

# Minorities at Risk

Monitoring the persecution  
and mobilization of ethnic  
groups worldwide

## At Risk Minority Organizations and Choices of Violence

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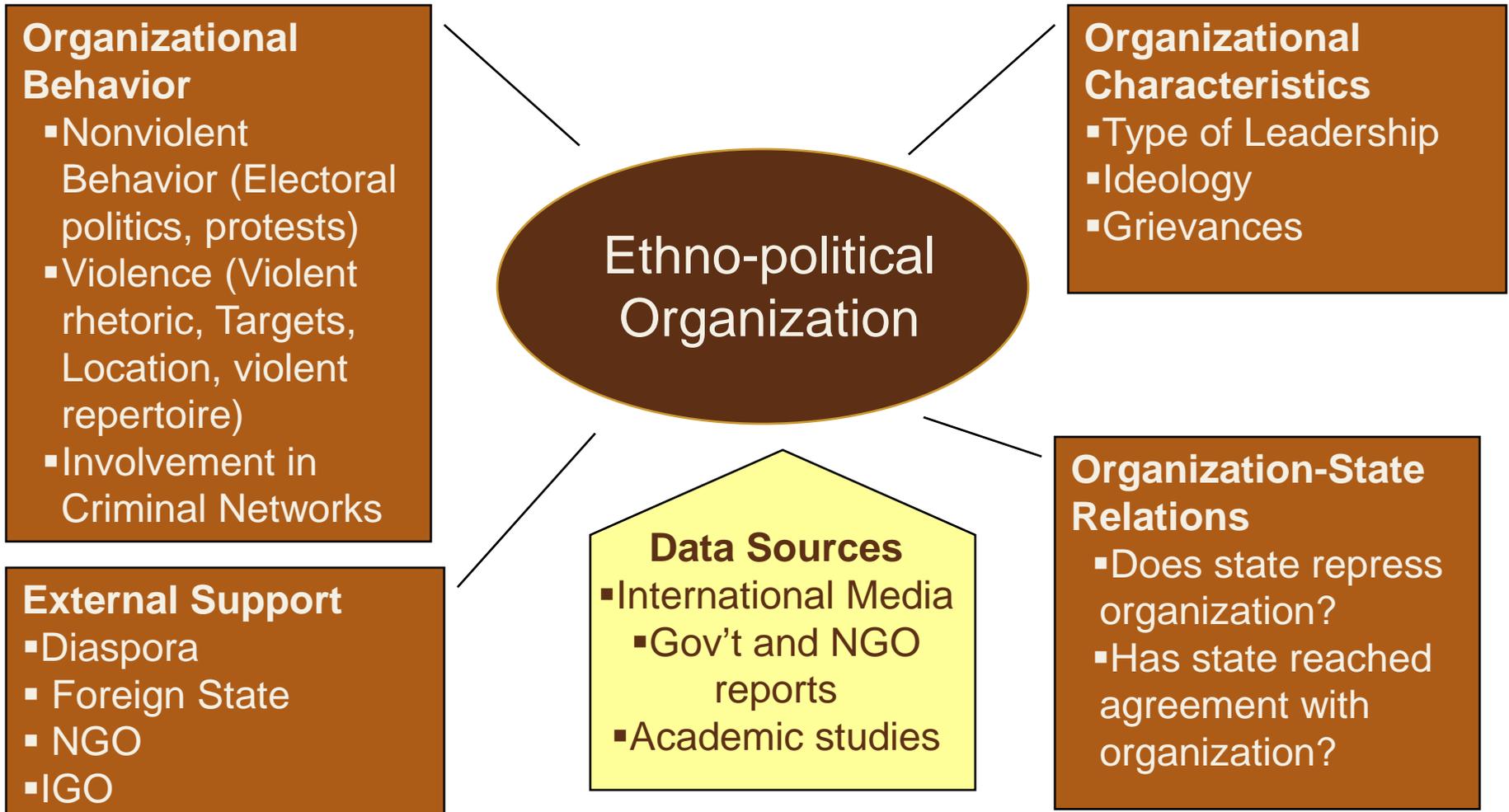
# What is MAROB?

- MAROB is a data-driven analytical effort focused on organizations that claim to represent ethnic groups
- Unique because MAROB gathers information on violent and non-violent organizations
- Includes organizations that represent groups deemed Minorities at Risk

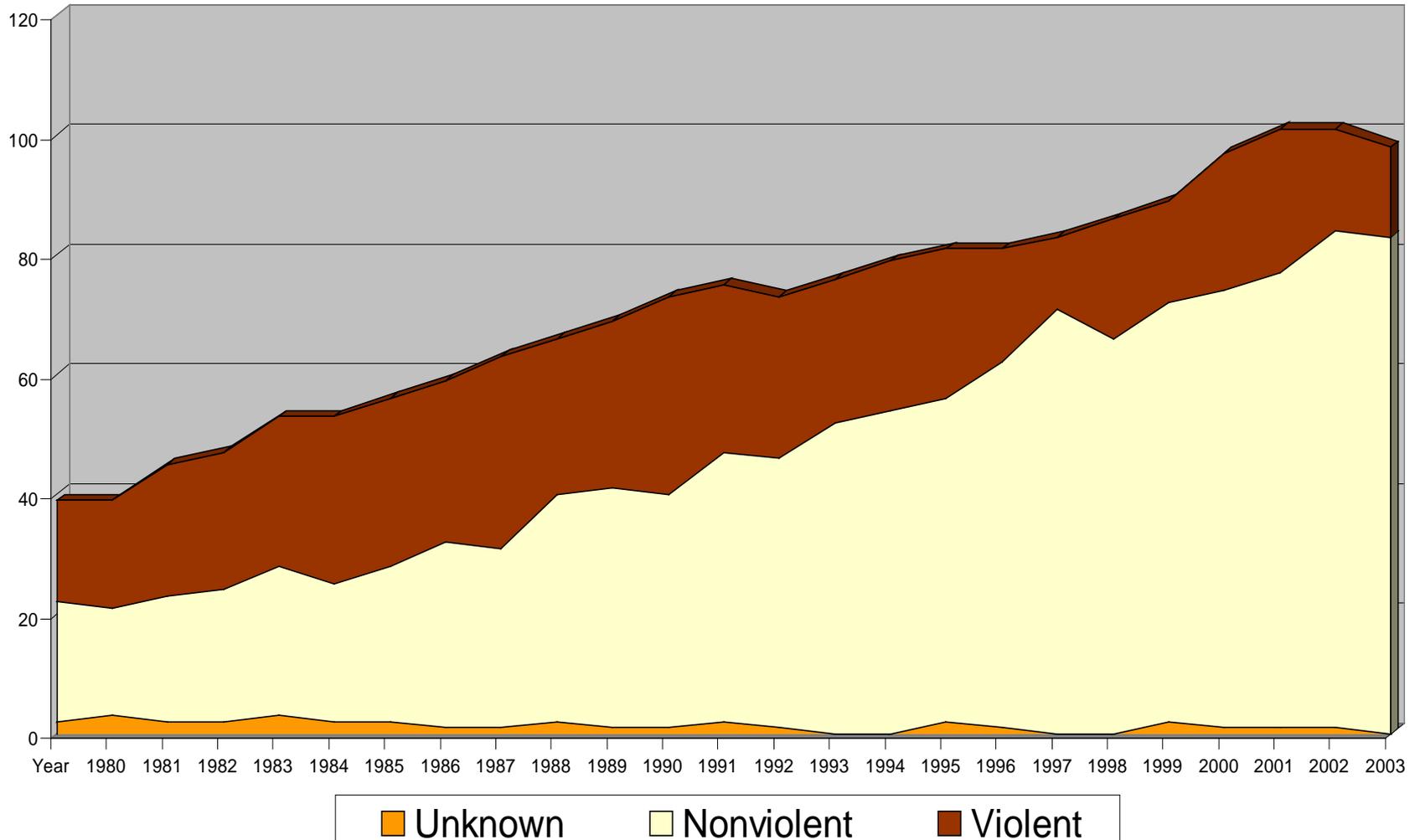
# MAR and MAROB

<b>Minority at Risk group</b>	<b>MAROB organizations</b>
Kurds in Iraq	Kurdistan Democratic Party, Patriotic Union of Kurdistan, Kurdish Revolutionary Hezbollah, etc.
Palestinians in Occupied Territories	HAMAS, Fatah, Palestinian Islamic Jihad, etc.
Shia in Lebanon	Hezbollah, Amal

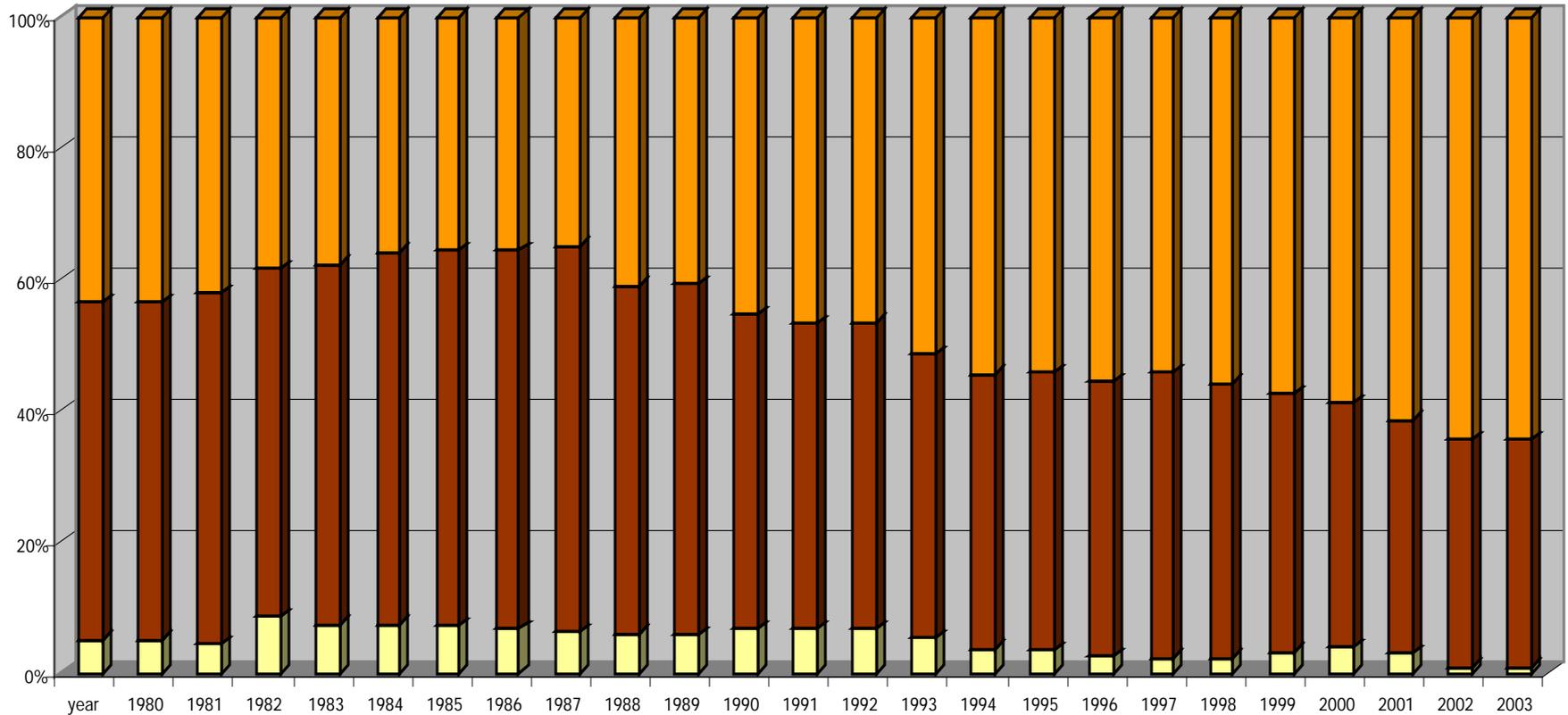
# Annual MAROB Data



# Middle East: Violence vs. Nonviolence



# Middle East Organizations: Percentage with Democratic Ideology



Unknown    No democratic ideology    Democratic Ideology

**Organization  
Environment**

**Capabilities:  
Attributes**

**Organizational  
Goals**

**BEHAVIOR**

# Why Use Terrorism?

- Ideological Motivations
  - Separatism
  - Religious Ideology
  - Democratic Ideology
- Capabilities
  - Foreign Support
- State Behavior towards the Organization
  - State Repression
  - Government Concession

# Targeting Civilians

	Percent Probability if variable set at (all others at mode):	
Variables	Minimum	Maximum
Democratic Ideology (-)	7	3
Justifying Terrorism (+)	3	6
Liberation Ideology (+)	3	7
Religious Ideology	NS	NS
Foreign State Support (+)	3	8
Strong State Repression (+)	3	6
State has not made any concessions (+)	3	6
Percent Probability if using combined variables set at:	Least likely (mode for all variables)	most likely
	3	89

# Why Target Security Forces?

- **Violence breeds violence**
  - Organizations that use terrorism will be more likely to use direct action
  - Strong state violence will move organizations to use direct action
- **Rhetoric matters**
  - Organizations that have specifically declared their target is the state and its security apparatus, not society, are more likely to in fact carry out direct action.
- **Gender Attitudes matter**
  - Organizations that promote the exclusion of women are more likely to accept stereotypical warrior views of the use of violence.
- **Nationalism matters**
  - Organizations that see themselves as setting up another state will want to behave like a state – and thus engage in direct action
- **Control of territory matters**
  - They become a target of security forces and so are forced to fight those who shoot back.
  - They are becoming like a state – and so have to engage in counter state activity.
  - Provides capability to attack the state
- **Foreign support matters (Governmental and Diaspora)**
  - Provides capability
  - Foreign support may find soldiers more appetizing targets than civilians

# Factors Increasing Probability of Attacks on Security Forces

Variable	Variable at minimum all else at mode	Variable at maximum all else at mode
All at mode	0.102	
Rhetorically saying soldiers ok – not civilians	0.102	0.216
Control of territory from nothing a little and a lot	0.102	0.463
Gender exclusion attitudes	0.102	0.380
Diaspora support	0.102	0.303
Strong state repression	0.102	0.281
Terrorist violence	0.102	0.221

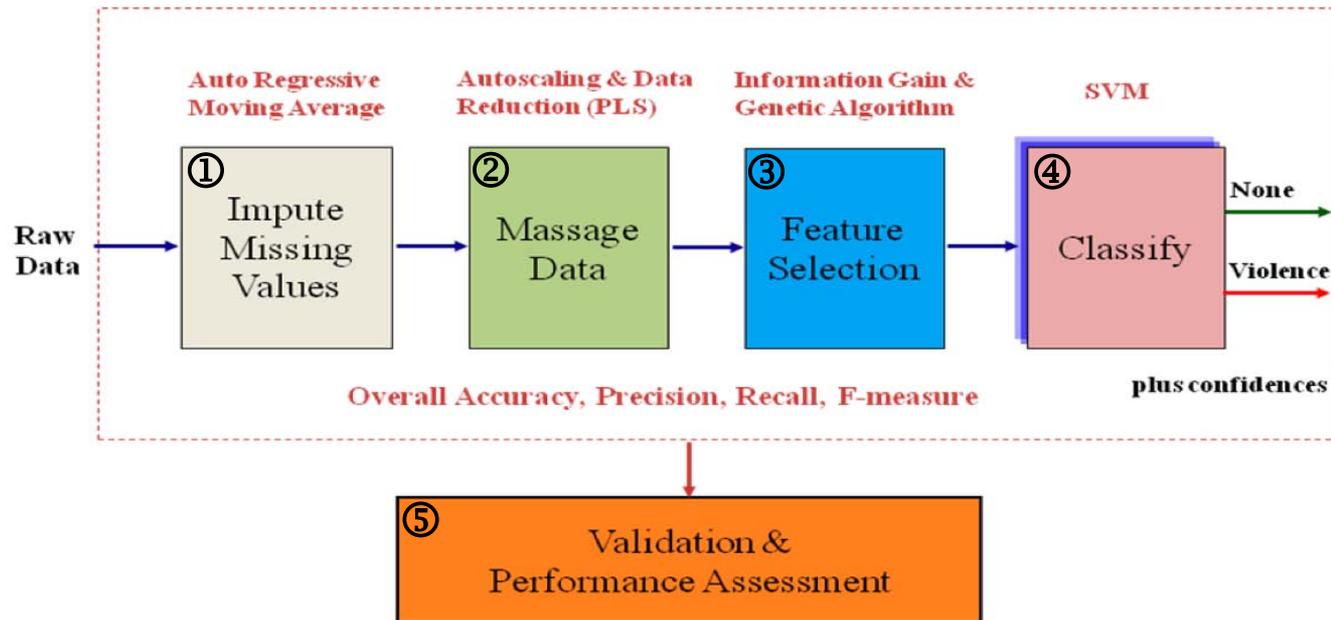
# Forecasting – Violence

- **State Behavior towards the Organization**
- **Capabilities**
- **Ideological Motivations**
- **Organizational activities**

# Data Analysis

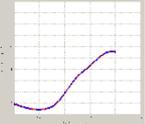
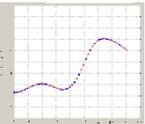
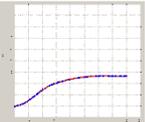
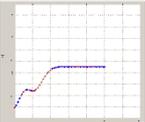
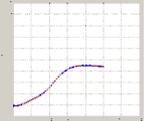
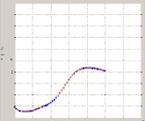
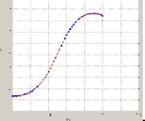
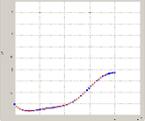
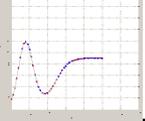
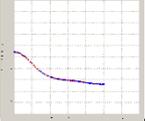
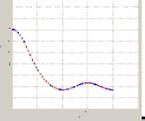
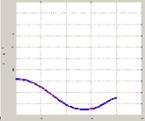
- Data Set Includes:
  - 58 organizations for 14 MAR groups, operating between 1995 and 2004
  - Classification and prediction target:
    - ***Is the organization using violence as a policy?***
  - Training period: 1995 - 2000 (348 year observations)
  - Testing period: 2001 - 2004 (232 year observations)
- Challenges:
  - High dimensional data (166 variables)
  - 13% of missing values

# Overall Approach



- ① Impute missing values by a time series analysis, auto regressive moving average (ARMA)
- ② Partial least squares (PLS)-based data reduction to reduce noise in the data
- ③ Obtain relevant information for the dependent variable and each independent variable by information gain and select best variable combination by a genetic algorithm-based global optimization algorithm
- ④ Classify by support vector machine (SVM) that maximizes the distance from the nearest training patterns (Excellent method)
- ⑤ Performance assessment by Accuracy, Precision, Recall, and F-measure

# Classification Results (2001-2004)

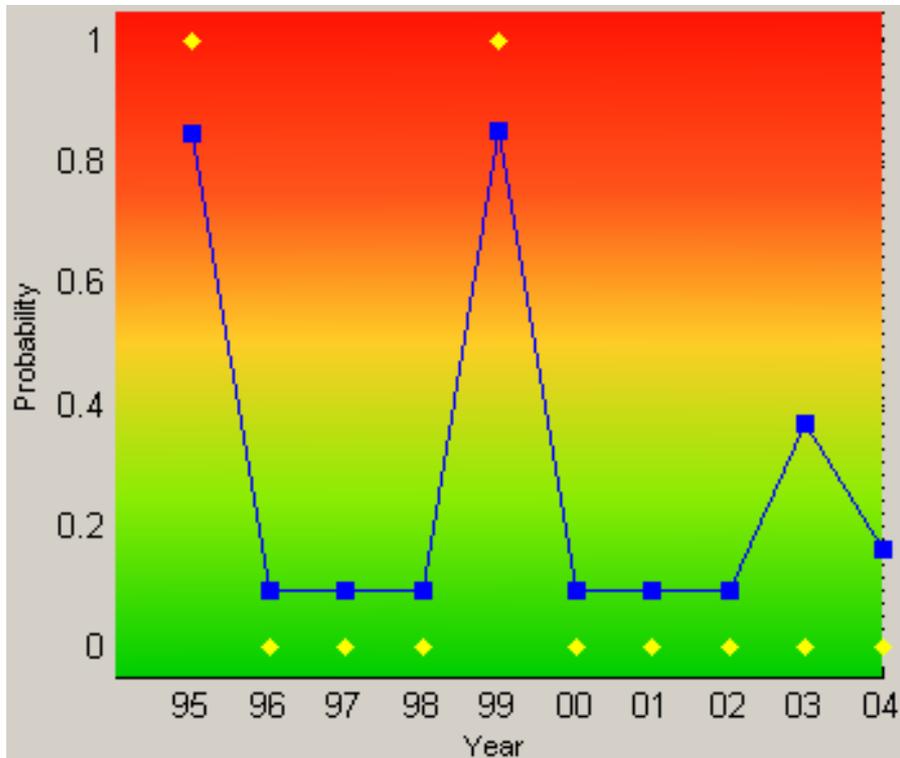
Variable	Sensitivity	Variable	Sensitivity	Causal Impact
STATEVIOLENCE		STORGREPRESS		+
VIOLRHETDOM		SMUGGLE		
DIASUP		INGOHUMSUP		
RELORG		ORGCULTGR		
GENDEXC		DEMORG		-
GORGST3		ORGPOP		
<b>Classification Accuracy</b>				92.61%
<b>Recall</b>				77.55%
<b>Precision</b>				86.36%
<b>F-measure</b>				81.72%

# Probabilities of Violence

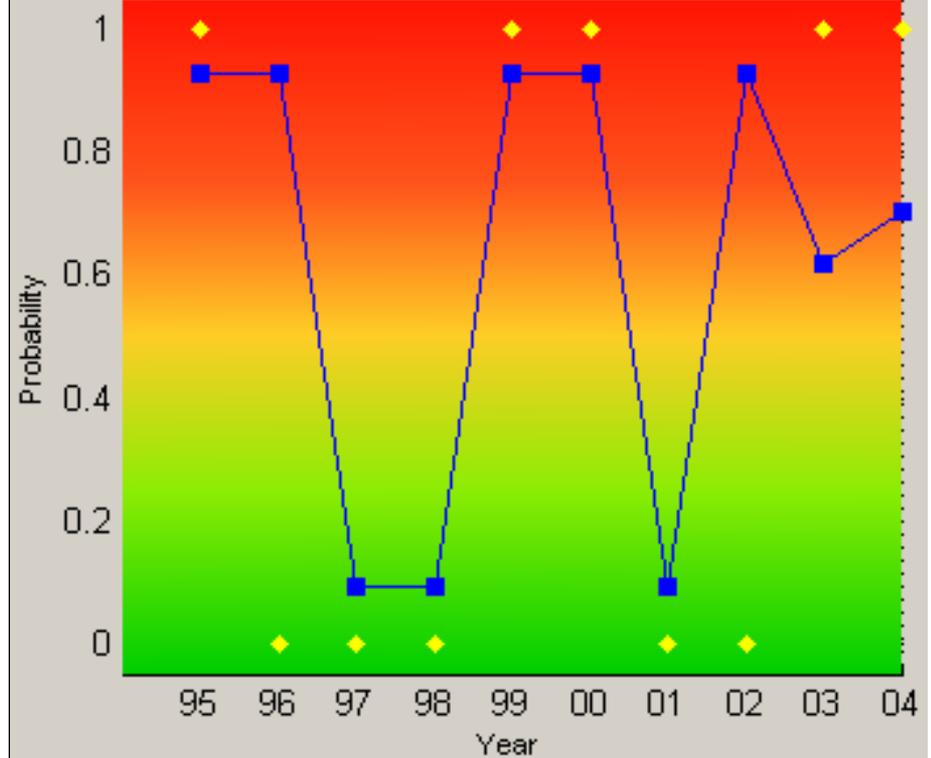
<i>Variables</i>	<i>Minimum</i>	<i>Maximum</i>
Violence by State	10%	55%
Repression by State	23%	60%
Violent rhetoric	10%	35%
Diaspora support	10%	45%
Humanitarian Support from International Nongovernment Organization	10%	40%
Religious Organization	12%	85%
Dominant Cultural Grievance of the Organization	10%	38%
Democratic	55%	28%
Gender Exclusiveness	10%	45%
Popularity of Organization	32%	15%
Electoral Politics	70%	18%
Smuggling of Consumer Goods	10%	45%

# Successful Forecasts

'Islamic Action Organization\_Iraq'

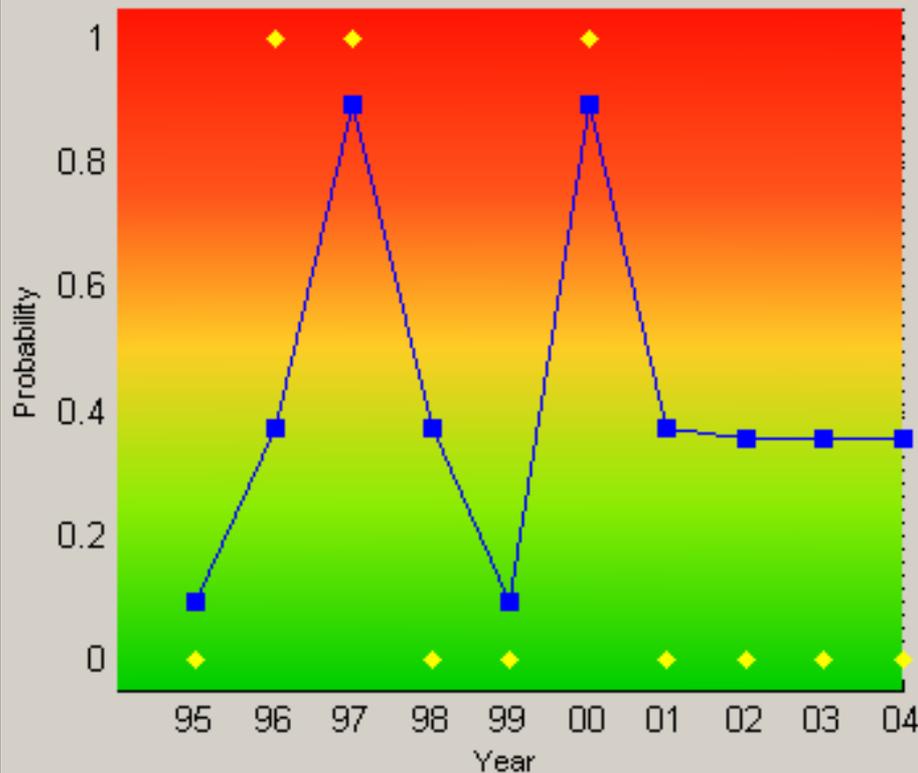


'Iraqi Baath Party\_Iraq'

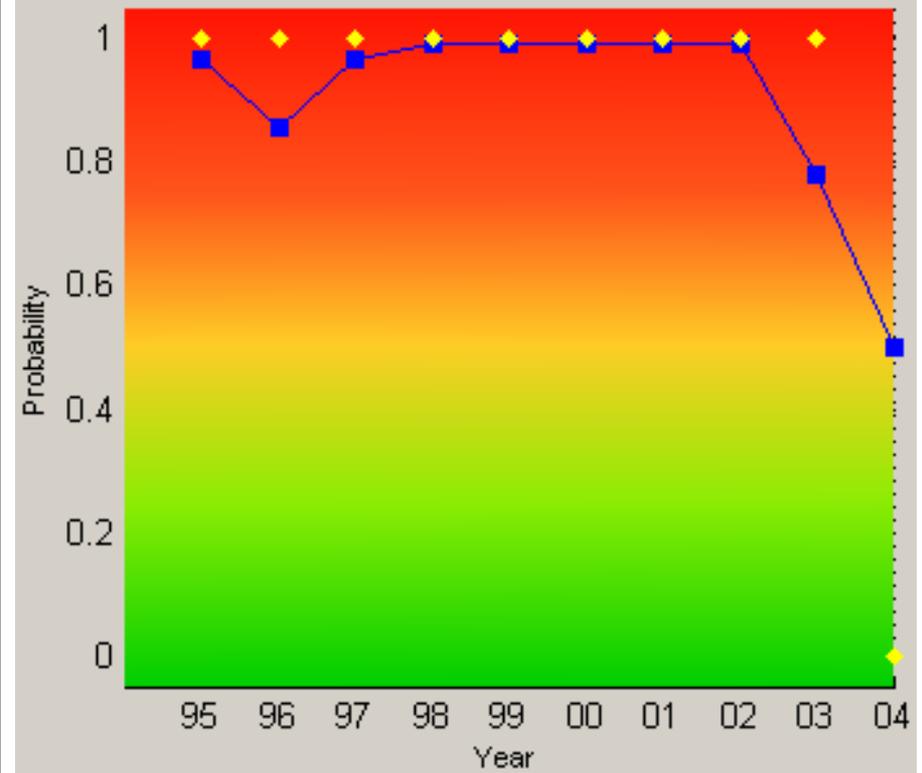


# Somewhat Successful Forecasts

'Al-Jama" a al-Islamiyia\_Lebanon'

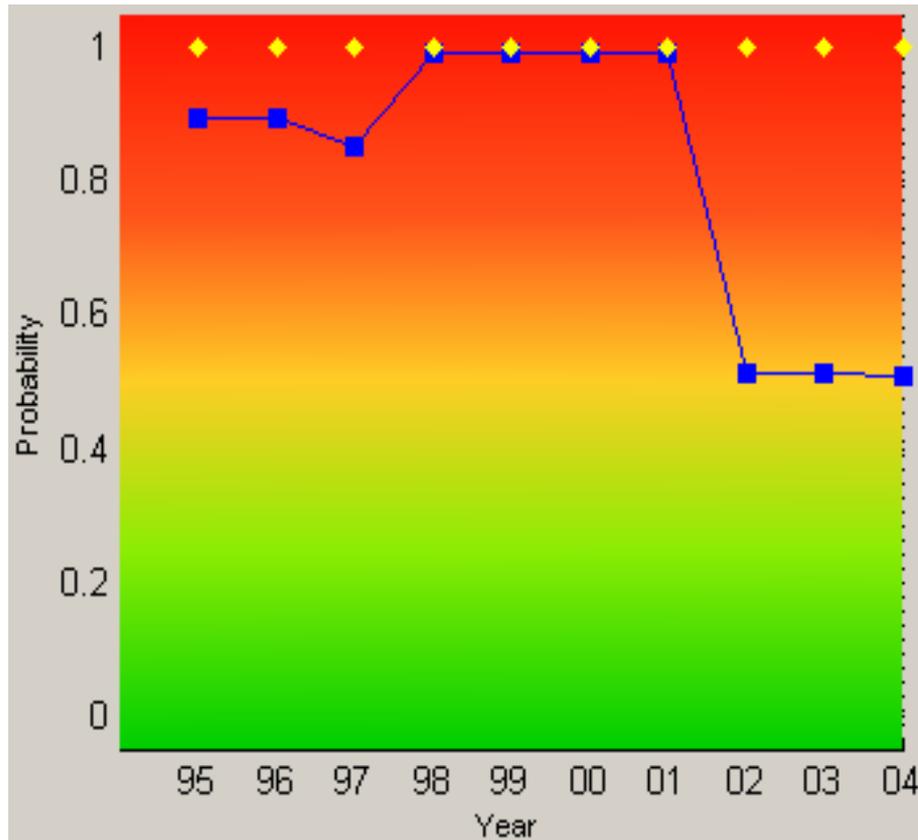


'Kurdistan Democratic Party\_Iraq'

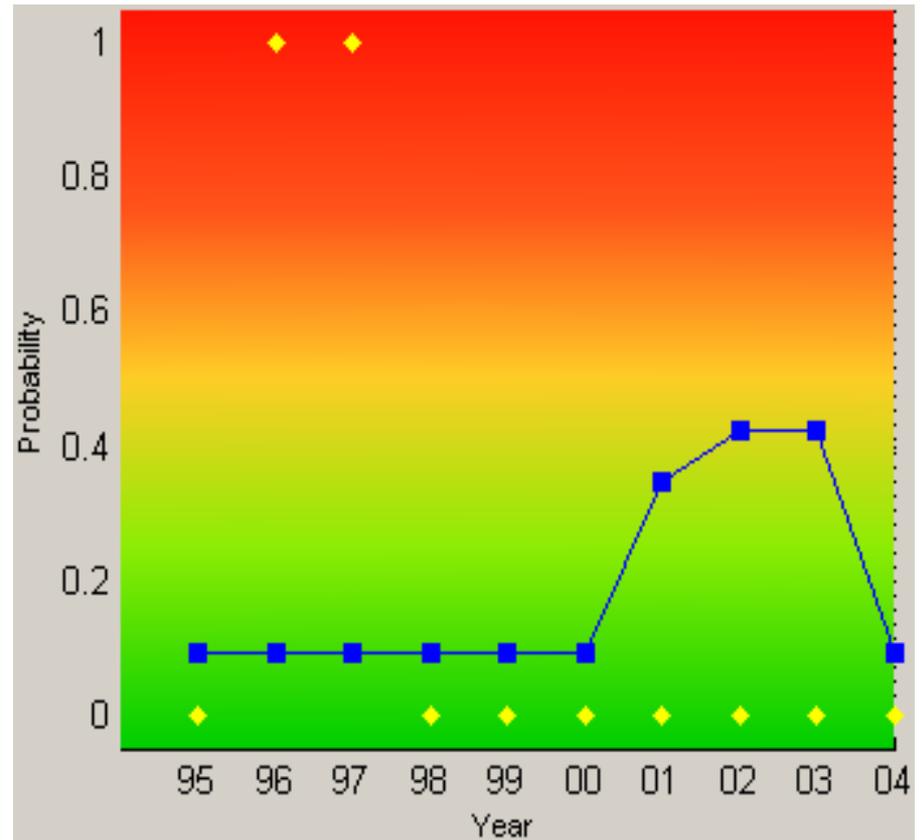


# Less Successful Forecasts

## ' Hamas\_Israel'



## ' Conservative Party\_Iraq'



# General Predictions for Violence for 2009

<b>Organization</b>	<b>Prediction</b>
'Amal_Lebanon'	Very Likely
'Fatah/Palestinian Liberation Organization_Lebanon'	Very Likely
' Hamas_Israel'	Very Likely
'Hezbollah_Lebanon'	Very Likely
'Palestinian Islamic Jihad_Israel'	Very Likely
'Al-Jama''a al-Islamiya_Lebanon'	Possible
'Democratic Front for the Liberation of Palestine_Israel'	Possible
'Iraqi Baath Party_Iraq'	Possible
'Islamic Movement in Iraqi Kurdistan_Iraq'	Possible
'Islamic Unity Movement_Lebanon'	Possible
'Supreme Council for the Islamic Revolution in Iraq'	Possible