

Partially Successful Replication of Brunner's 2000 JMCB Article

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Making use of the data/code archives maintained by the *Journal of Money, Credit and Banking*, it can be shown that most of the tables containing numerical results (Tables 2,3,5, and 6) in the article by Brunner (2000) contain minor errors. Below are presented Brunner's Table 3, as it appeared in his article, and the correct Table 3.

Economic Variable	Estimate of H_z	Significance Levels				R^2
		$H_z = 0$	$H_z = 1$	$G_z = 0$	$H_z = 1$ $G_z = 0$	
UR_{t-1}	.57	< .01	.01	.03	.03	.19
$\% \Delta RSLSt - 1$	.80	< .01	.02	< .01	< .01	.36
$\% \Delta IP_{t-1}$	.85	< .01	.05	.06	.01	.24
$\% \Delta CPI_{t-1}$	.95	< .01	.69	.71	.73	.00

Published table 3

Economic Variable	Estimate of H_z	Significance Levels				R^2
		$H_z = 0$	$H_z = 1$	$G_z = 0$	$H_z = 1$ $G_z = 0$	
UR_{t-1}	.57	< .01	.01	.03	.03	.58
$\% \Delta RSLSt - 1$	1.20	< .01	.02	< .01	< .01	.67
$\% \Delta IP_{t-1}$	1.15	< .01	.05	.06	.01	.60
$\% \Delta CPI_{t-1}$	1.05	< .01	.69	.71	.73	.44

Correct table 3, corrected errors in boldface

Most of the errors are due to mistakenly reporting \bar{R}^2 instead of R^2 . See the last column of numbers in the table. Note in particular that an R^2 reported to be zero actually is 0.44. Three other errors were due to ignoring a minus sign in an estimated coefficient; see the first column of numbers in the table below, which reports the estimate of H_z . The program actually estimated $H_z - 1$, and for the variable UR_{t-1} this coefficient was -0.43 . Hence the estimate of $H_z - 1 = -0.43 \Rightarrow H_z = 1 - 0.43 = 0.57$, and Brunner got this right. For $\% \Delta RSLSt - 1$ this coefficient was $+0.198$ but Brunner treated it as if it were -0.198 , and so reported 0.80 instead of the correct 1.20.

The correct Tables 2, 5 and 6, also can be found at this journal's website.

Dr. Brunner kindly reviewed this document, and decided that the main conclusions of his paper remain unchanged.

REFERENCES

Brunner, Allan D. (2000), "On the Derivation of Monetary Policy Shocks: Should We Throw the VAR Out with the Bath Water?" *Journal of Money, Credit and Banking* **32**(2), 254-279

Brunner, Allan D. (2003), personal communication.

Supporting Materials for
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Economic Variable	Estimate of H_{ffr}	Significance Levels				R^2
		$H_{ffr} = 0$	$H_{ffr} = 1$	$G_{ffr} = 0$	$H_{ffr} = 1$ $G_{ffr} = 0$	
$TFFR_{t-1}$	.99	< .01	.94	< .01	< .01	.41
$TBRt - 1$	.64	< .01	< .01	< .01	< .01	.78
CDR_{t-1}	.86	< .01	.26	< .01	< .01	.44
EDR_{t-1}	.82	< .01	.05	< .01	< .01	.47

Published Table 2

Economic Variable	Estimate of H_{ffr}	Significance Levels				R^2
		$H_{ffr} = 0$	$H_{ffr} = 1$	$G_{ffr} = 0$	$H_{ffr} = 1$ $G_{ffr} = 0$	
$TFFR_{t-1}$	.99	< .01	.94	< .01	< .01	.69
$TBRt - 1$	.64	< .01	< .01	< .01	< .01	.95
CDR_{t-1}	.86	< .01	.26	< .01	< .01	.71
EDR_{t-1}	.82	< .01	.05	< .01	< .01	.75

Correct table 2, corrected errors in boldface

Source of Innovation	Parameter Estimates			
	λ_1 or γ_1	λ_1 or γ_1	λ_1 or γ_1	R^2
(1) Standard VAR Model	-.77***	-.12	.87**	.06
(2) Restructured VAR Model	-1.31***	-.06	1.12***	.13
(3) Augmented VAR Model	-.44*	.07	.18	.00
(4) Pure Expectations Model	-.79***	-.09	.23	.03

Published Table 5

Source of Innovation	Parameter Estimates			
	λ_1 or γ_1	λ_1 or γ_1	λ_1 or γ_1	R^2
(1) Standard VAR Model	-.77***	-.12	.87**	.07
(2) Restructured VAR Model	-1.31***	-.06	1.12***	.14
(3) Augmented VAR Model	-.44*	.07	.08	.02
(4) Pure Expectations Model	-.79***	-.09	.23	.04

Correct Table 5, corrections in boldface

Source of Shocks	Variance of Shocks	Correlation with			
		(1)	(2)	(3)	(4)
(1) Standard VAR Model	.335	–	.97	.58	.58
(2) Restructured VAR Model	.339	.97	–	.59	.60
(3) Augmented VAR Model	.130	.58	.59	–	.56
(4) Pure Expectations Model	.406	.58	.60	.56	–

Published Table 6

Source of Shocks	Variance of Shocks	Correlation with			
		(1)	(2)	(3)	(4)
(1) Standard VAR Model	.362	–	.97	.58	.58
(2) Restructured VAR Model	.396	.97	–	.59	.60
(3) Augmented VAR Model	.132	.58	.59	–	.56
(4) Pure Expectations Model	.423	.58	.60	.56	–

Correct Table 6, corrections in boldface