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Terrorism Reduces Basque GDP

It would come as a surprise to no one, particularly in the aftermath of the September 11 attacks in the United States, that among the grim effects of terrorism is its potential to cause widespread economic pain. At the same time, it's hard to say precisely how much economic damage can be attributed to terrorism, in terms of such things as stock values and gross domestic product (GDP), because economists have produced little evidence to illuminate a cause-and-effect relationship between the specter of terrorism and declining economic fortunes.

In **The Economic Costs of Conflict: A Case-Control Study for the Basque Country** (NBER Working Paper No. 8478), authors **Alberto Abadie** and **Javier Gardeazabal** seek a deeper understanding of this phenomenon by measuring the economic pain inflicted on the Basque Country of Spain that can be tied to the terrorist struggle that began in the late 1960s and continues today. They

find that after terrorism became endemic to the region, fears of violence, extortion, and kidnapping by ETA separatists were responsible, on average, for a 10 percent drop in the area's per capita GDP. Furthermore, they note that during a 1998-9

period, sans terrorism. Indeed, before the onset of the terrorist activity — which began in 1968 and became progressively worse throughout the 1970s — the Basque Country had higher per capita income, investment, and industrial production,

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cease-fire, stocks in the region responded by outperforming stocks from outside the region. Then, when the cease-fire was over, those same Basque-centered stocks, seemingly taking a cue from the return to trouble, dropped below those of other regions.

The authors' economic analysis was somewhat complicated by the fact that, in order to isolate the effect of terrorism, they needed to compare the Basque Country to a region that matched its economic condi-

tions, along with a better-educated workforce, than the rest of Spain. So to make an accurate comparison, Abadie and Gardeazabal create an economic parallel universe of sorts for the Basque one, in which attributes from several Spanish regions are combined to form what the authors refer to as a “synthetic Basque Country without terrorism.”

Abadie and Gardeazabal find that the Basque Country and the synthetic region behave similarly until 1975. Then, from 1975, when ETA's

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Authors of papers summarized here can be reached at a uniform NBER e-mail address of the form: jsmith@nber.org.

terrorist activity became a large-scale phenomenon, they diverge. The Basque Country per capita GDP drops to around 10 percent below that of the synthetic region.

Moreover, the comparison between the Basque Country and the synthetic region is sensitive enough to detect an economic decline that

grew more pronounced during “spikes” in terrorist attacks. These findings suggest just how sensitive economic conditions can be not just to terrorism, per se, but to its varying levels of intensity. “Terrorism explains the GDP gap [between the actual Basque Country with terrorism and the synthetic Basque

Country without terrorism] almost perfectly,” the authors note.

Abadie and Gardeazabal observe that while their focus is the Basque conflict, “the methods applied in this paper can be used to measure the economic effects of conflict elsewhere.”

— Matthew Davis

The Effects of Welfare and Tax Reform

Tax and transfer programs targeted at low income families have changed dramatically in recent years. These changes have encouraged work and discouraged welfare receipt. A number of studies have examined how these recent policy changes have affected poor families. Studies of those leaving welfare have found that although more of these individuals are working, a considerable number report difficulty paying for food, rent, or utilities. Despite the fact that employment rates for single mothers rose each year from 1993 to 1998, studies have found that total family income for the poorest single mothers fell from 1995 to 1998, suggesting that losses in transfer income outstripped earnings gains.

In **The Effects of Welfare and Tax Reform: The Material Well-Being of Single Mothers in the 1980s and 1990s** (NBER Working Paper No. 8298), **Bruce Meyer** and **James Sullivan** use data from the Consumer Expenditure Survey and the Panel Study of Income Dynamics to examine how consumption patterns have changed over the past two decades for single mothers and their children. The authors look at family consumption rather than income, arguing that the former better captures well-being, particularly for poor families. Research based on in-depth interviews of single mothers has shown that

almost all of them supplement their income with off-the-books work or unreported transfers, which are generally overlooked in survey measures of income. Many transfer programs generate incentives to hide income, and recent reforms have changed these incentives. Thus, the

The authors find that total consumption by most single mothers increased slightly over the years from 1984 to 1995, and then rose more noticeably after 1995. From the late 1980s to the period from 1996 to 1998 inflation-adjusted consumption rose on average by more

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prevalence of this unreported income is likely to be affected by the recent policy changes. Surveys of income also tend to under-report government transfers and fail to capture some in-kind benefits.

Meyer and Sullivan focus on single mothers for two reasons. First, by looking at single mothers, they can examine the effect of reforms not only on participants in these tax and welfare programs, but also on those who may have been diverted from participating in these programs. Second, single mothers represent the group that is most directly affected by the recent changes in tax and transfer policy. Single mothers and their children account for the vast majority of the welfare caseload. They also receive about half of all credit dollars distributed through the Earned Income Tax Credit.

than 8 percent for single mothers. This increase was also evident for the more disadvantaged group of single mothers without a high school degree, as well as for those toward the low end of the consumption distribution.

This rise in consumption occurred during a period of prolonged economic expansion in the 1990s. In an effort to separate the impact of policy changes from the impact of this economic expansion, the authors compare changes in consumption of single mothers to changes for single childless women and married mothers. These groups of women all have similar wages, and this similarity is especially strong when one holds constant educational attainment. This suggests that macroeconomic changes are likely to affect these three groups similarly, while

the policy changes are likely to be much more important for single mothers. The authors also account for the fact that changes in macroeconomic conditions may affect these groups differently: they include controls for the unemployment rate at both the state and national level.

After accounting for the effects of differences in demographic characteristics such as age, education, and family size, the authors find that total consumption by single mothers increased relative to both comparison groups. Relative consumption

was significantly higher in the period after 1996 than in the late 1980s. The fact that consumption for single mothers and their children increased relative to both comparison groups suggests that only a small part of the increase in the level of consumption by single mothers is attributable to the economic growth that characterized much of this period. The evidence is less clear for changes in relative consumption over the years immediately before and after the passage of the major welfare reform legisla-

tion in 1996. However, the authors do find evidence that consumption for single mothers relative to both comparison groups does not fall in the period from 1996 to 1998. Again, these results also hold for more disadvantaged single mothers, although the authors acknowledge that their results do not provide evidence on how consumption has changed for single mothers who are at the very bottom of the consumption distribution.

— Linda Gorman

College Drinking and Drug Use

By cracking down on underage and binge drinking, in an attempt to prevent student deaths of the nature that were highly publicized in recent years, colleges also will trim the illegal use of marijuana. Stricter college alcohol policies, such as raising the price of alcohol or banning alcohol on campus, decrease the number of students who use marijuana, according to an NBER Working Paper by **Jenny Williams, Rosalie Pacula, Frank Chaloupka, and Henry Wechsler**. Alcohol and marijuana are what economists call “economic complements,” at least for college students. There had been concern that the two were “substitutes,” and that anti-alcohol policies by colleges inadvertently contributed to a 22 percent increase in marijuana use among college students between 1993 and 1999.

In **Alcohol and Marijuana Use Among College Students: Economic Complements or Substitutes** (NBER Working Paper No. 8401), the authors consider evidence from the Harvard School of Public Health College Alcohol Study, using data on students from 1993, 1997, and 1999. This data covers 140 schools in 40 states. The authors also have data on the prices of marijuana, and on the expected

social and legal penalties faced by those caught using it.

The surveys consistently show that substance use and abuse among college students is higher than estimates from the general population. For example, in 1999 a Monitoring the Future Survey found that 83.6 percent of 19- to 28-year-old students drank alcohol, 35.2 percent

used marijuana, and 36.9 percent used any illicit drug. That compares with prevalence rates for all young adults in the same age bracket of 84.1 percent, 27.6 percent, and 30.3 percent respectively for these substances. The higher use rates among college students are “particularly disturbing,” the authors note, because they frequently are accompanied by serious health consequences, acts of violence and/or crime, poor performance in school, and other negative outcomes.

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In order to reduce substance use and abuse among college students, Congress passed the Drug-Free Schools and Communities Act of

1986. It set aside money for prevention programs in higher education. Also, there was a wave of private and public initiatives at the state and local level to curb underage and binge drinking. Policies that work, according to the NBER paper, include raising the price of alcohol, often through a higher beer tax, and restricting access to alcohol through campus bans or state laws restricting happy hours. The bonus is a drop in marijuana use as well. However, bans of alcohol on campus shrink the use of both alcohol and marijuana only by female students of all ages, but not by males. Further, these various changes in alcohol policies have the same impact on individuals under the age of 21 as on those of legal drinking age. The more likely explanation for the rise in the use of marijuana by college students, the authors suspect, is that its price has dropped significantly in the past decade.

— David R. Francis

Religion Shapes Financial Rules and Growth

It is obvious that financial development benefits economic growth. Yet, countries that protect investors, such as the United Kingdom and the United States, are in the minority, despite the fact that global competition for capital penalizes countries with poor investor protection. Why is it, then, that protection of investor rights differs so much across countries?

In **Culture, Openness, and Finance** (NBER Working Paper No. 8222), authors **René Stulz** and **Rohan Williamson** find that cultural differences, systems of belief that shape the actions of individuals within a society, play a critical role in policies and practices related to investor protection.

Religion, for example, is a key component of culture. Usury, interpreted to mean receiving any interest on loans, was prohibited by the medieval church and led to excommunication. The Calvinist reformation, however, viewed payments of interest as a normal part of commerce, making it possible for modern debt markets to develop. That development has created sharp historical differences in creditor rights between Catholic and Protestant countries. Since cultural practices change slowly, the authors find

those differences still persisting in the twentieth century. However, religion appears to have no effect on shareholder rights.

Similarly, language is another cultural variable that has an effect on creditor and shareholder rights. Countries having the same language

are smaller in Catholic countries than in Protestant countries.

The authors also find that a country's openness to international trade is closely tied to creditor rights, since such trade must be financed. Countries with open trade have stronger protection of creditors.

“Creditor rights are strongest in Protestant countries, irrespective of whether the country has common or civil laws.”

more often share similar laws regarding protecting rights of creditors and shareholders.

Cultural practices related to the origin of laws also make a difference in creditor and shareholder rights. Common law countries protect investors better than civil law countries, in part because of the greater flexibility offered judges in shaping and applying common laws. Similarly, religion has more of an influence on creditor rights. Creditor rights are strongest in Protestant countries, irrespective of whether the country has common or civil laws. Protestant countries also have better enforcement of creditor rights than do Catholic countries. These findings are supported by the fact that debt issuances relative to

Openness to international trade also tends to mitigate the influence of religion on creditor rights, so that even in Catholic countries with significant international trade there is better protection of creditor rights.

The striking difference between countries is harder to explain with regard to shareholder rights than creditor rights. For example, a shareholder's vote is likely to count more in a Catholic country when the shareholder gets to vote, but it is harder to get to vote in such a country. Cultural influences are also related to enforcement, with Catholic countries, especially those that are Spanish-speaking, having weaker enforcement of rights.

— Les Picker

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