

International Trade and Transnational Terrorism:
A quick overview

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- R. Bonner, 2003; Commissioner at the Bureau of Customs and Border Protection (Homeland Security Dept. US) :

"We must protect American lives, but we must also protect American livelihoods--our economy. That's why we have twin goals: (1)increasing security [to prevent from terrorism] and (2) facilitating legitimate trade and travel."

- Questions:

1/ What is the relationship between Terrorism and globalization ?

2/ How can we identify in the data the impact of terrorism on trade?

3/ What is the role of security measures?

4/ What do we know / what do we ought to know?

Some basic Theory:

- Terrorism affects trade negatively :
 - Trade cost effect: threat and insecurity/ counter terrorist policies
 - Income channel effect: direct destruction/
macroeconomic: fiscal cost/ growth
 - Bilateral versus multilateral effects :
« source », « target », « host » countries ?
- Openness affects Terrorism :
 - Vulnerability /visibility on target countries: +
 - Technology and relative costs of terrorism : + or –
 - Counter terrorist policy: endogenous

Measuring Transnational Terrorism

Database ITERATE (Int. Ter: Attributes for Terrorist Events)
(Mickolus, Sandler *et al*): 1968-2003

• Definition of “Transnational Terrorism”:

"the use, or threat of use, of anxiety-inducing, extra-normal violence for political purposes by any individual or group, whether acting for or in opposition to established governmental authority, when such action is intended to influence the attitudes and behavior of a target group wider than the immediate victims and when, through the nationality or foreign ties of its perpetrators, its location, the nature of its institutional or human victims, or the mechanics of its resolution, its ramifications transcend national boundaries“

• Two other conditions:

1/ ‘Terrorism’: when only perpetrated against a liberal state

2/ ‘Transnational’: when it involves at least two countries recognized by international community

3/ “Incidents” and threats, type of terrorist action, number of victims, etc...

4/ type of country: - Origin country: country of [first] nationality of terrorist groups;

- Target country: country of [first] nationality of victims

- Host country: country of location of incidents (Origin, Target or Third country)

Stylized facts 1 : Sandler and Enders (2002)

- a) No obvious upward trend in the number of the incidents.
- b) Number of casualties per incident increased significantly in the 90s
Changing nature of the terrorist organizations.
- d) Cyclical patterns
- e) Attacks aimed at US interests : substantial portion of total events
- f) Transnational Terrorism is a local phenomenon:
hit targets that are relatively close to home.
- g) - Changes in Origin countries over time: political/separatist
vs religious
- No changes in Target countries (1st ranked: US, ISR, GBR, FRA)

Stylized Facts 2

- Bilateral Pattern:

1/ Proximity and Ex or neo colonies

(ex: Latin American countries hit mainly the USA, North Africa with France, etc...)

2/ Incidents originate mostly from highly specialized countries: Agriculture, Natural resources /manufacturing employing intensively those resources

1/ and 2/ seem to affect terrorism but they also affect Bilateral trade!!! Suggests Endogeneity

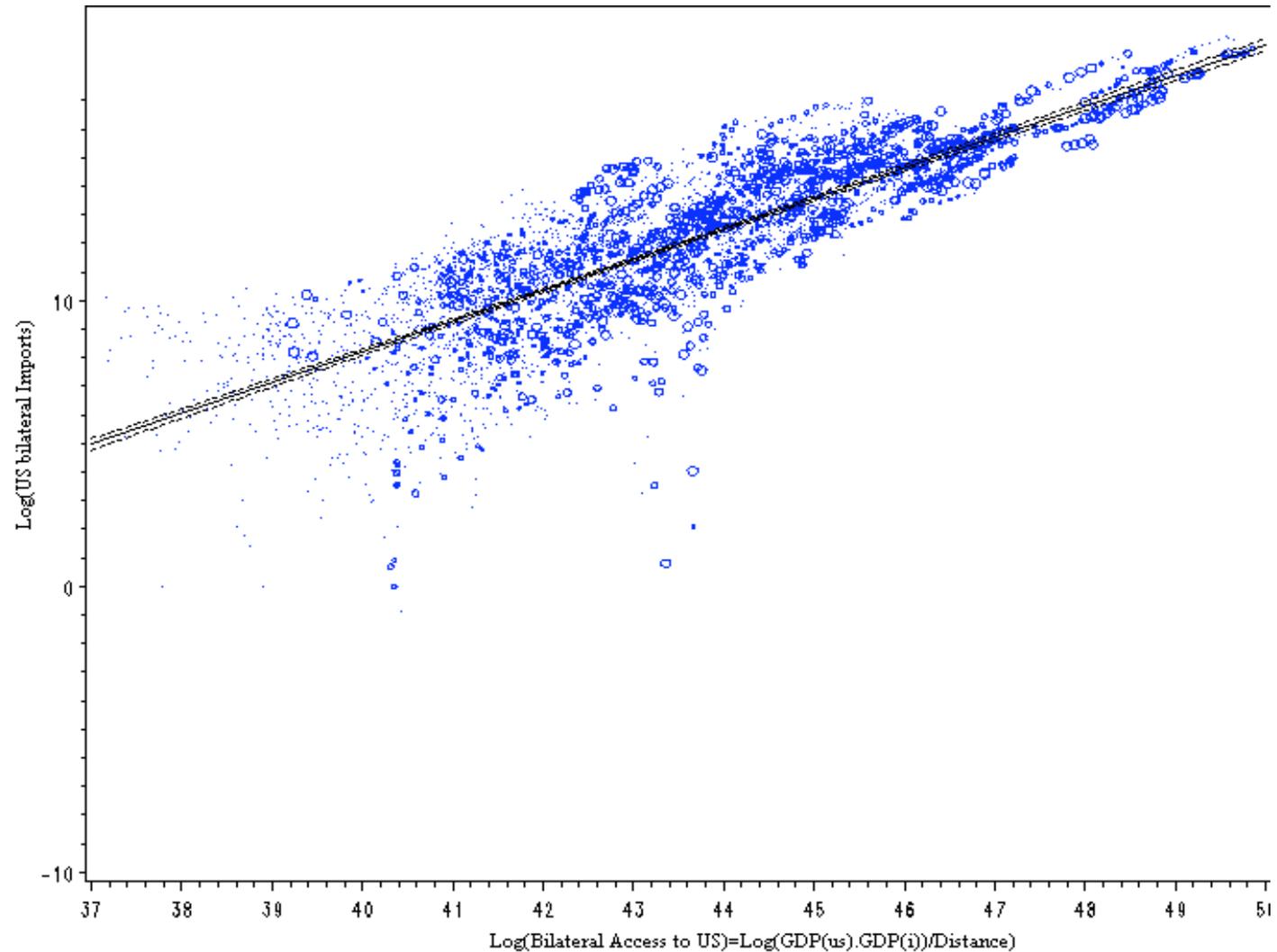
Stylized Facts 3: terrorism and trade. Any relationship?

- Is difference between *actual* and *potential* trade related to terrorism acts?

1/ Bubble=actual
and
Slope=potential

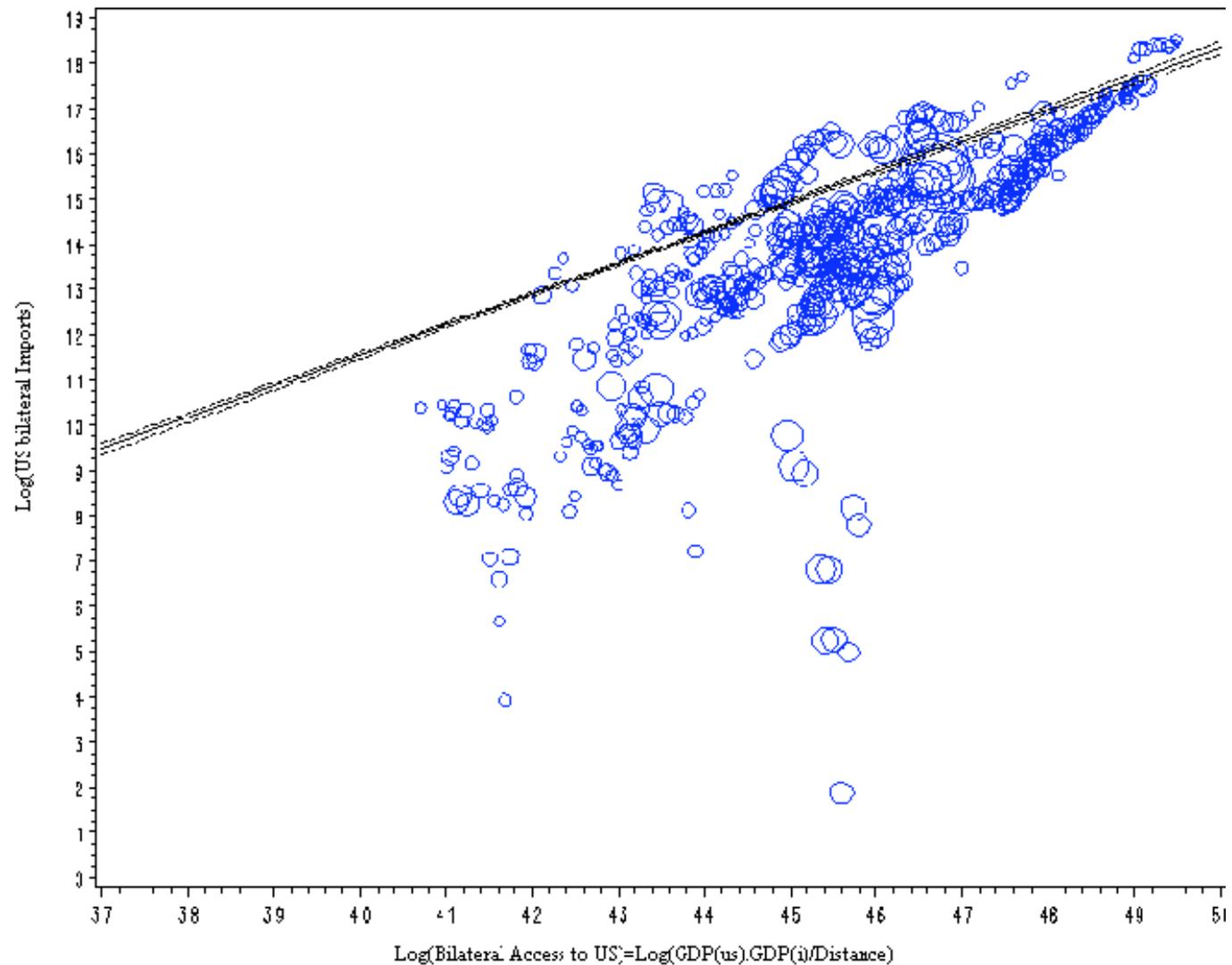
2/ Size Bubbles:
Num. of incidents
[in last 5 years]

3/ No pattern but
most origin
countries of acts
have also high
exports to US:
Endogeneity!



Stylized Facts 4: Deviation from trade potential of 'safe' countries

What would have been the volume of exports of risky countries if they had not been treated as risky?



Bilateral Trade Flows Analyses

Standard Gravity equation + terrorism variable :

- dummy variable: 0 if no terrorist event
1 if at least one terrorist event in the country
- Total number of terrorist events in period in country

- Nitsh and Schumacher (2004): (1968-79)
trade reduced by around 10% if one country is attacked
20% if both countries are affected

- Fratianni and Kang (2006): (1980-1999)
terrorism-related trading costs decline with distance

- Blomberg and Hess (2004) : (1968-1999)
1 terrorist accident associated with 7.6 % decline in bilateral trade
Tariff equivalent trade cost between 1 % and 3%
(other conflicts : civil wars /wars, etc.....: 8% to 19%)

Problems

- Controls for common third factors:
 - proximity and colony (or neo-colony) ties
 - specialization patterns
- Income channel effects: long run effects on GDP per capita
Blomberg, Hess and Orphanides (2004): macroeconomic effect small
1 terrorist attack reduces growth by 0,5 percent
BUT
Abadie and Gardeazabal (2001) on Basque Economy
World Bank (2002) on Israeli economy
- Dyadic relationships : « target » and « source » countries
(Krueger and Laitin 2003)
Rich democracies : « target » / politically repressed: « source »
- Endogeneity of terrorism on trade/openness
- Endogenous counter-terrorist policies

The reverse impact of openness on terrorism

- Li and Schaub (2004): 112 countries (1957-1997)

Impact of globalization on transnational terrorism (trade / FDI / Portfolio)

1/ No effect of greater economic integration on terrorist accidents within its borders.

2/ country's GDP per capita affects negatively number of terrorist events within its borders

- Blomberg and Hess (2005): « target » and « source » countries

1/ Openness affects positively terrorism in « target » countries
negatively terrorism in « source » countries

2/ Wealth affects positively terrorism in « target » countries
negatively terrorism in « source » countries

Security, trade and Transnational terrorism

- Mirza and Verdier (2006) : « semi-structural » model:
 - Terrorism and Counter-terrorism measures are endogenous : strategic interaction and policy trade-off embedded into gravity equation
 - US bilateral trade flows and rest of the world (1968-2003) at product level (SITC4/5 digits)

1) Trade cost effect : Terrorism \longrightarrow Security \longrightarrow Lower Trade

(2) Welfare Effect : Higher Trade \longrightarrow Lower security incentives

What strategy to employ in order to identify (1) while accounting for (2) ?

- Identification strategy

- proxy for efficiency of security/terrorism technology:
 - frequency of past incidents against the US
 - frequency of past incidents perpetrated by terrorist groups from given source
- Use particular incidents:
 - Terrorism incidents against a target country but located in Third countries!
- **Ex:** Cuban group, Aircraft hijack in Peru, 14 citizens victims (mainly US) (1980)
- Al-Qaida (Saudi Arabia), Car explosion, US embassy, Tanzania (Dar el Salam, 1998): 80 victims
- Hutu Group (Rwanda), Tourist Camp attack in Uganda, 20 US and English victims (1999).

Flavor of Results:

- 1/ Small effect on average: a 1% increase in frequency of past incidents originating from a given country, reduces US imports by about 0.02%
- 2/ Nonlinear effect: Origin countries linked to very active perpetrators (Yesterday: Cuba, Columbia and today: Lebanon, Afghanistan, etc...) are much more affected (elasticity around 1 to 1.5)
- 3/ The effect is much larger when:
 - the partner is small
 - the number of victims is 'high'
 - the products are sensitive to shipping time-length
 - the products are network –related (i.e transiting by an effect on the number of Business visas delivered)

Conclusions

- Two-way relationship between trade and transnational terrorism
 - Terrorism on trade: modest on average/ more important for recurrent Terrorism
 - Openness on Terrorism: nuanced!
 - + for « target » countries
 - for « source » countries
 - + if world income polarization
 - if world income convergence
 - Effects of counter-terrorist policies: non linear effect on trade flows differentiated by products and sectors
- Line of research : Regional and « contagion » effects
Nord-South Trade implications
Globalization/ Political transitions and terrorism