

Note on the Personal Interest Payments Forecast

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Moody's Analytics has re-specified its forecast equation for personal interest payments. The previous equation featured hard-coded coefficients that were not documented. It also forecast this nonstationary time series without transforming the dependent variable to make it stationary. As a result, the regression was spurious and unreliable.

The new equation forecasts personal interest payments as a function of consumer debt outstanding and interest rates on specific types of debt. Each debt type was its own independent variable, allowing the different independent variables to have different coefficients. The resulting interest rate times debt series was nonstationary, so we took the differenced log of these products.

New equation specification

Dependent Variable: DLOG(FYPOINTQ_US)

Method: Least Squares

Date: 09/09/19 Time: 18:51

Sample (adjusted): 1995Q1 2019Q1

Included observations: 97 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG((FZFL154190005Q_US- FZFL153165105Q_US)*FRCARB_US)	0.134608	0.050357	2.673084	0.0089
DLOG((FZFL154190005Q_US- FZFL153165105Q_US)*FRPERB_US)	0.224836	0.081071	2.773313	0.0067
DLOG((FZFL154190005Q_US- FZFL153165105Q_US)*FRCCARD_US)	0.372969	0.079062	4.717425	0.0000
R-squared	0.332323	Mean dependent var		0.010858
Adjusted R-squared	0.318117	S.D. dependent var		0.023517
S.E. of regression	0.019419	Akaike info criterion		-5.014654
Sum squared resid	0.035448	Schwarz criterion		-4.935024
Log likelihood	246.2107	Hannan-Quinn criter.		-4.982455
Durbin-Watson stat	1.679148			

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

Previous equation specification

Dependent Variable: FYPOINTQ_US

Method: ARMA Conditional Least Squares (Marquardt - EViews legacy)

Date: 08/01/13 Time: 14:05

Sample: 1962Q1 2013Q1

Included observations: 205

Convergence achieved after 4 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.178524	0.660034	1.785550	0.0757
.75*(.3*(FRTB3M_US/400)+.7*(1/8)*(1/400)*(FRAAAC_US+FRAAAC_US(- 1)+FRAAAC_US(-2)+FRAAAC_US(- 3)+FRAAAC_US(-4)+FRAAAC_US(- 5)+FRAAAC_US(-6)+FRAAAC_US(-7)))-(FYPOINTQ_US(-1))	1.000056	0.004479	223.2846	0.0000
AR(1)	0.365691	0.065782	5.559122	0.0000
R-squared	0.998383	Mean dependent var		114.2205
Adjusted R-squared	0.998367	S.D. dependent var		94.28503
S.E. of regression	3.810022	Akaike info criterion		5.527673
Sum squared resid	2932.285	Schwarz criterion		5.576302
Log likelihood	-563.5865	Hannan-Quinn criter.		5.547342
F-statistic	62363.15	Durbin-Watson stat		2.050516
Prob(F-statistic)	0.000000			
Inverted AR Roots	.37			

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