

## Note on the Dividends Paid Forecast

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Evan Karson

Moody's Analytics has re-specified its forecast equation for corporate after-tax dividends paid. Simply put, this variable was previously mis-specified. The native time series is nonstationary. Without adjustment, any regression produced is spurious. This resulted in a jump-off in the first quarter of forecast and an unreliable forecast thereafter.

To remedy this, we took a differenced log of the dependent variable. We also included after tax corporate profits, as they are a key input for dividend payments. We take a logged difference of this variable as well to make it stationary. We also maintain capacity utilization as a cyclical driver and include a dummy variable to account for a spike in the historical data. The new equation features lower back-testing error, shock properties, and no jump-off in the first period of forecast.

### New equation specification

Dependent Variable: DLOG(FZPAVN\_US)

Method: Least Squares

Date: 09/24/19 Time: 13:29

Sample (adjusted): 1985Q1 2019Q2

Included observations: 138 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(@MOVAV(FZPA_US,8))	0.658840	0.154945	4.252089	0.0000
D(@MOVAV(FCUMF_US,4))	0.014213	0.005975	2.378808	0.0188
D(@DURING("2004Q4"))	0.167512	0.032393	5.171204	0.0000
R-squared	0.250024	Mean dependent var		0.018187
Adjusted R-squared	0.238913	S.D. dependent var		0.052403
S.E. of regression	0.045716	Akaike info criterion		-3.311217
Sum squared resid	0.282150	Schwarz criterion		-3.247581
Log likelihood	231.4739	Hannan-Quinn criter.		-3.285356
Durbin-Watson stat	2.999067			

Mnemonics referenced in the above equation, for example FET, can be defined using the Mnemonic 411 feature on DataBuffet. Please contact [Help@economy.com](mailto:Help@economy.com) for assistance.

### Previous equation specification

Dependent Variable: FZPAVN\_US

Method: Least Squares

Date: 07/19/17 Time: 09:38

Sample: 1972Q4 2017Q1

Included observations: 178

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-212.0429	100.7357	-2.104944	0.0367
@MOVAV(FZPA_US,4)	0.569109	0.010263	55.45341	0.0000
@MOVAV(FCUMF_US,4)	2.714948	1.244914	2.180831	0.0305
@DURING("2004Q4")	114.4005	65.40664	1.749066	0.0820
R-squared	0.956562	Mean dependent var		353.9927
Adjusted R-squared	0.955813	S.D. dependent var		309.9035
S.E. of regression	65.14389	Akaike info criterion		11.21329
Sum squared resid	738408.4	Schwarz criterion		11.28479
Log likelihood	-993.9828	Hannan-Quinn criter.		11.24229
F-statistic	1277.234	Durbin-Watson stat		0.336970
Prob(F-statistic)	0.000000			

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