Nixon and Ford as Ex-Post Keynesians

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Abstract:
Reestimation of a growth rate version of the St. Louis equation suggests that the equation does believe in fiscal policy, but only for the Nixon-Ford administrations.

Article:
B. Friedman [(1977), p. 367] concluded that: "The St. Louis Model now believes in fiscal policy- because the sum of the government expenditure coefficients were statistically significant for the 1953i to 1976ii and the 1960i to the 1976ii periods when the first difference form of the St. Louis equation was estimated. In response to B. Friedman, Carlson (1978) showed that the first difference form failed the Goldfeld-Quandt test for heteroskedasticity which means that the t values of the coefficients are invalid. Carlson proposes a growth rate version of the St. Louis equation as the appropriate specification since it passes a Goldfeld-Quandt test. The sum of the monetary coefficients is 1.05 with a t value of 5.62, while the sum of the government expenditure coefficients is 0.02 with a t value of 0.30. Therefore, he concludes that the St. Louis equation does not believe in fiscal policy.

TABLE 1. *St. Louis Equation: Democrat-Republican Version*

	1953i–1960i	1960ii–1969i	1969ii–1977i	1953i–1969i	1960ii–1977i	1953i–1960i 1969ii–1977i
M_t	0.91 (2.33)	0.11 (0.96)	0.52 (1.46)	0.30 (2.00)	0.26 (1.75)	0.72 (2.48)
M_{t-1}	0.58 (3.44)	0.33 (4.81)	0.53 (1.42)	0.45 (5.51)	0.32 (3.50)	0.32 (2.94)
M_{t-2}	0.18 (0.62)	0.30 (3.15)	−0.39 (−1.05)	0.37 (2.88)	0.21 (1.65)	−0.11 (−0.32)
M_{t-3}	0.19 (1.17)	−0.02 (−0.22)	0.73 (1.85)	0.12 (1.40)	0.01 (0.07)	0.69 (1.83)
M_{t-4}	0.43 (1.13)	−0.32 (−2.59)	−0.49 (−1.35)	−0.11 (−0.68)	−0.13 (−0.90)	−0.40 (−1.25)
ΣM	2.29 (3.51)	0.40 (1.94)	0.90 (1.93)	1.14 (4.75)	0.67 (2.69)	1.21 (3.93)
E_t	0.04 (0.62)	0.14 (3.18)	−0.01 (−0.07)	0.07 (1.77)	0.09 (2.13)	0.05 (0.83)
E_{t-1}	0.10 (2.55)	0.09 (3.01)	0.09 (1.27)	0.09 (3.56)	0.04 (1.11)	0.06 (1.27)
E_{t-2}	0.06 (1.11)	−0.03 (−0.68)	−0.02 (−0.25)	0.02 (0.65)	−0.02 (−0.42)	0.03 (0.69)
E_{t-3}	−0.08 (−2.11)	−0.11 (−4.12)	0.17 (2.42)	−0.10 (−3.70)	0.00 (−0.15)	−0.03 (−0.73)
E_{t-4}	−0.19 (−3.22)	−0.11 (−2.52)	0.12 (1.79)	−0.16 (−4.00)	0.04 (0.93)	−0.09 (−1.70)
ΣE	−0.07 (−0.65)	−0.03 (−0.35)	0.36 (2.07)	−0.07 (−0.96)	0.15 (1.57)	0.01 (0.14)
Constant	0.85 (0.58)	6.09 (6.05)	0.33 (0.09)	3.16 (3.86)	3.55 (2.40)	2.23 (2.08)
SSE	428.921	83.412	252.371	635.135	612.919	1017.24
R^2	0.558	0.605	0.564	0.531	0.253	0.463
DW	1.82	2.64	1.99	1.85	1.96	1.79
N	33	32	32	65	64	0.65
F^7_{51}				1.75		3.59
F^7_{50}					2.95	

If the profession is ready for the next round in the debate, the growth rate version of the St. Louis equation does believe in fiscal policy, but only for the Nixon-Ford administrations. Since sufficient time has elapsed, and a new preferred form of the St. Louis equation has been proposed, we decided to update Silber's (1971) Democratic and Republican versions of the equation. The results are presented in Table 1 for the growth rate version for the Eisenhower (E), Kennedy-Johnson (K-J), and Nixon-Ford (N-F) administrations and for the

various combinations. The sum of the government expenditure coefficients is only positive (0.36) and statistically significant (2.07) for the N-F years. For the other administrations, the sum of the government expenditure coefficients is approximately zero and insignificant. The sum of the monetary coefficients varies considerably over the three administrations, though the coefficients are always statistically significant.

Chow tests reveal that stability of the St. Louis equation cannot be rejected at the five percent level of significance for the E and K-J years; stability is rejected at that level for the K-J and N-F years and for the E and N-F administrations.

B. Friedman's caveats and conclusions are still in order with this twist of the St. Louis equation. Not only does the St. Louis equation believe in the recent effectiveness of fiscal policy, but Keynesians have only Nixon and Ford to thank. One wonders what tales will be told by the equation when it is estimated for the Carter Administration, assuming there are sufficient degrees of freedom.

References
Carlson, Keith M. "Does the St. Louis Equation Now Believe in Fiscal Policy?" Federal Reserve Bank of St. Louis, *Review.* 60 (February 1978): 13-19.
Friedman, Benjamin M. "Even the St. Louis Model Now Believes in Fiscal Policy." *Journal of Money, Credit and Banking.* 9 (May 1977): 365-67.
Silber, William L. "The St. Louis Equation: 'Democratic' and 'Republican' Versions and Other Experiments." *Review of Economics and Statistics* 53 (November 1971): 362-67.