MILKEN INSTITUTE
Global Conference

In conjunction with Forbes

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Los Angeles • California
“Look, you’ve got to accept some curtailment of your freedom in exchange for increased security.”
“The intensification of geopolitical risks makes discerning the economic path ahead especially difficult”

Alan Greenspan
The Impact of 9/11 on the Dow
The Dow Remains Depressed
The Impact of 9/11 on High Yield Bonds

%
The Impact of 9/11 on Airline Stocks

US$

United

Delta

Northwest

JAN 2000 APR JUL OCT JAN APR JUL OCT JAN APR JUL OCT JAN 2003

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Instability Pushes Oil Prices Higher

West Texas Crude ($ per barrel)
## 5 Industries Affected Most by 9/11

<table>
<thead>
<tr>
<th>Industry</th>
<th>2002 Forecast Job Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bars and Restaurants</td>
<td>-135,000</td>
</tr>
<tr>
<td>Hotels and Motels</td>
<td>-123,000</td>
</tr>
<tr>
<td>Misc. Recreation</td>
<td>-119,000</td>
</tr>
<tr>
<td>Air Transport</td>
<td>-77,000</td>
</tr>
<tr>
<td>Advertising</td>
<td>-49,000</td>
</tr>
</tbody>
</table>
## 5 Metropolitan Areas Most Affected Most by 9/11

<table>
<thead>
<tr>
<th>Area</th>
<th>2002 Forecast Job Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>-149,000</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>-69,000</td>
</tr>
<tr>
<td>Chicago</td>
<td>-68,000</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>-41,000</td>
</tr>
<tr>
<td>Boston</td>
<td>-36,000</td>
</tr>
</tbody>
</table>
Money Laundering and Terrorism

• Executive Order 13224 gives the Treasury authority to freeze the assets of persons or institutions associated with terrorists.

• It also allows the Treasury to deny foreign banks that refuse to freeze terrorist assets access to U.S. markets.
Hawala Banking

• Hawala is the Hindi word for trust and refers to a trust-based informal banking system
  – Based on a chain of hawaladars informal money lenders
  – Requires no identification, commissions are low, and transmission of funds is fast
  – In ancient China a similar system operated and was known as "fei qian" or "flying coins"
Hawala Banking

• “Hawala dealers don't care about where the money comes from or what it is being used for.”

Delhi Hawala Banker
Somalia’s Al Barakaat
Informal Hawala Bank or Terrorist Financier

• Al Barakaat was deemed “the quartermasters of terror,” by Paul O'Neill and its assets were frozen.
  – A Somali financial and telecom company, it operated 40 countries and handled $140 million in remittances.
  – Somalia’s largest private sector employer with 3,000 staff
  – It is alleged to raise, manage, invest, and distribute funds for al-Qaida
$33 Billion U.S. Physical Security Services Market

- Armored Transport: 6%
- Private Investigation: 6%
- Corrections: 6%
- Alarm Monitoring: 33%
- Guarding: 35%
- Other: 25%
2001 Private Physical Security Demand by Market

- Commercial: 49%
- Government: 16%
- Institutional: 14%
- Industrial: 13%
- Other: 8%
- Guarding: 19%
- Alarm Monitoring: 9%
- Armored Transport: 8%
- Other: 13%
## Nonresidential Physical Security Services Market

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Businesses</strong></td>
<td>6,740</td>
<td>7,150</td>
<td>7,650</td>
<td>8,150</td>
</tr>
<tr>
<td><strong>Nonresidential Security Market (billions)</strong></td>
<td>19.6</td>
<td>25.8</td>
<td>33.7</td>
<td>47.7</td>
</tr>
<tr>
<td><strong>Total Security Market (billions)</strong></td>
<td>24.2</td>
<td>33.6</td>
<td>47.7</td>
<td>77.5</td>
</tr>
</tbody>
</table>
Major Armed Conflicts Around the World

Countries with ongoing armed conflicts
Nuclear Proliferation

- **Possess nuclear weapons**
- **Active nuclear weapons program**
## Nuclear Warhead Stockpiles

<table>
<thead>
<tr>
<th>Country</th>
<th>Stockpiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>10,600</td>
</tr>
<tr>
<td>Russia</td>
<td>8,600</td>
</tr>
<tr>
<td>China</td>
<td>400</td>
</tr>
<tr>
<td>France</td>
<td>350</td>
</tr>
<tr>
<td>U.K.</td>
<td>200</td>
</tr>
<tr>
<td>Israel</td>
<td>100</td>
</tr>
<tr>
<td>Pakistan</td>
<td>~35</td>
</tr>
<tr>
<td>India</td>
<td>~30</td>
</tr>
<tr>
<td>N. Korea</td>
<td>~2</td>
</tr>
</tbody>
</table>
The Threat of Russia’s Nuclear Weapons Scientists

- Russia’s nuclear development program employs 120,000
- More than 62% of employees earn less than $50 per month
- 58% of nuclear weapons scientists have to take 2\textsuperscript{nd} jobs to make ends meet
- 80% of scientists would be willing to work in the military industrial complex of a foreign country
The Threat of Russia’s Nuclear Arsenal

- Russia has 8,600 nuclear warheads
- Troops responsible for warhead storage have suffered from wage arrears
- There are 9,500 homeless active duty and retired officers
- Officers’ wages rarely exceed $70 a month
- In 1997 a warhead storage site was closed due to hunger strikes by staff
Combating the Threat
Eliminating Russian Weapons of Mass Destruction

- 6,000 nuclear warheads deactivated
- 500 ICBMs destroyed
- 450 ICBM silos destroyed
- 200 nuclear test tunnels sealed
- 100 nuclear bombers dismantled
Combating the Threat  
2003 US Spending

• An increase of $1.5 billion including

  – $549 million for ongoing programs to destroy nuclear, chemical, and biological weapons in Russia

  – $235 million to secure and better control dangerous fissile materials in Russia

  – $101 million for ongoing programs to engage Russian weapons scientists in peaceful research
Russian Disarmament
From 33,000 to 8,000 Warheads
Military Buildup in Korea

- North Korea: 1 million
- South Korea: 550,000
- U.S.A.: 35,000
The Koreas

North Korea can only compete in war

GDP ($bn)

North Korea

South Korea

Military Budget ($bn)

North Korea

South Korea

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Chemical Proliferation

- Declared chemical weapon stocks or facilities
- Undeclared chemical weapon stocks or facilities
History of Chemical Weapons

1915: First use of chemical weapons: Germany uses chlorine gas against French and British troops

1915-8: Chlorine, mustard and phosgene gas used by both sides in First World War. 100,000 tons used and 90,000 men killed

1918: Haber awarded Nobel Prize for Chemistry

1925: Geneva Convention bans use of chemical weapons

1934-6: Italy uses chemical weapons against Abyssinians

1937-1945: Japan uses chemical weapons against China

1940-5: Germany uses nerve gas to commit genocide against Jews and others

1945: Aum Shinrikyo uses nerve gas to murder commuters on Tokyo Subway

1963-7: Egypt uses mustard gas against Yemeni Royalists in Yemen’s civil war

1972: Biological and Toxic Weapons Convention

1984-9: Iraq uses chemical weapons against Iran

1988: Iraq uses poison gas on its Kurdish population

1992: Chemical Weapons Convention: Iraq refuses to ratify

2002: Chemical Weapons Convention has been accepted by 145 countries with 98% of the world’s chemical industry

2002: 10% of world chemical weapons stocks have been eliminated
## Chemical Weapons Destroyed

1997 - 2002

<table>
<thead>
<tr>
<th></th>
<th>Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Declared Chemical Weapon Stocks</td>
<td>70,000</td>
</tr>
<tr>
<td>Total Destroyed Chemical Weapon Stocks</td>
<td>6,700</td>
</tr>
</tbody>
</table>
Countries Not Committed to Eliminating Their Chemical Weapon Stocks

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated Stocks (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>100 - 500</td>
</tr>
<tr>
<td>Libya</td>
<td>70 – 100</td>
</tr>
<tr>
<td>North Korea</td>
<td>5,000</td>
</tr>
<tr>
<td>Syria</td>
<td>500 – 1,000</td>
</tr>
</tbody>
</table>
$37.7 Billion of Homeland Security Spending for 2003

- Other: $9.4 billion (18%)
- Department of Defense Homeland Activities: $6.8 billion (25%)
- Aviation Security: $4.9 billion (16%)
- Biological Terrorism Defense: $6 billion (13%)
- Border Security: $10.6 billion (28%)
# U.S. Missile Defense Spending

<table>
<thead>
<tr>
<th>Missile Defense Agency Budget (billions)</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$7.7</td>
<td>$6.7</td>
<td>$7.7</td>
</tr>
</tbody>
</table>
International Terrorist Attacks
1981-2001
Suicide Attacks
1980-2000

- Tamils: 168
- Hezbollah: 50
- Hamas: 30
- PKK: 21
- Other: 6
Victims of International Terrorism
1981-2001
Economic Costs of Terrorism in U.S.A.

- **Immediate Costs**
  - Becker and Murphy estimate $25-$60 billion
  - IMF estimates $21.4 billion

- **Longer Term Costs**
  - Becker Murphy estimate airline security and its associated waiting costs will cost the economy $11 billion per year
  - Council of Economic Advisors estimate increased security could lower total output by 0.6% over 5 years
  - IMF estimates increased security and other costs could lower 5 year output by 0.75%
Middle East Comprises 8% of World Population

- Middle East & North Africa
- Rest of the World
Middle East Comprises 3% of World GDP
Middle East Comprises 63% of International Terrorist Groups

Middle East & North Africa

Rest of the World
Middle East Lags in Economic Growth
Real GDP Growth 1980-99
Middle East Leads in Population Growth
1980-99

Middle East & North Africa

Percent

World

High Income

United States

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Per-Capita Economic Growth is Negative in Some Countries

-3 -2 -1 0 1 2 3

- Egypt
- Syria
- West Bank and Gaza
- Morocco
- Algeria
- Jordan
- Iran
- Tunisia
- Lebanon
- Saudi Arabia
- United States
- World
- Yemen
- Pakistan

Israel
Estimated Population Below Poverty Line

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRN</td>
<td>54</td>
</tr>
<tr>
<td>Pak</td>
<td>45</td>
</tr>
<tr>
<td>JOR</td>
<td>36</td>
</tr>
<tr>
<td>LBN</td>
<td>27</td>
</tr>
<tr>
<td>DZA</td>
<td>18</td>
</tr>
<tr>
<td>EGY</td>
<td>9</td>
</tr>
<tr>
<td>SYR</td>
<td>0</td>
</tr>
<tr>
<td>MOR</td>
<td>0</td>
</tr>
<tr>
<td>YEM</td>
<td>0</td>
</tr>
<tr>
<td>TUN</td>
<td>0</td>
</tr>
<tr>
<td>KWT</td>
<td>0</td>
</tr>
<tr>
<td>USA</td>
<td>0</td>
</tr>
</tbody>
</table>
Percent of Population Less Than 14 Years Old
The Middle East Relies on Aid

Foreign Aid Per Capita

US$

Middle East & North Africa

World

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Capital Markets are Undeveloped

Stock Market Turnover as a Percentage of GDP

Percent

100

80

60

40

20

0

Middle East & North Africa

World

100
Conflict is Concentrated in the Middle East

Countries with ongoing armed conflicts
Two States Have Nuclear Weapons and Three More are Trying to Join Them

- Possesses nuclear weapons
- Active nuclear weapons program
- No nuclear weapons program
The Aspiring Nuclear Powers are State Sponsors of Terrorism

State Sponsors of Terrorism
Five Middle Eastern States Have Chemical Weapons

- **Red**: Possesses chemical or biological weapons
- **Blue**: No chemical or biological weapons program
Ratification of the Convention on Chemical Weapons is not Universal

- **Non Signatory States**
- **Signatory States**
World GDP Shares

- North America: 38%
- Europe: 26%
- Asia: 27%
- South America: 4%
- Africa: 2%
- Australia: 3%
World Oil Production Shares

16%  9%  9%  23%  10%  32%
Chief Security Officers Not Confident

• A poll of nearly 300 CSOs revealed:
  – 63% are not confident the government can protect critical infrastructure and citizens from terrorist attacks
  – 43% anticipate a terrorist attack on U.S. soil within 6 months
  – 40% have stockpiled food and water
  – 6% have purchased duct tape and plastic sheeting