

# Nato Advanced Research Workgroup

## “Behind MACBETH”



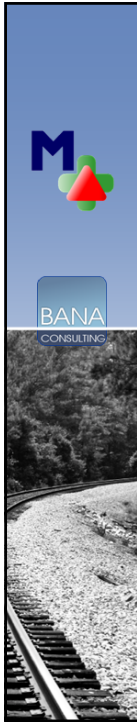
Lisbon, April 2007

### *Behind* MACBETH



	A	B	C	D		
A		Very Weak	Moderate	Very Strong	Extreme	6
B			Moderate	Strong	Very Strong	5
C				Strong	Strong	4
D					Moderate	3
					Weak	2
					Very Weak	1

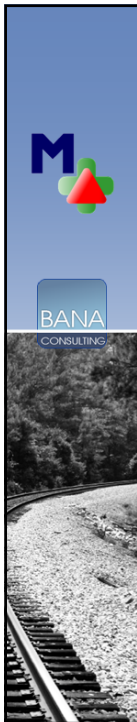
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## Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate	Very Strong	Extreme	6
B			Moderate 3	Strong	Very Strong	5
C				Strong 4	Strong	4
D					Moderate	3
					Weak	2
					Very Weak	1

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## Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate 4	Very Strong	Extreme	6
B			Moderate 3	Strong	Very Strong	5
C				Strong 4	Strong	4
D					Moderate	3
					Weak	2
					Very Weak	1

$v(A)-v(C) = v(A)-v(B) + v(B)-v(C)$

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### Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate 4	Very Strong	Extreme	6
B			Moderate 3	Strong	Very Strong	5
C				Strong 4	Strong	4
D					Moderate	3
					Weak	2
					Very Weak	1

$v(A)-v(C) < v(C)-v(D)$

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### Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate 4	Very Strong	Extreme	7
B			Moderate 3	Strong	Very Strong	6
C				Strong 5	Strong	5
D					Moderate	3-4
					Weak	2
					Very Weak	1

Increase  $v(C)-v(D)$  in 1

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## Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate 4	Very Strong	Extreme	10
B			Moderate 3	Strong 8	Very Strong	9
C				Strong 5	Strong	5-8
D					Moderate	3-4
					Weak	2
					Very Weak	1

$v(B)-v(D) = v(B)-v(C) + v(C)-v(D)$

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## Behind MACBETH

	A	B	C	D		
A		Very Weak 1	Moderate 4	Very Strong 9	Extreme	10
B			Moderate 3	Strong 8	Very Strong	9
C				Strong 5	Strong	5-8
D					Moderate	3-4
					Weak	2
					Very Weak	1

$v(A)-v(D) = v(A)-v(B) + v(B)-v(C) + v(C)-v(D)$

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# Behind MACBETH

	A	B	C	D	Current scale
A	no 0	very weak 1	moderate 4	v. strong 9	9
B		no 0	moderate 3	strong 8	8
C			no 0	strong 5	5
D				no 0	0

**Consistent judgements**

	Current scale	MACBETH anchored	MACBETH basic
A	9	9.00	9.00
B	8	8.00	8.00
C	5	5.00	5.00
D	0	0.00	0.00

	0	1	3
no	0		
very weak	1.00	1.00	
moderate		3.00	4.00