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# **Based Model Used Prepayment**

The REG Procedure Model: MODEL1 Dependent Variable: PP\_Used PP\_Used

Number of Observations Read	255	
Number of Observations Used	173	
Number of Observations with Missing Values	82	

Stepwise Selection: Step 0

First 11 Vars Entered: R-Square = 0.3219 and C(p) = 540.9025

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	11	0.02716	0.00247	6.95	<.0001			
Error	161	0.05721	0.00035532					
<b>Corrected Total</b>	172	0.08436						

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.15892	0.00487	0.37882	1066.12	<.0001
*	Feb	0.00244	0.00688	0.00004478	0.13	0.7231
*	Mar	0.03674	0.00700	0.00978	27.51	<.0001
*	Apr	0.02553	0.00700	0.00472	13.28	0.0004
*	May	0.02016	0.00700	0.00294	8.28	0.0046
*	June	0.02318	0.00700	0.00389	10.95	0.0012
*	July	0.02339	0.00700	0.00396	11.15	0.0010
*	Aug	0.02809	0.00700	0.00571	16.08	<.0001
*	Sept	0.01170	0.00700	0.00099086	2.79	0.0969
*	Oct	0.01081	0.00688	0.00087682	2.47	0.1182
*	Nov	-0.00193	0.00688	0.00002793	0.08	0.7795
*	Dec	-0.00107	0.00688	0.00000866	0.02	0.8761
	* Fo	rced into the	model by	the INCLUDE	= option	

Bounds on condition number: 1.8266, 217.19

Variable CREDIT\_CHGOFF\_US Entered: R-Square = 0.7587 and C(p) = 98.5101

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	12	0.06401	0.00533	41.92	<.0001			
Error	160	0.02036	0.00012724					

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	Corrected Total	172 0.084	36			
	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.19217	0.00351	0.38200	3002.27	<.0001
*	Feb	0.00182	0.00412	0.00002471	0.19	0.6600
*	Mar	0.03643	0.00419	0.00961	75.53	<.0001
*	Apr	0.02530	0.00419	0.00464	36.43	<.0001
*	May	0.02002	0.00419	0.00290	22.81	<.0001
*	June	0.02293	0.00419	0.00381	29.93	<.0001
*	July	0.02297	0.00419	0.00382	30.03	<.0001
*	Aug	0.02772	0.00419	0.00556	43.72	<.0001
*	Sept	0.01172	0.00419	0.00099452	7.82	0.0058
*	Oct	0.01180	0.00412	0.00104	8.21	0.0047
*	Nov	-0.00072127	0.00412	0.00000390	0.03	0.8612
*	Dec	-0.00028972	0.00412	6.294727E-7	0.00	0.9440
	CREDIT_CHGOFF_US	-0.00688	0.00040438	0.03685	289.61	<.0001
	* Forced	into the mode	el by the INC	LUDE= option		

Bounds on condition number: 1.8271, 248.97

Variable LN\_OIL\_P\_INX\_US Entered: R-Square = 0.7895 and C(p) = 69.1920

Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	13	0.06660	0.00512	45.87	<.0001		
Error	159	0.01776	0.00011170				
Corrected Total	172	0.08436					

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.14979	0.00938	0.02846	254.78	<.0001
*	Feb	0.00165	0.00386	0.00002046	0.18	0.6692
*	Mar	0.03592	0.00393	0.00934	83.57	<.0001
*	Apr	0.02437	0.00393	0.00429	38.41	<.0001
*	May	0.01877	0.00394	0.00254	22.74	<.0001
*	June	0.02152	0.00394	0.00334	29.87	<.0001
*	July	0.02154	0.00394	0.00334	29.91	<.0001
*	Aug	0.02636	0.00394	0.00501	44.81	<.0001
*	Sept	0.01048	0.00394	0.00079209	7.09	0.0085
*	Oct	0.01137	0.00386	0.00096815	8.67	0.0037
*	Nov	-0.00093093	0.00386	0.00000650	0.06	0.8097
*	Dec	-0.00032290	0.00386	7.818822E-7	0.01	0.9334
	LN_OIL_P_INX_US	0.01024	0.00212	0.00260	23.25	<.0001
	CREDIT_CHGOFF_US	-0.00695	0.00037916	0.03754	336.04	<.0001
	* Forced	into the mod	el by the INCI	LUDE= option		

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Bounds on condition number: 1.828, 283.68

Stepwise Selection: Step 3

Variable LT\_VHL\_SALES\_US Entered: R-Square = 0.8274 and C(p) = 32.6519

Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	14	0.06980	0.00499	54.08	<.0001		
Error	158	0.01457	0.00009218				
Corrected Total	172	0.08436					

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.03579	0.02116	0.00026380	2.86	0.0927
*	Feb	0.00173	0.00351	0.00002250	0.24	0.6219
*	Mar	0.03606	0.00357	0.00941	102.08	<.0001
*	Apr	0.02418	0.00357	0.00422	45.81	<.0001
*	May	0.01812	0.00358	0.00237	25.66	<.0001
*	June	0.02033	0.00358	0.00297	32.19	<.0001
*	July	0.01988	0.00359	0.00283	30.66	<.0001
*	Aug	0.02448	0.00359	0.00428	46.46	<.0001
*	Sept	0.00878	0.00359	0.00055161	5.98	0.0155
*	Oct	0.00990	0.00352	0.00073095	7.93	0.0055
*	Nov	-0.00181	0.00351	0.00002444	0.27	0.6073
*	Dec	-0.00066969	0.00351	0.00000336	0.04	0.8488
	LN_OIL_P_INX_US	0.01861	0.00240	0.00556	60.30	<.0001
	LT_VHL_SALES_US	0.00405	0.00068846	0.00320	34.67	<.0001
	CREDIT_CHGOFF_US	-0.00334	0.00070392	0.00207	22.46	<.0001
	* Forced	into the mode	el by the INCL	.UDE= option		

Bounds on condition number: 4.8342, 426.36

Variable CREDIT\_CHGOFF\_US\_a9 Entered: R-Square = 0.8343 and C(p) = 27.5816

Analysis of Variance							
Source	DF	Sum of Mean Squares F		F Value	Pr > F		
Model	15	0.07039	0.00469	52.70	<.0001		
Error	157	0.01398	0.00008904				
<b>Corrected Total</b>	172	0.08436					

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.04184	0.02092	0.00035597	4.00	0.0473
*	Feb	0.00164	0.00345	0.00002010	0.23	0.6354

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*	Mar	0.03597	0.00351	0.00936	105.15	<.0001
*	Apr	0.02422	0.00351	0.00424	47.59	<.0001
*	May	0.01822	0.00352	0.00239	26.87	<.0001
*	June	0.02035	0.00352	0.00297	33.39	<.0001
*	July	0.01975	0.00353	0.00279	31.35	<.0001
*	Aug	0.02431	0.00353	0.00422	47.44	<.0001
*	Sept	0.00875	0.00353	0.00054855	6.16	0.0141
*	Oct	0.01004	0.00346	0.00075141	8.44	0.0042
*	Nov	-0.00156	0.00345	0.00001828	0.21	0.6511
*	Dec	-0.00050431	0.00345	0.00000191	0.02	0.8839
	LN_OIL_P_INX_US	0.01711	0.00243	0.00443	49.73	<.0001
	LT_VHL_SALES_US	0.00398	0.00067726	0.00307	34.48	<.0001
	CREDIT_CHGOFF_US	-0.00451	0.00082839	0.00263	29.58	<.0001
	CREDIT_CHGOFF_US_a9	0.00144	0.00055989	0.00058628	6.58	0.0112
	* Forced in	to the model	by the INCLU	DE= option		

Bounds on condition number: 6.0064, 526.48

Stepwise Selection: Step 5

Variable CONS\_CONFIDENCE\_US\_a6 Entered: R-Square = 0.8445 and C(p) = 19.2238

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	16	0.07124	0.00445	52.94	<.0001			
Error	156	0.01312	0.00008410					
Corrected Total	172	0.08436						

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.03583	0.02042	0.00025891	3.08	0.0813
*	Feb	0.00168	0.00335	0.00002111	0.25	0.6171
*	Mar	0.03639	0.00341	0.00956	113.72	<.0001
*	Apr	0.02468	0.00342	0.00439	52.21	<.0001
*	May	0.01867	0.00342	0.00251	29.80	<.0001
*	June	0.02071	0.00342	0.00308	36.57	<.0001
*	July	0.01998	0.00343	0.00286	33.96	<.0001
*	Aug	0.02442	0.00343	0.00426	50.67	<.0001
*	Sept	0.00876	0.00343	0.00055001	6.54	0.0115
*	Oct	0.01023	0.00336	0.00078063	9.28	0.0027
*	Nov	-0.00151	0.00335	0.00001712	0.20	0.6525
*	Dec	-0.00051251	0.00335	0.00000197	0.02	0.8786
	CONS_CONFIDENCE_US_a6	0.00017880	0.00005595	0.00085887	10.21	0.0017
	LN_OIL_P_INX_US	0.01858	0.00240	0.00503	59.79	<.0001
	LT_VHL_SALES_US	0.00288	0.00074233	0.00127	15.05	0.0002
	CREDIT_CHGOFF_US	-0.00454	0.00080517	0.00267	31.78	<.0001
	CREDIT CHGOFF US a9	0.00179	0.00055530	0.00087432	10.40	0.0015

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\* Forced into the model by the INCLUDE= option

Bounds on condition number: 6.1605, 636.77

Stepwise Selection: Step 6

Variable LT\_VHL\_SALES\_US\_a9 Entered: R-Square = 0.8519 and C(p) = 13.7085

Analysis of Variance								
Source DF Sum of Squares Square F Value Pr >								
Model	17	0.07187	0.00423	52.43	<.0001			
Error	155	0.01250	0.00008062					
<b>Corrected Total</b>	172	0.08436						

	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.09618	0.02951	0.00085627	10.62	0.0014
*	Feb	0.00185	0.00328	0.00002553	0.32	0.5744
*	Mar	0.03727	0.00336	0.00995	123.35	<.0001
*	Apr	0.02623	0.00339	0.00483	59.86	<.0001
*	May	0.02055	0.00342	0.00292	36.19	<.0001
*	June	0.02235	0.00340	0.00347	43.09	<.0001
*	July	0.02104	0.00338	0.00313	38.76	<.0001
*	Aug	0.02496	0.00336	0.00444	55.01	<.0001
*	Sept	0.00910	0.00336	0.00059210	7.34	0.0075
*	Oct	0.01062	0.00329	0.00083912	10.41	0.0015
*	Nov	-0.00122	0.00329	0.00001103	0.14	0.7120
*	Dec	-0.00039482	0.00328	0.00000117	0.01	0.9044
	CONS_CONFIDENCE_US_a6	0.00030114	0.00007027	0.00148	18.37	<.0001
	LN_OIL_P_INX_US	0.01392	0.00289	0.00187	23.25	<.0001
	LT_VHL_SALES_US	0.00280	0.00072742	0.00119	14.80	0.0002
	LT_VHL_SALES_US_a9	-0.00277	0.00099480	0.00062317	7.73	0.0061
	CREDIT_CHGOFF_US	-0.00531	0.00083527	0.00325	40.36	<.0001
	CREDIT_CHGOFF_US_a9	0.00090916	0.00062935	0.00016825	2.09	0.1506
	* Forced into	the model by	the INCLUD	E= option		

Bounds on condition number: 11.322, 952

 $\label{lem:variable_credit_charge} Variable \ CREDIT\_CHGOFF\_US\_a9 \ Removed: \ R-Square = 0.8499 \ and \ C(p) = 13.7376$ 

Analysis of Variance								
Source DF Sum of Square F Value Pr								
Model	16	0.07170	0.00448	55.20	<.0001			
Error	156	0.01267	0.00008119					

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	Corrected Total 1	72 0.08436				
	Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
	Intercept	0.10968	0.02809	0.00124	15.25	0.0001
*	Feb	0.00193	0.00329	0.00002792	0.34	0.5584
*	Mar	0.03751	0.00336	0.01010	124.40	<.0001
*	Apr	0.02658	0.00339	0.00498	61.37	<.0001
*	May	0.02096	0.00342	0.00306	37.66	<.0001
*	June	0.02274	0.00341	0.00362	44.59	<.0001
*	July	0.02135	0.00338	0.00323	39.81	<.0001
*	Aug	0.02516	0.00337	0.00452	55.63	<.0001
*	Sept	0.00920	0.00337	0.00060515	7.45	0.0071
*	Oct	0.01064	0.00330	0.00084280	10.38	0.0015
*	Nov	-0.00125	0.00330	0.00001170	0.14	0.7047
*	Dec	-0.00043840	0.00329	0.00000144	0.02	0.8942
	CONS_CONFIDENCE_US_a6	0.00031953	0.00006934	0.00172	21.23	<.0001
	LN_OIL_P_INX_US	0.01327	0.00286	0.00175	21.51	<.0001
	LT_VHL_SALES_US	0.00290	0.00072683	0.00129	15.87	0.0001
	LT_VHL_SALES_US_a9	-0.00349	0.00086239	0.00133	16.37	<.0001
	CREDIT_CHGOFF_US	-0.00497	0.00080582	0.00309	38.11	<.0001
	* Forced into	the model by	the INCLUD	E= option		

Bounds on condition number: 8.4498, 775.8

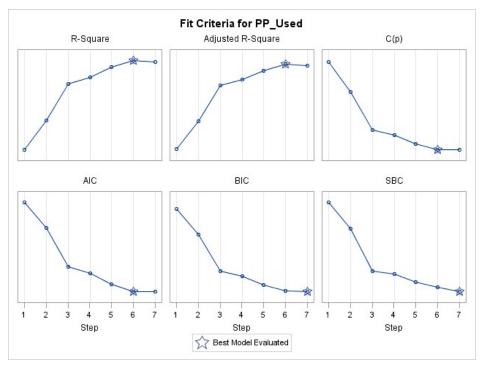
All variables left in the model are required or significant at the 0.1000 level.

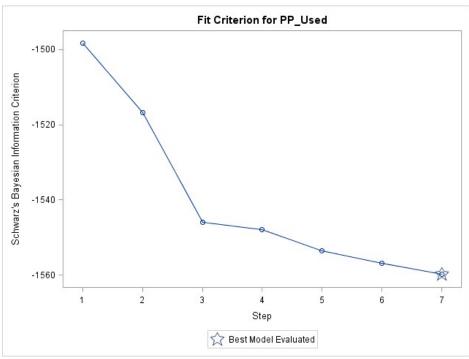
No other variable met the 0.1000 significance level for entry into the model.

	Summary of Stepwise Selection								
Step	Variable Entered	Variable Removed	Label	Number Vars In	Partial R- Square	Model R- Square	C(p)	F Value	Pr > F
1	CREDIT_CHGOFF_US		CREDIT_CHGOFF_US	12	0.4368	0.7587	98.5101	289.61	<.0001
2	LN_OIL_P_INX_US		LN_OIL_P_INX_US	13	0.0308	0.7895	69.1920	23.25	<.0001
3	LT_VHL_SALES_US		LT_VHL_SALES_US	14	0.0379	0.8274	32.6519	34.67	<.0001
4	CREDIT_CHGOFF_US_a9			15	0.0069	0.8343	27.5816	6.58	0.0112
5	CONS_CONFIDENCE_US_a6			16	0.0102	0.8445	19.2238	10.21	0.0017
6	LT_VHL_SALES_US_a9			17	0.0074	0.8519	13.7085	7.73	0.0061
7		CREDIT_CHGOFF_US_a9		16	0.0020	0.8499	13.7376	2.09	0.1506

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**Based Model Used Prepayment** 





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## **Based Model Used Prepayment**

Number of Observations Read	255
Number of Observations Used	173
Number of Observations with Missing Values	82

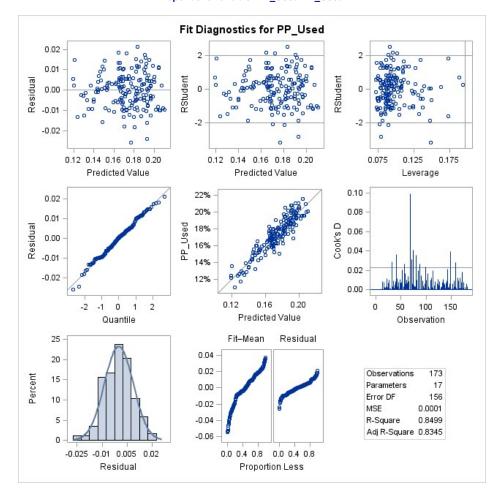
Analysis of Variance								
Source DF Squares Square F Value Pr > F								
Model	16	0.07170	0.00448	55.20	<.0001			
Error	156	0.01267	0.00008119					
Corrected Total	172	0.08436						

Root MSE	0.00901	R-Square	0.8499
Dependent Mean	0.17346	Adj R-Sq	0.8345
Coeff Var	5.19437		

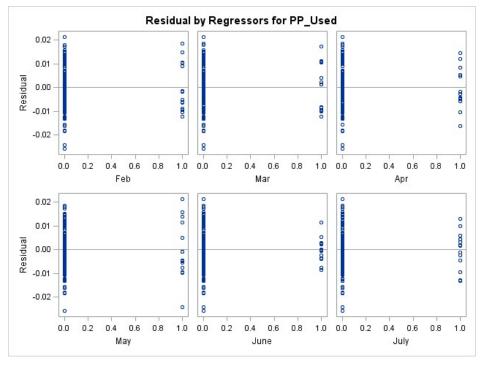
	Parameter Estimates							
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	Variance Inflation	
Intercept	Intercept	1	0.10968	0.02809	3.90	0.0001	0	
Feb		1	0.00193	0.00329	0.59	0.5584	1.82719	
Mar		1	0.03751	0.00336	11.15	<.0001	1.79274	
Apr		1	0.02658	0.00339	7.83	<.0001	1.82472	
May		1	0.02096	0.00342	6.14	<.0001	1.84974	
June		1	0.02274	0.00341	6.68	<.0001	1.83792	
July		1	0.02135	0.00338	6.31	<.0001	1.81476	
Aug		1	0.02516	0.00337	7.46	<.0001	1.80368	
Sept		1	0.00920	0.00337	2.73	0.0071	1.79779	
Oct		1	0.01064	0.00330	3.22	0.0015	1.84144	
Nov		1	-0.00125	0.00330	-0.38	0.7047	1.83393	
Dec		1	-0.00043840	0.00329	-0.13	0.8942	1.82813	
CONS_CONFIDENCE_US_a6		1	0.00031953	0.00006934	4.61	<.0001	5.08221	
LN_OIL_P_INX_US	LN_OIL_P_INX_US	1	0.01327	0.00286	4.64	<.0001	2.55225	
LT_VHL_SALES_US	LT_VHL_SALES_US	1	0.00290	0.00072683	3.98	0.0001	6.11796	
LT_VHL_SALES_US_a9		1	-0.00349	0.00086239	-4.05	<.0001	8.44978	
CREDIT_CHGOFF_US	CREDIT_CHGOFF_US	1	-0.00497	0.00080582	-6.17	<.0001	6.23318	

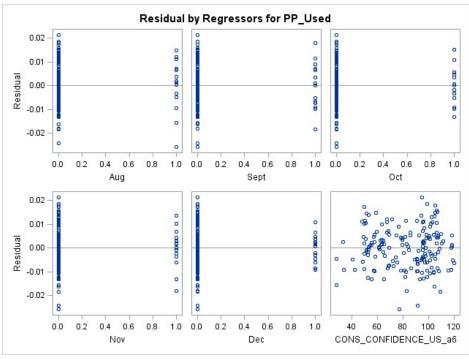
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## **Based Model Used Prepayment**

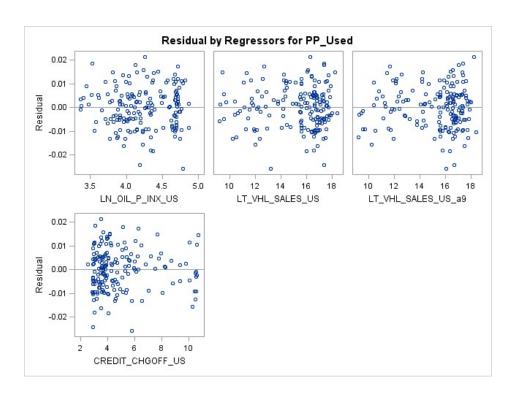


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## **Refined Regression**

Number of Observations Read	255
Number of Observations Used	173
Number of Observations with Missing Values	82

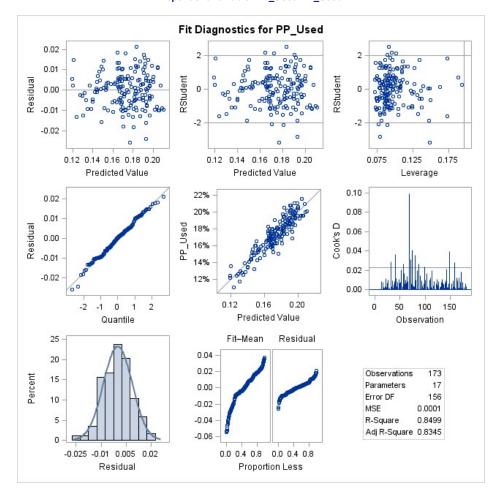
Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	16	0.07170	0.00448	55.20	<.0001		
Error	156	0.01267	0.00008119				
Corrected Total	172	0.08436					

Root MSE	0.00901	R-Square	0.8499
Dependent Mean	0.17346	Adj R-Sq	0.8345
Coeff Var	5.19437		

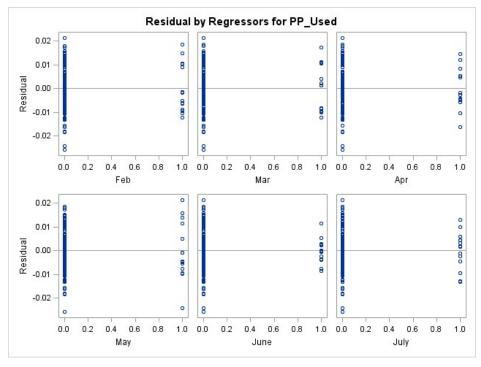
	Paramet	er Es	stimates				
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	Variance Inflation
Intercept	Intercept	1	0.10968	0.02809	3.90	0.0001	0
Feb		1	0.00193	0.00329	0.59	0.5584	1.82719
Mar		1	0.03751	0.00336	11.15	<.0001	1.79274
Apr		1	0.02658	0.00339	7.83	<.0001	1.82472
May		1	0.02096	0.00342	6.14	<.0001	1.84974
June		1	0.02274	0.00341	6.68	<.0001	1.83792
July		1	0.02135	0.00338	6.31	<.0001	1.81476
Aug		1	0.02516	0.00337	7.46	<.0001	1.80368
Sept		1	0.00920	0.00337	2.73	0.0071	1.79779
Oct		1	0.01064	0.00330	3.22	0.0015	1.84144
Nov		1	-0.00125	0.00330	-0.38	0.7047	1.83393
Dec		1	-0.00043840	0.00329	-0.13	0.8942	1.82813
CONS_CONFIDENCE_US_a6		1	0.00031953	0.00006934	4.61	<.0001	5.08221
LN_OIL_P_INX_US	LN_OIL_P_INX_US	1	0.01327	0.00286	4.64	<.0001	2.55225
LT_VHL_SALES_US	LT_VHL_SALES_US	1	0.00290	0.00072683	3.98	0.0001	6.11796
LT_VHL_SALES_US_a9		1	-0.00349	0.00086239	-4.05	<.0001	8.44978
CREDIT_CHGOFF_US	CREDIT_CHGOFF_US	1	-0.00497	0.00080582	-6.17	<.0001	6.23318

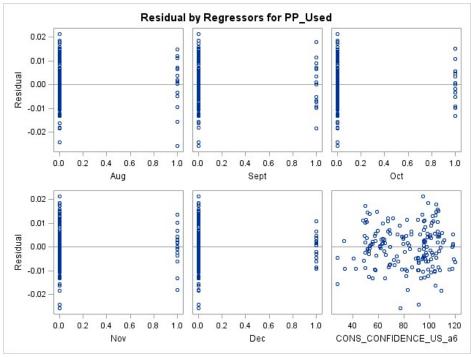
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## **Refined Regression**

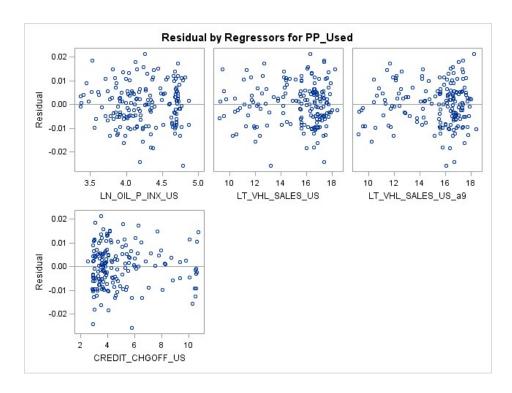


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## Model with forecast for Scenario 1

#### The AUTOREG Procedure

Dependent Variable	PP_Used	
	PP_Used	

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#### Model with forecast for Scenario 1

#### The AUTOREG Procedure

	Ordinary Least Squares Estimates							
SSE	0.01266509	DFE	156					
MSE	0.0000812	Root MSE	0.00901					
SBC	-1068.7815	AIC	-1122.3874					
MAE	0.00687735	AICC	-1118.439					
MAPE	4.00947532	HQC	-1100.6398					
		Total R-Square	0.8499					

Miscellaneous Statistics					
Statistic	Value	Prob	Label		
Normal Test	0.2851	0.8671	Pr > ChiSq		

<b>Durbin-Watson Statistics</b>								
Order	DW	Pr < DW	Pr > DW					
1	2.1128	0.6555	0.3445					
2	1.8000	0.0708	0.9292					
3	1.6049	0.0046	0.9954					
4	2.2518	0.9508	0.0492					

NOTE: Pr<DW is the p-value for testing positive autocorrelation, and Pr>DW is the p-value for testing negative autocorrelation.

Godfrey's Serial Correlation Test						
Alternative	LM	Pr > LM				
AR(1)	0.5923	0.4415				
AR(2)	2.1222	0.3461				
AR(3)	9.3377	0.0251				
AR(4)	11.8652	0.0184				

Tes	Tests for ARCH Disturbances Based on OLS Residuals								
Order	Q	Pr > Q	LM	Pr > LM	LK	Pr >  LK			
1	2.9023	0.0885	2.2504	0.1336	-1.4706	0.1414			
2	3.9259	0.1404	3.2685	0.1951	-1.7195	0.0855			
3	4.0966	0.2512	3.4882	0.3223	-1.6396	0.1011			
4	6.1695	0.1868	5.1638	0.2709	-2.1304	0.0331			
5	6.3321	0.2752	5.4812	0.3600	-2.1392	0.0324			
6	9.2486	0.1601	7.5569	0.2724	-1.1393	0.2546			
7	10.8685	0.1445	8.0069	0.3320	-1.5030	0.1328			
8	15.1163	0.0569	11.8855	0.1564	-0.5133	0.6077			
9	17.9365	0.0359	16.4000	0.0590	0.3006	0.7637			
10	18.2895	0.0503	16.9004	0.0766	0.2255	0.8216			
11	18.3615	0.0736	17.8837	0.0843	0.4504	0.6524			
12	18.7200	0.0955	17.9295	0.1178	0.3669	0.7137			

Parameter Estimates						
Variable	DF	Estimate	Standard Error		Approx Pr >  t	Variable Label

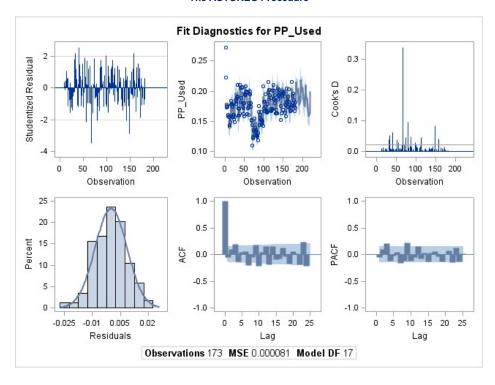
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Intercept	1	0.1097	0.0326	3.37	0.0010	
Feb	1	0.001930	0.003049	0.63	0.5277	
Mar	1	0.0375	0.003117	12.04	<.0001	
Apr	1	0.0266	0.003071	8.65	<.0001	
May	1	0.0210	0.003804	5.51	<.0001	
June	1	0.0227	0.002313	9.83	<.0001	
July	1	0.0214	0.002839	7.52	<.0001	
Aug	1	0.0252	0.003326	7.57	<.0001	
Sept	1	0.009195	0.003118	2.95	0.0037	
Oct	1	0.0106	0.002553	4.17	<.0001	
Nov	1	-0.001252	0.002478	-0.51	0.6142	
Dec	1	-0.000438	0.002425	-0.18	0.8568	
CONS_CONFIDENCE_US_a6	1	0.000320	0.0000579	5.51	<.0001	
LN_OIL_P_INX_US	1	0.0133	0.003109	4.27	<.0001	LN_OIL_P_INX_US
LT_VHL_SALES_US	1	0.002895	0.000754	3.84	0.0002	LT_VHL_SALES_US
LT_VHL_SALES_US_a9	1	-0.003490	0.000958	-3.64	0.0004	
CREDIT_CHGOFF_US	1	-0.004975	0.001022	-4.87	<.0001	CREDIT_CHGOFF_US

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## Model with forecast for Scenario 1

#### The AUTOREG Procedure



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## Model with forecast for Scenario 2

The AUTOREG Procedure

Dependent Variable	PP_Used	
	PP_Used	

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#### Model with forecast for Scenario 2

#### The AUTOREG Procedure

Ordinary Least Squares Estimates							
SSE 0.01266509 DFE 15							
MSE	0.0000812	Root MSE	0.00901				
SBC	-1068.7815	AIC	-1122.3874				
MAE	0.00687735	AICC	-1118.439				
MAPE	4.00947532	HQC	-1100.6398				
		Total R-Square	0.8499				

Miscellaneous Statistics							
Statistic Value Prob Label							
Normal Test	0.2851	0.8671	Pr > ChiSq				

<b>Durbin-Watson Statistics</b>								
Order DW Pr < DW Pr > D								
1	2.1128	0.6555	0.3445					
2	1.8000	0.0708	0.9292					
3	1.6049	0.0046	0.9954					
4	2.2518	0.9508	0.0492					

NOTE: Pr<DW is the p-value for testing positive autocorrelation, and Pr>DW is the p-value for testing negative autocorrelation.

Godfrey's Serial Correlation Test							
Alternative LM Pr > LM							
AR(1)	0.5923	0.4415					
AR(2)	2.1222	0.3461					
AR(3)	9.3377	0.0251					
AR(4)	11.8652	0.0184					

Tests for ARCH Disturbances Based on OLS Residuals								
Order	Q	Pr > Q	LM	Pr > LM	LK	Pr >  LK		
1	2.9023	0.0885	2.2504	0.1336	-1.4706	0.1414		
2	3.9259	0.1404	3.2685	0.1951	-1.7195	0.0855		
3	4.0966	0.2512	3.4882	0.3223	-1.6396	0.1011		
4	6.1695	0.1868	5.1638	0.2709	-2.1304	0.0331		
5	6.3321	0.2752	5.4812	0.3600	-2.1392	0.0324		
6	9.2486	0.1601	7.5569	0.2724	-1.1393	0.2546		
7	10.8685	0.1445	8.0069	0.3320	-1.5030	0.1328		
8	15.1163	0.0569	11.8855	0.1564	-0.5133	0.6077		
9	17.9365	0.0359	16.4000	0.0590	0.3006	0.7637		
10	18.2895	0.0503	16.9004	0.0766	0.2255	0.8216		
11	18.3615	0.0736	17.8837	0.0843	0.4504	0.6524		
12	18.7200	0.0955	17.9295	0.1178	0.3669	0.7137		

Parameter Estimates						
Variable DF Estimate Standard Error t Value Pr >  t  Variable Label						

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Intercept	1	0.1097	0.0326	3.37	0.0010	
Feb	1	0.001930	0.003049	0.63	0.5277	
Mar	1	0.0375	0.003117	12.04	<.0001	
Apr	1	0.0266	0.003071	8.65	<.0001	
May	1	0.0210	0.003804	5.51	<.0001	
June	1	0.0227	0.002313	9.83	<.0001	
July	1	0.0214	0.002839	7.52	<.0001	
Aug	1	0.0252	0.003326	7.57	<.0001	
Sept	1	0.009195	0.003118	2.95	0.0037	
Oct	1	0.0106	0.002553	4.17	<.0001	
Nov	1	-0.001252	0.002478	-0.51	0.6142	
Dec	1	-0.000438	0.002425	-0.18	0.8568	
CONS_CONFIDENCE_US_a6	1	0.000320	0.0000579	5.51	<.0001	
LN_OIL_P_INX_US	1	0.0133	0.003109	4.27	<.0001	LN_OIL_P_INX_US
LT_VHL_SALES_US	1	0.002895	0.000754	3.84	0.0002	LT_VHL_SALES_US
LT_VHL_SALES_US_a9	1	-0.003490	0.000958	-3.64	0.0004	
CREDIT_CHGOFF_US	1	-0.004975	0.001022	-4.87	<.0001	CREDIT_CHGOFF_US

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## Model with forecast for Scenario 2

#### The AUTOREG Procedure

