Comments on:

Economic Impacts of Global Terrorism: From Munich to Bali
(by James Barth, Tong Li, Don McCarthy, Triphon Phumiwasana & Glenn Yago)

Justin Wolfers
Wharton School, U.Penn
CEPR, IZA & NBER

AEA Meetings
Sunday January 8, 2006
Research Question

What are the economic impacts of terrorism?

– Language: “Economic jihad”
– Outcome_{c,t} = Terrorism_{c,t} + Controls_{c,t} + Country_{c} + Year_{t}

Outcome variables:
– Growth in real GDP per capita (%\Delta Y/n)
– Capital formation to GDP (I/Y)
– Stock market capitalization to GDP
– Stock traded value to GDP

Terrorism variables:
– Incidents per capita
– Incidents per GDP
– Fatalities & injuries per capita
– Fatalities & injuries per GDP
– Terrorist incidents per capita (Business targets)

Which of these variables are:
– Interesting?
– Welfare-relevant?
– Sensible?
Research Question

◆ What are the economic impacts of terrorism?
  – Language: “Economic jihad”
  – Outcome\textsubscript{c,t} = Terrorism\textsubscript{c,t}
    \begin{align*}
    &+ \text{ Controls}_{c,t} + \text{Country}_c + \text{Year}_t
    \end{align*}

◆ Outcome variables:
  – Growth in real GDP per capita (%ΔY/n)
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◆ Which are:
  – Interesting?
  – Welfare-relevant?
  – Sensible?
### Author’s Answers

**Effects of a 1 standard deviation shock to terrorism**

<table>
<thead>
<tr>
<th>Incidents per capita</th>
<th>Δ(Y/n)</th>
<th>I/Y</th>
<th>Fatalties &amp; injuries per capita</th>
<th>Δ(Y/n)</th>
<th>I/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.011%</td>
<td>-.0126</td>
<td></td>
<td>-.00003%</td>
<td>-.000006</td>
</tr>
<tr>
<td></td>
<td>(p=.06)</td>
<td>(p=.011)</td>
<td></td>
<td>(p=.06)</td>
<td>(p=.011)</td>
</tr>
<tr>
<td></td>
<td>-.002%</td>
<td>-.005</td>
<td></td>
<td>-.023%</td>
<td>-.009</td>
</tr>
<tr>
<td></td>
<td>(p=.89)</td>
<td>(p=.49)</td>
<td></td>
<td>(p=.89)</td>
<td>(p=.49)</td>
</tr>
</tbody>
</table>

**Effects of September 11 on:**

<table>
<thead>
<tr>
<th>Incidents per capita</th>
<th>Δ(Y/n)</th>
<th>I/Y</th>
<th>Fatalties &amp; injuries per capita</th>
<th>Δ(Y/n)</th>
<th>I/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.005</td>
<td>-.0126</td>
<td></td>
<td>-.0003%</td>
<td>-.00006</td>
</tr>
<tr>
<td></td>
<td>(p=.06)</td>
<td>(p=.011)</td>
<td></td>
<td>(p=.06)</td>
<td>(p=.011)</td>
</tr>
</tbody>
</table>

|                      | -.002%  | -.005 |                                 | -.023%  | -.009 |
|                      | (p=.89) | (p=.49)|                               | (p=.89) | (p=.49)|

Questions about statistical significance

Justin Wolfers, Comments on “Economic Impacts of Terrorism”
Correlation and Causation

“Poverty, Political Freedom and the Roots of Terrorism”
– Alberto Abadie
– Presented at Economics of National Security; 1/7/2005
– Asks: What is the effect of GDP on terrorism?
What Drives These Results?

- Terrorism incidents per million people
  - Mean: 0.26
  - Median: 0
  - Maximum: 47
  - Standard deviation: 1.3

- Three crucial datapoints:
  - Israel (particularly in late 2000s)
  - Columbia
  - Iraq (2005)