foreigners; and regulation of credit, labor, and business. These broad areas include 37 different components.¹

To measure religious freedom, we relied on Marshall (2000), whose edited volume evaluated the state of religious freedom in 75 countries comprising more than 90 percent of the world's population. Each country was assigned a value from 1 to 7 based on the level of religious freedom. The measure focused on the denial of the right to practice one's religion.

For data on political and civil liberties, we relied on Freedom House (FH). Both types of freedom were assigned a value from 1 to 7. When analyzing civil liberties, FH focuses on effective rights, not merely constitutional guarantees. Those rights include expression and belief; association and organizational rights; rule of law and human rights; and personal autonomy and economic rights. All freedom variables were inverted so that a higher number indicates more freedom.

The dependent variable in all the regressions is per capita GDP in U.S. dollars adjusted for PPP. Data on PPP per capita GDP were obtained from the World Bank's *World Development Indicators*. After deleting cases for missing data, we were left with data on 54 countries for which all variables were available. Table 1 shows the correlation matrix for the different variables.

There is a strong correlation among most of the variables. The lowest value of the correlations is 0.57 for PPP per capita GDP and political freedom, and the highest exceeds 0.92 for political freedom and civil liberties. Strong correlations among the independent variables suggest that freedoms across various dimensions are highly related. Relationships among the variables have the expected directionality. One can observe from the data that higher levels of freedoms are correlated with higher levels of per capita income.

Economic freedom has the highest correlation with per capita GDP, followed by civil liberties, religious freedom, and political freedom. Religious freedom is most highly correlated with civil liberties, followed by political freedom. With a Pearson's correlation of 0.82, civil liberties can "explain" about 67 percent of the variation in the religious freedom variable.

Conceptually, correlations among the independent variables can be due to overlap in definition and measurement. For example, two

¹The Heritage Foundation also has a measure of economic freedom, which produced similar results when used in the models.

TABLE 1
CORRELATION MATRIX

	Political Freedom	Civil Liberties	Religious Freedom	Economic Freedom	PPP per Capita GDP
Political Freedom	1.00				
Civil Liberties	0.92	1.00			
Religious Freedom	0.71	0.83	1.00		
Economic Freedom	0.60	0.65	0.61	1.00	
PPP per Capita GDP	0.57	0.68	0.63	0.79	1.00

components of civil liberties are free religious institutions and the presence of free private and public religious expression. Conversely, many of the components of religious freedom are in fact subsets of civil liberties. For example, freedom of the press by necessity includes freedom of religious press.

We present the results for five alternate model specifications between freedoms and per capita GDP in Table 2. In all regressions the F-statistic was significant, indicating that all models have significant explanatory powers.

Models A and B display paired comparisons of single independent variable models using economic freedom and religious freedom against PPP per capita GDP. The coefficients have the predicted signs and are statistically significant at the 1 percent level.

Model C combines economic freedom and religious freedom in explaining PPP per capita GDP. Inclusion of both variables into one model increased the adjusted R-squared of the model to 52 percent, suggesting that the two freedom-dimensions taken together can better explain individual prosperity. Again, both variables have the expected signs and are statistically significant.

Model D incorporates all of the freedom variables, but the adjusted R-squared falls to 51 percent. The VIF for civil liberties was 10.61, indicating a possible problem with multicollinearity. To correct for the possible problem with multicollinearity, the civil liberties variable was dropped in model E. Economic freedom was significant at the 1 percent level, and religious freedom was significant at the 10 percent level.

The size of the coefficients in models A through E is also a telling statistic. Since we logged all the variables, the coefficients represent elasticity. The elasticity for the economic freedom variable varied from 3.28 in model D to 4.29 in model A. On average, the coefficient for economic freedom was 3.58, which means that a 1 percent increase in economic freedom increases per capita income by 3.58 percent. The impact of religious freedom was much smaller, ranging from 0.51 in model D to 1.50 in model B, with an average of 0.84. The relative size of the economic freedom variable is about 4.26 times larger than that of religious freedom, which means that economic freedom has a greater impact on economic progress than religious freedom.

Conclusion

Looking at the variables across the different models, the coefficient for the economic freedom variable was always significant and with the

TABLE 2
REGRESSION RESULTS
(PPP per Capita GDP is the Dependent Variable)

Model	A	B	C	D	E
Intercept	0.435 (0.86)	2.93 (14.45)	0.747 (1.47)	0.707 (1.35)	0.747 (1.44)
Economic Freedom	4.29*** (6.89)		3.37*** (4.56)	3.28*** (4.15)	3.37*** (4.35)
Religious Freedom		1.50*** (4.97)	0.67** (2.14)	0.514 (1.12)	0.669* (1.76)
Political Freedom				-0.31 (-0.514)	0.0016 (0.0048)
Civil Liberties				0.628 (0.619)	
Adjusted R ²	0.49	0.33	0.52	0.51	0.51
F Significance	1.07E-8	8.94E-6	1.07E-8	2.56E-7	6.51E-8

NOTES: The top number is the coefficient and the number in the parentheses is the t-statistic. *Significant at the 10 percent level; **Significant at the 5 percent level; ***Significant at the 1 percent level.

appropriate sign. The more economically free countries also produce the richest individuals, on average. The impact of economic freedom on the level of individual income seems to trump that of religious and other social and political freedoms. Predictably, the size of the coefficient decreased by the introduction of new freedom variables. Therefore, the second conclusion is that economic freedom remains one of the most influential variables affecting economic prosperity. This result, of course, is intuitive because it is likely that an economic-related independent variable will best explain variations in an economic-related dependent variable. The other freedoms examined were political and social in nature.

The regression results for the religious freedom variable are promising. All of the models using religious freedom as an explanatory variable had the predicted sign in the coefficient, and three of the four using the religious freedom variable exhibited significant results. Although our results are preliminary, they suggest that religious freedom has a positive impact on a country's prosperity.

Companies seeking lucrative grounds for their products may be advised to examine the antecedent freedoms that are related to their consumers' incomes in foreign markets. A different level of religious freedom will affect the management of a foreign operation, but multinationals can also impact the social and political environments of host markets. Multinational human-resource strategies, for example, can promote religious freedom as well as other freedoms and their associated benefits. Insisting on a diverse labor pool and on promotion based on merit rather than religious affiliation may further the cause of religious freedom.

History has shown that religious toleration goes hand-in-hand with other types of freedom, including economic freedom. Our study suggests that it is in a nation's long-run economic interest to expand not only economic freedom but also religious freedom. We must not forget, however, that ultimately those rights should not rest solely upon economic or utilitarian logic.

References

- Alon, I., and Spitzer, J. (2003) "Does Religious Freedom Affect Country Risk Assessment?" *Journal of International and Area Studies* 10 (2): 51–62.
- Barro, R. J., and McCleary, R. M. (2003) "Religion and Economic Growth." *American Sociological Review* 68 (5): 760–812.
- Easterly, W., and Levine, R. (1997) "Africa's Growth Tragedy: Policies and Ethnic Divisions." *Quarterly Journal of Economics* 112 (4): 1203–50.
- Johnson, J. P., and Lenartowicz, T. (1998) "Culture, Freedom and Economic

- Growth: Do Cultural Values Explain Economic Growth?" *Journal of World Business* 33 (4): 332.
- Lavoie, D., and Chamlee-Wright, E. (2000) *Culture and Enterprise: The Development, Representation and Morality of Business*. London: Routledge.
- Marshall, P., ed. (2000) *Religious Freedom in the World*. Nashville, Tenn.: Broadman & Holman.
- Shea, N. (2000) "Religious Freedom and American Foreign Policy." In P. Marshall (ed.) *Religious Freedom in the World*, 1–8. Nashville, Tenn.: Broadman & Holman.