Table 2a

Conditional scedasticity of the structural innovations

[*Y,P,M1,R*]			[*Y,P,TR,R*]			[*Y,P,TR,NBR,R*]		
Y	δ_{11}	0.2501 (3.47)	*Y*	δ_{11}	0.1902 (3.20)	*Y*	δ_{11}	0.1452 (2.50)
	δ_{21}	-----		δ_{21}	-----		δ_{21}	-----
P	δ_{12}	0.2356 (3.78)	*P*	δ_{12}	0.2547 (3.53)	*P*	δ_{12}	0.2470 (3.29)
	δ_{22}	-----		δ_{22}	-----		δ_{22}	-----
M1	δ_{13}	0.1231 (1.79)	*TR*	δ_{13}	-----	*TR*	δ_{13}	-----
	δ_{23}	0.5959 (3.26)		δ_{23}	-----		δ_{23}	-----
R	δ_{14}	0.1559 (3.56)	*R*	δ_{14}	0.2331 (13.33)	*NBR*	δ_{14}	0.1594 (6.38)
	δ_{24}	0.7493 (10.26)		δ_{24}	0.7059 (23.40)		δ_{24}	0.8146 (28.92)
						R	δ_{15}	0.2300 (5.04)
							δ_{25}	0.7476 (14.89)

$\triangle_j$= diag (δ_{j1},---,δ_{jN}) (j= 1,2) capture the coefficients of the univariate GARCH processes - see equation (5). Numbers in parenthesis are the t-statistics. ---- denotes the coefficients that are fixed to zero in order to satisfy the condition $\delta_{ji} \geq 0$ (see section 2.3).

Table 2b

Tests of validity of the GARCH (1,1) processes

	[*Y,P,M1,R*]			[*Y,P,TR,R*]			[*Y,P,TR,NBR,R*]		
Y	*s*= 4	0.5788	*Y*	*s*= 4	0.2805	*Y*	*s*= 4	0.3467
	s= 8	0.3495		*s*= 8	0.5158		*s*= 8	0.3072
	s= 12	0.3796		*s*= 12	0.7759		*s*= 12	0.1829
P	*s*= 4	0.1435	*P*	*s*= 4	0.5036	*P*	*s*= 4	0.2268
	s= 8	0.5168		*s*= 8	0.7565		*s*= 8	0.2218
	s= 12	0.1442		*s*= 12	0.6136		*s*= 12	0.8052
M1	*s*= 4	0.5150	*TR*	*s*= 4	0.7255	*TR*	*s*= 4	0.3167
	s= 8	0.7890		*s*= 8	0.5118		*s*= 8	0.3219
	s= 12	0.6104		*s*= 12	0.5873		*s*= 12	0.1632
R	*s*= 4	0.4539	*R*	*s*= 4	0.5985	*NBR*	*s*= 4	0.9002
	s= 8	0.2220		*s*= 8	0.2910		*s*= 8	0.7384
	s= 12	0.1138		*s*= 12	0.8287		*s*= 12	0.5357
						R	s= 4	0.6670
							s= 8	0.1747
							s= 12	0.1603

s= 4,8,12: Marginal significance (p-value) of the test for

$\sum_{j=1}^{s} d_j = 0$, *when* $\delta_{1i} = \delta_{2i} = 0$; $\sum_{j=2}^{s} d_j = 0$, *when* $\delta_{1i} \neq 0$, $\delta_{2i} = 0$; $\sum_{j=3}^{s} d_j = 0$, *when* $\delta_{1i} \neq 0$, $\delta_{2i} \neq 0$;

in conditional heteroscedasticity test equation:

$\xi_{it}^2 = cste + \sum_{j=1}^{s} d_j \xi_{i,t-j}^2 + res_t$, *where* ξ_{it} *is the structural innovation of the ith variable* .

Table 5

Tests of Restrictions

Cholesky-M-Rule	(*i*)	(*ii*)	(*iii*)
Homoscedasticity	195.5096* (12)	218.4348* (10)	249.2702* (16)
Heteroscedasticity	8.7434 (6)	3.4740 (6)	19.4552** (10)
Cholesky-R-Rule	(*iv*)	(*v*)	(*vi*)
Homoscedasticity	195.5096* (12)	218.4348* (10)	249.2702* (16)
Heteroscedasticity	7.2798 (6)	4.7114 (6)	12.7364 (10)
Gordon-Leeper	(*vii*)	(*viii*)	(*ix*)
Heteroscedasticity	5.3822 (4)	2.5002 (4)	5.8176 (6)

The numbers refer to the χ^2-statistics associated with the log-likelihood ratio tests. The numbers in parentheses are the number of restrictions.
See the end of table 4 for the definitions of (*i*) - (*ix*).
*Restrictions are rejected at the 1% level.
**Restrictions are rejected at the 5% level.

Table 3

Short-run elasticities

	[*Y,P,M1,R*]	[*Y,P,TR,R*]	[*Y,P,TR,NBR,R*]
$\varepsilon_{y,m}$	0.2362	0.0899	0.1050
	(0.2167)	(0.4753)	(0.0662)
$\varepsilon_{y,r}$	0.0017	-0.0014	0.0014
	(0.0028)	(0.0014)	(0.0017)
$\varepsilon_{m,r}$	- 0.0019**	0.0013	-0.0114*
	(0.0009)	(0.0027)	(0.0021)
$\varepsilon_{m,y}$	-0.0639	-0.2133	0.0567
	(0.0786)	(0.7696)	(0.1146)
$\varepsilon_{r,m}$	25.23 ***	3.84	5.76
	(13.95)	(9.65)	(3.75)
$\varepsilon_{r,y}$	8.37	7.13	1.09
	(11.88)	(7.84)	(5.38)

The numbers refer to the short-run elasticity of x_{1t} with respect to x_{2t} ($\varepsilon_{x1, x2}$). The short-run elasticities are recovered from the matrix A. For example, if x_{1t} and x_{2t} are measured in logs or in percent and are the first two variables of the SVAR process, then $\varepsilon_{x1,x2} = -a_{12}/a_{11}$ - where a_{11} and a_{12} are the elements of the matrix A.
The numbers in parentheses are the standard errors.

*: Significant at 1% level

**: Significant at 5% level

***:Significant at 10% level.

Table 1

Conditional scedasticity of the statistical innovations

	[*Y,P,M1,R*]			[*Y,P,TR,R*]			[*Y,P,TR,NBR,R*]		
Y	s= 1	0.0008	Y	s= 1	0.0008	Y	s= 1	0.0038
	s= 2	0.0462		s= 2	0.1015		s= 2	0.3507
	s= 4	0.0812		*s*= 4	0.1193		*s*= 4	0.2780
	s= 8	0.5625		*s*= 8	0.8597		*s*= 8	0.9245
	s= 12	0.5115		*s*= 12	0.9965		*s*= 12	0.7706
P	*s*= 1	0.0000	*P*	*s*= 1	0.0000	*P*	*s*= 1	0.0000
	s= 2	0.0001		*s*= 2	0.0001		*s*= 2	0.0000
	s= 4	0.0111		*s*= 4	0.0075		*s*= 4	0.0016
	s= 8	0.0572		*s*= 8	0.0375		*s*= 8	0.0409
	s= 12	0.0281		*s*= 12	0.0154		*s*= 12	0.0190
M1	*s*= 1	0.0811	*TR*	*s*= 1	0.7187	*TR*	*s*= 1	0.3460
	s= 2	0.0157		*s*= 2	0.6118		*s*= 2	0.4019
	s= 4	0.0828		*s*= 4	0.3886		*s*= 4	0.2320
	s= 8	0.0358		*s*= 8	0.3754		*s*= 8	0.2817
	s= 12	0.0154		*s*= 12	0.1165		*s*= 12	0.0950
R	*s*= 1	0.5096	*R*	*s*= 1	0.5751	*NBR*	*s*= 1	0.0000
	s= 2	0.0001		*s*= 2	0.0000		*s*= 2	0.0000
	s= 4	0.0051		*s*= 4	0.0060		*s*= 4	0.0000
	s= 8	0.0000		*s*= 8	0.0000		*s*= 8	0.0018
	s= 12	0.0000		*s*= 12	0.0000		*s*= 12	0.00 01
						R	*s*= 1	0.5041
							s= 2	0.0005
							s= 4	0.0109
							s= 8	0.0001
							s= 12	0.0001

s= 1,2,4,8,12: Marginal significance (p-value) of the test for

$$\sum_{j=1}^{s} d_j = 0$$

in the conditional heteroscedasticity test equation:

$$v_{it}^2 = cste + \sum_{j=1}^{s} d_j v_{i,t-j}^2 + res_t, \quad where \quad v_{it} \quad is \quad the \quad statistical \quad innovation \quad of \quad the \quad ith \quad variable \quad .$$