Forming a Core Trader Group for

The Policy Analysis Market

Arlington, VA
5 June 2003
A Market in the Future of the Middle East

**Promise.** Using the Policy Analysis Market, thousands of individuals who are interested in the Middle East can compare their opinions on the issues that will shape the region’s future.

**Intuition.** Market feedback facilitates group improvement of predictions, offering the potential of a superior policy tool.

**Key Concern.** When trading starts on 1 October 2003, a trader base of several hundred must be registered and ready.

**Why we invited you.** We want to engage a core group of professionals to assist us in building the trader base.
Why PAM? Answers from various Perspectives

DARPA: Desire to augment current processes for pooling opinions and resolving predictions

A PAM Trader: Profit, pride, professional value, interesting engagement

Net Exchange: An opportunity to establish a commercial product line by prototyping a promising risk management/decision support process.
Predicting the Future: PAM in the Information Trade

1. Futures markets based on an underlying commerce that has been standardized (key role of objective data)
2. Insurance against specific futures, supported by wholesale reinsurance to spread out the specific risks
3. OTC Derivatives (essentially, 2 making use of 1)
4. Iowa Political Market and other pure information markets (see *The Economist*, 9 May 2003)
5. Economic Derivatives (4 applied to economic issues)
6. PAM enhances (4) by standardizing a commerce (1) then provides a robust derivative capability (3+)
### Examples of PAM Futures and Trades

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Turkish econ. health in Q2 '04 will be &gt; 115 (an index measure)</td>
<td>36¢ (%)</td>
<td>Bank officer charged with Turkey risk assessment considers this more likely</td>
<td>Buy contracts in this security until prediction = 45¢</td>
</tr>
<tr>
<td>Civilian deaths from terrorism in Q4 '04</td>
<td>500</td>
<td>Reporter with a Middle Eastern news agency considers this too high</td>
<td>Sell contracts until prediction = 300</td>
</tr>
<tr>
<td>The U.S. recognizes a Provisional Palestinian State in Q3 '04</td>
<td>55¢</td>
<td>Professor of mid-East studies thinks this is high</td>
<td>Sell contracts until prediction = 40¢</td>
</tr>
<tr>
<td>If Q3 '04 Iraqi econ. health &gt; 150, then Q4 '04 Syrian civil stability &lt; 100</td>
<td>42¢</td>
<td>Expert in Syrian domestic politics considers this far too low</td>
<td>Buy contracts until the prediction = 60¢</td>
</tr>
</tbody>
</table>
A View one-year into the Future

**Fundamentals** standardized into series of securities

- Regional: Economic, civil, military, and U.S. involvement for Egypt, Iran, Iraq, Israel, Jordan, Saudi Arabia, Syria, and Turkey
- Global economic and conflict indicators (e.g., trade, terrorism deaths)

Group of all Regional and Global PAM Securities defined over a four-quarter Span

Issuance

Payoff: EIU assesses data indices on which securities are defined

Maturity
The look of one particular Security

Regional Securities will be ranges relative to a data index.

As maturity nears, finer ranges are defined.

The prices for all securities of an issue that mature on the same date add up to $1.00 (think % predictions).
Adding Specificity -- Event Securities

Specific events that become of interest and can be stated as Yes or No, Happened or Not will be added.

Examples of potential Specific Event Securities

- Provisional Palestinian State recognized by the U.S. government during the first quarter of 2004.
- Fall of Iranian cleric-led regime in the fourth quarter of 2004.

Issuance Process: The Market expresses an interest in a specific event, Net Exchange nominates a definition to the Economist Intelligence Unit, it then accepts or rejects the responsibility of assessing the security at maturity -- if accepted, Net Exchange issues the new security into PAM.
An Example of how Derivatives improve Insight

If these securities had been issued at the start of the war, several sorts of predictions could have been built.

Event \( \mathbf{A} \): Overthrow of Jordanian Monarchy

Event \( \mathbf{B} \): Iraqi Regime persists after One Month

<table>
<thead>
<tr>
<th>Event</th>
<th>( \mathbf{A} )</th>
<th>( \sim\mathbf{A} )</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \mathbf{B} )</td>
<td>( \mathbf{AB} )</td>
<td>( \sim\mathbf{AB} )</td>
<td>$0.50</td>
</tr>
<tr>
<td>( \sim\mathbf{B} )</td>
<td>( \mathbf{A}\sim\mathbf{B} )</td>
<td>( \sim\mathbf{A}\sim\mathbf{B} )</td>
<td>$0.50</td>
</tr>
<tr>
<td>Price</td>
<td>$0.35</td>
<td>$0.65</td>
<td></td>
</tr>
</tbody>
</table>

Different traders interested in different predictions:

- Military expert believes that \( \mathbf{P}(\mathbf{B}) \) should be more than $0.50 -- he buys.
- Member of the CIA believes that \( \mathbf{P}(\mathbf{AB}) \) is too high -- she sells.
- Expert in Jordanian politics considers \( \mathbf{P}(\mathbf{A}|\mathbf{B}) = $0.60 \) too low -- he buys.
The Mechanics of Participating in PAM

An interested individual must register and make an initial deposit of funds.
- Any individual with whom a U.S. corporation may legally do business
- No U.S. government agency may register, though employees may
- An agreement acknowledging Funds at Risk must be signed

Trading supported 24/7 with access over the Web

Delayed public access to PAM prices; e.g., two weeks

Traders may deposit additional funds and withdraw funds not committed to trades pending maturity.

A trader will be anonymous from the U.S. government and Net Exchange.
The Role of DARPA and the U.S. DOD

The Defense Advanced Research Projects Agency has funded PAM development and its initial operations.
- Net Exchange does not have to, and will not, extract a cut from trading.
- DARPA will be given the same access as a PAM trader, and no more.

Net Exchange and The Economist Intelligence Unit are responsible for all matters associated with PAM securities -- DARPA and the DOD do not get to ask The Market questions.

Employees of DARPA and the DOD may register as traders, but as private individuals. (No employee of Net Exchange or the EIU may be a PAM trader.)
The Role of a Core Trader Group

Advise on usability through access to early versions
- Is it clear why someone would want to use PAM and how to do so?
- Are the mechanics of doing what you want to do efficient or tortuous?
- Are the policies of PAM conducive for attracting participants?

Direct assistance in reaching and registering traders
- Tell your friends and colleagues about PAM
- Introduce prospective traders to representatives of PAM

Indirect assistance in reaching and registering traders
- Invitations to speak at conferences/meetings
- Quotes on the PAM website
- References to PAM when interviewed
PAM Traders: Demographic and Schedule Goals

Intend a global trading population (50% non-U.S.)

<table>
<thead>
<tr>
<th>Demographic</th>
<th>30 Jun</th>
<th>1 Sep</th>
<th>1 Oct</th>
<th>31 Dec</th>
<th>31 Mar</th>
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<tbody>
<tr>
<td>Academia</td>
<td>15</td>
<td>100</td>
<td>125</td>
<td>200</td>
<td>2,000</td>
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<tr>
<td>Policy Institutes</td>
<td>20</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>1,000</td>
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<tr>
<td>Financial Industry</td>
<td>1</td>
<td>20</td>
<td>25</td>
<td>50</td>
<td>500</td>
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<tr>
<td>Practitioners</td>
<td>2</td>
<td>50</td>
<td>75</td>
<td>200</td>
<td>1,000</td>
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<tr>
<td>Press</td>
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<td>50</td>
<td>100</td>
<td>150</td>
<td>500</td>
</tr>
<tr>
<td>General Public</td>
<td>30</td>
<td>75</td>
<td>150</td>
<td>2,500</td>
<td></td>
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<tr>
<td>Totals</td>
<td>50</td>
<td>400</td>
<td>600</td>
<td>1,000</td>
<td>7,500</td>
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