

The CONTENTS Procedure

Data Set Name	WORK.HMEQ	Observations	5960
Member Type	DATA	Variables	13
Engine	V9	Indexes	0
Created	10/17/2020 21:23:25	Observation Length	104
Last Modified	10/17/2020 21:23:25	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	5
First Data Page	1
Max Obs per Page	1258
Obs in First Data Page	1225
Number of Data Set Repairs	0
Filename	/saswork/SAS_work3D700001FBD5_odaws02-euw1.oda.sas.com/SAS_work8A070001FBD5_odaws02-euw1.oda.sas.com/hmeq.sas7bdat
Release Created	9.0401M6
Host Created	Linux
Inode Number	542995
Access Permission	rw-r--r--
Owner Name	u44791576
File Size	768KB
File Size (bytes)	786432

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
1	BAD	Num	8	BEST12.	BEST32.
10	CLAGE	Num	8	BEST12.	BEST32.
12	CLNO	Num	8	BEST12.	BEST32.
13	DEBTINC	Num	8	BEST12.	BEST32.
9	DELINQ	Num	8	BEST12.	BEST32.
8	DEROG	Num	8	BEST12.	BEST32.
6	JOB	Char	6	\$6.	\$6.

The CONTENTS Procedure

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
2	LOAN	Num	8	BEST12.	BEST32.
3	MORTDUE	Num	8	BEST12.	BEST32.
11	NINQ	Num	8	BEST12.	BEST32.
5	REASON	Char	7	\$7.	\$7.
4	VALUE	Num	8	BEST12.	BEST32.
7	YOJ	Num	8	BEST12.	BEST32.

The MEANS Procedure

Variable	N	N Miss	Mean	Std Dev	Minimum	Maximum
BAD	5960	0	0.1994966	0.3996555	0	1.0000000
LOAN	5960	0	18607.97	11207.48	1100.00	89900.00
MORTDUE	5442	518	73760.82	44457.61	2063.00	399550.00
VALUE	5848	112	101776.05	57385.78	8000.00	855909.00
YOJ	5445	515	8.9222681	7.5739822	0	41.0000000
DEROG	5252	708	0.2545697	0.8460468	0	10.0000000
DELINQ	5380	580	0.4494424	1.1272659	0	15.0000000
CLAGE	5652	308	179.7662752	85.8100918	0	1168.23
NINQ	5450	510	1.1860550	1.7286750	0	17.0000000
CLNO	5738	222	21.2960962	10.1389332	0	71.0000000
DEBTINC	4693	1267	33.7799153	8.6017462	0.5244992	203.3121487

The FREQ Procedure

BAD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	4771	80.05	4771	80.05
1	1189	19.95	5960	100.00

JOB	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Mgr	767	13.50	767	13.50
Office	948	16.69	1715	30.19
Other	2388	42.03	4103	72.22
ProfEx	1276	22.46	5379	94.68
Sales	109	1.92	5488	96.60
Self	193	3.40	5681	100.00
Frequency Missing = 279				

REASON	Frequency	Percent	Cumulative Frequency	Cumulative Percent
DebtCon	3928	68.82	3928	68.82
HomeImp	1780	31.18	5708	100.00
Frequency Missing = 252				

The HPSPLIT Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

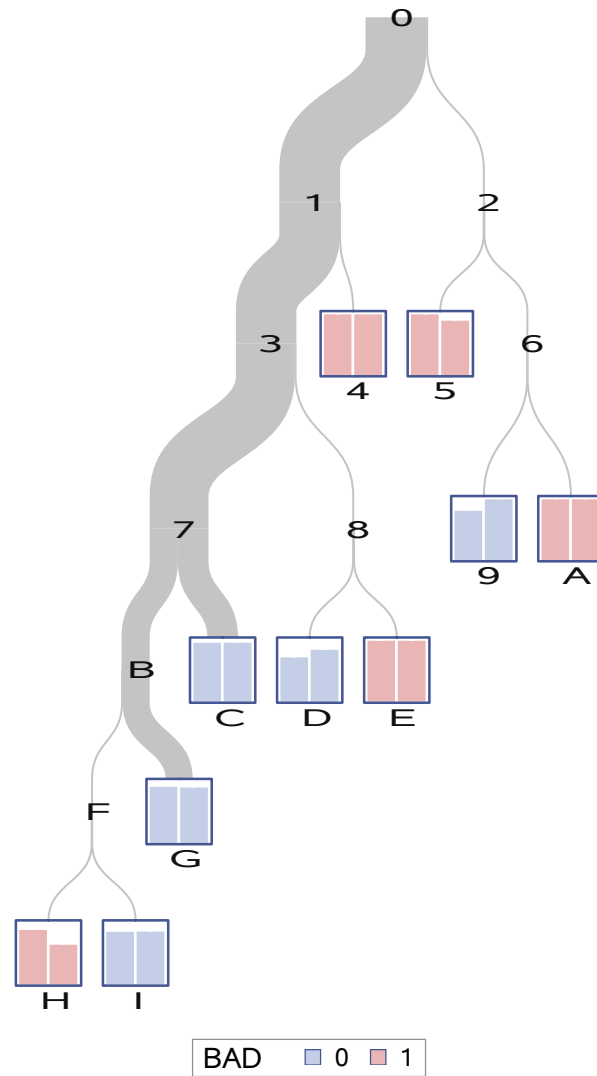
Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	Entropy
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	6
Number of Leaves Before Pruning	54
Number of Leaves After Pruning	10
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2364
Number of Validation Observations Used	1000

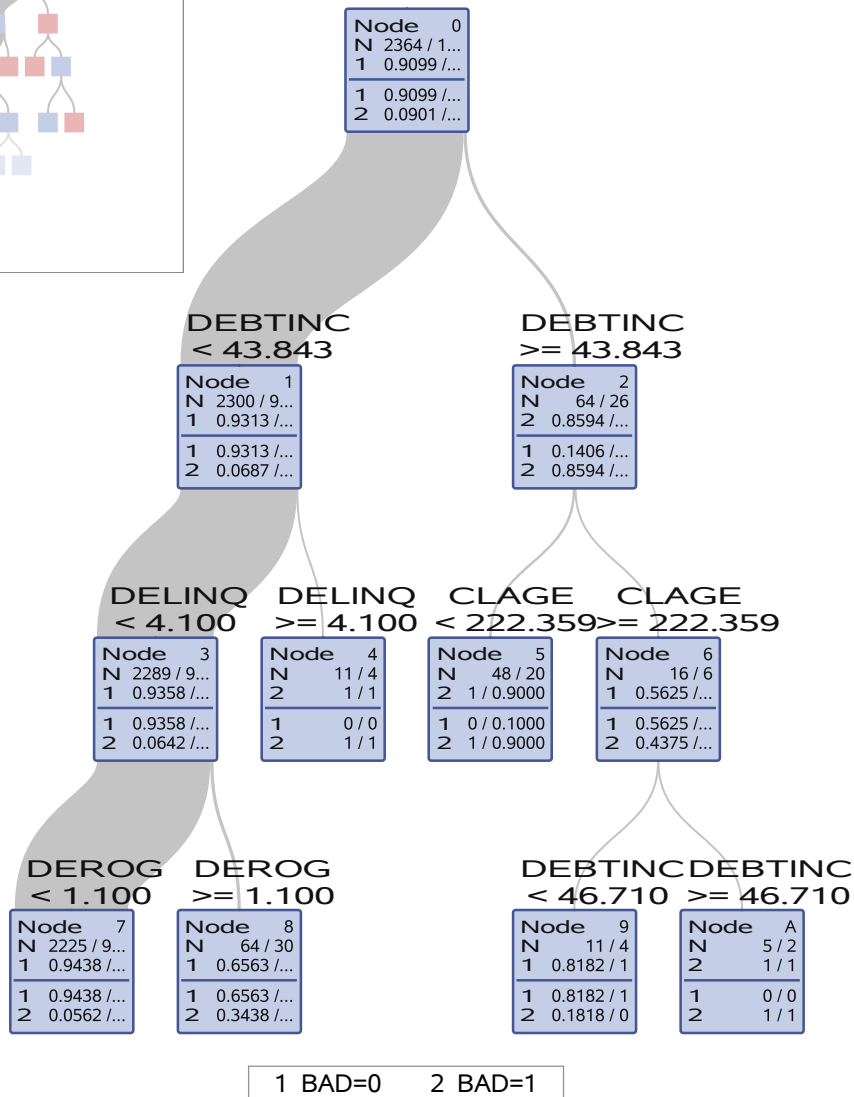
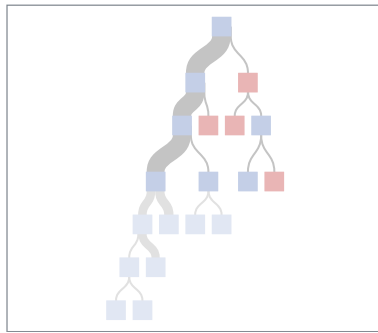
The HPSPLIT Procedure

Classification Tree for BAD



The HPSPLIT Procedure

Subtree Starting at Node=0

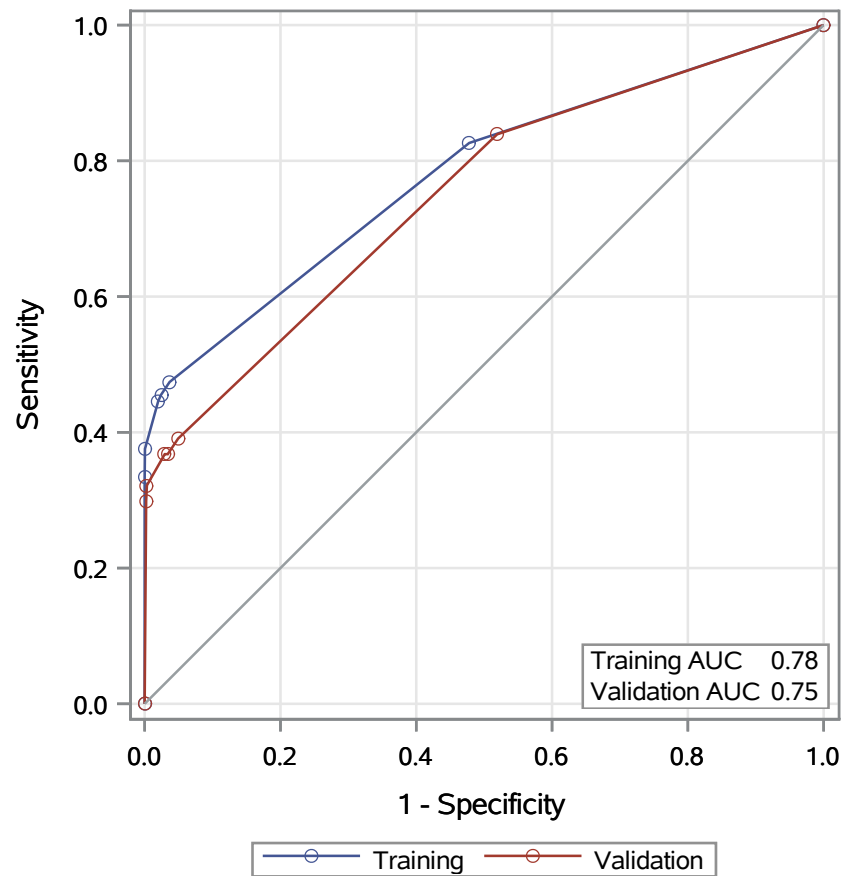


The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2150	1	0.0005
	1	133	80	0.6244
Validation	0	910	3	0.0033
	1	59	28	0.6782

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	10	0.0518	0.0567	0.3756	0.9995	0.2962	0.1036	244.8	0.7795
Validation	10	0.0579	0.0620	0.3218	0.9967	0.3212	0.1139	115.8	0.7483

ROC Curve for BAD



The HPSPLIT Procedure

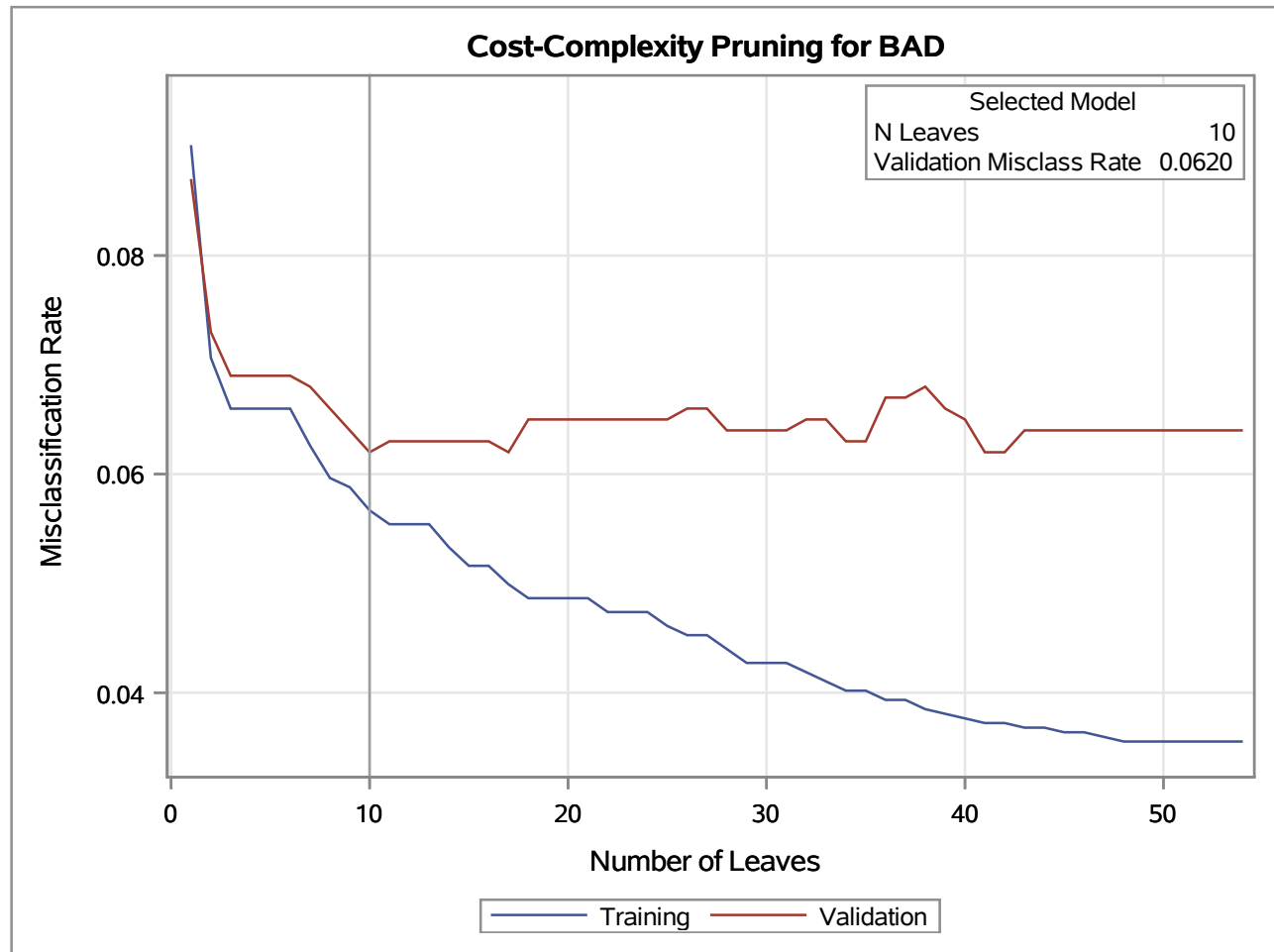
Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
4	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ >= 4.1	11	0.0000		1.0000	*	4	0.0000	1.0000
5	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE < 222.359 or Missing	48	0.0000		1.0000	*	20	0.1000	0.9000
9	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC < 46.7104 or Missing	11	0.8182	*	0.1818		4	1.0000	0.0000
A	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC >= 46.7104	5	0.0000		1.0000	*	2	0.0000	1.0000
C	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLAGE >= 175.649 or Missing	1160	0.9681	*	0.0319		453	0.9691	0.0309
D	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368	*	0.2632		28	0.8571	0.1429
E	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO >= 30.08	7	0.0000		1.0000	*	2	0.0000	1.0000
G	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
* Selected target level									

Decision tree without missing values

The HPSPLIT Procedure

Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	CLAGE < 175.649	1065	0.9174		0.0826	487	0.9117	0.0883
	LOAN >= 6110 or Missing	1024	0.9268	*	0.0732	468	0.9167	0.0833
H	Root Node	2364	0.9099		0.0901	1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687	974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642	970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562	940	0.9394	0.0606
	CLAGE < 175.649	1065	0.9174		0.0826	487	0.9117	0.0883
	LOAN < 6110	41	0.6829		0.3171	19	0.7895	0.2105
	MORTDUE < 44509.6	10	0.1000		0.9000	*	3	0.3333
I	Root Node	2364	0.9099		0.0901	1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687	974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642	970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562	940	0.9394	0.0606
	CLAGE < 175.649	1065	0.9174		0.0826	487	0.9117	0.0883
	LOAN < 6110	41	0.6829		0.3171	19	0.7895	0.2105
	MORTDUE >= 44509.6 or Missing	31	0.8710	*	0.1290		16	0.8750
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.0806	1.0000	5.1940	1.0000	2
DELINQ	0.4822	4.3787	0.5081	2.6391	1.0537	1
CLAGE	0.3560	3.2329	0.4042	2.0994	1.1353	2
CLNO	0.2865	2.6019	0.3429	1.7811	1.1968	1
MORTDUE	0.3302	2.9981	0.2425	1.2596	0.7345	1
LOAN	0.2384	2.1651	0.0595	0.3088	0.2494	1
DEROG	0.3532	3.2077	0.0000	0	0.0000	1

Decision tree without missing values**The HPSPLIT Procedure**

The HPSPLIT Procedure

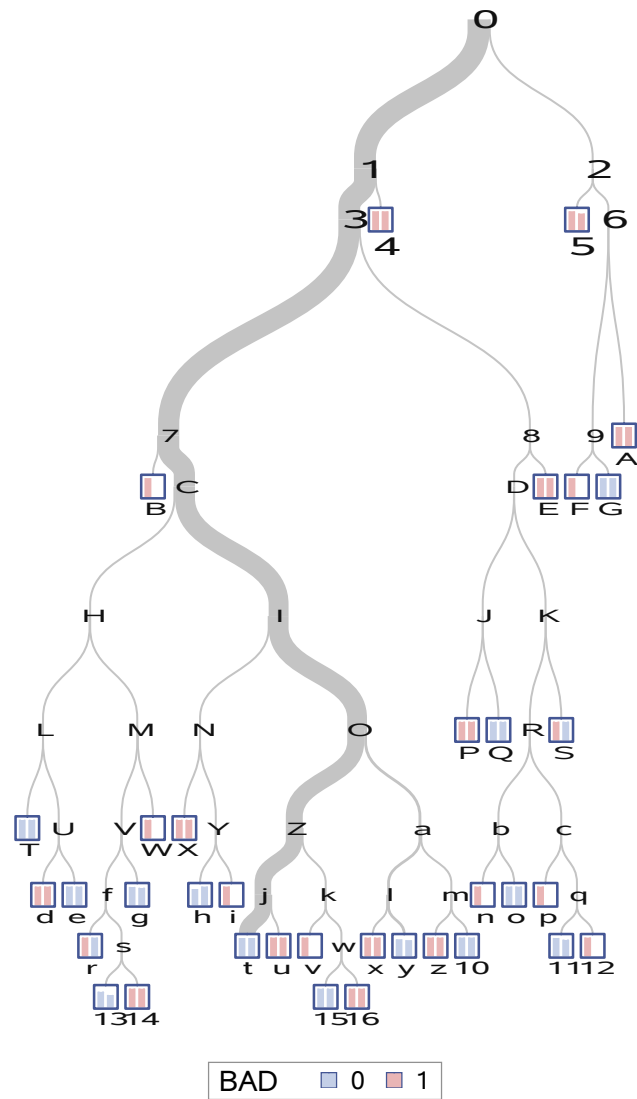
Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	Gini
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	42
Number of Leaves After Pruning	35
Model Event Level	1

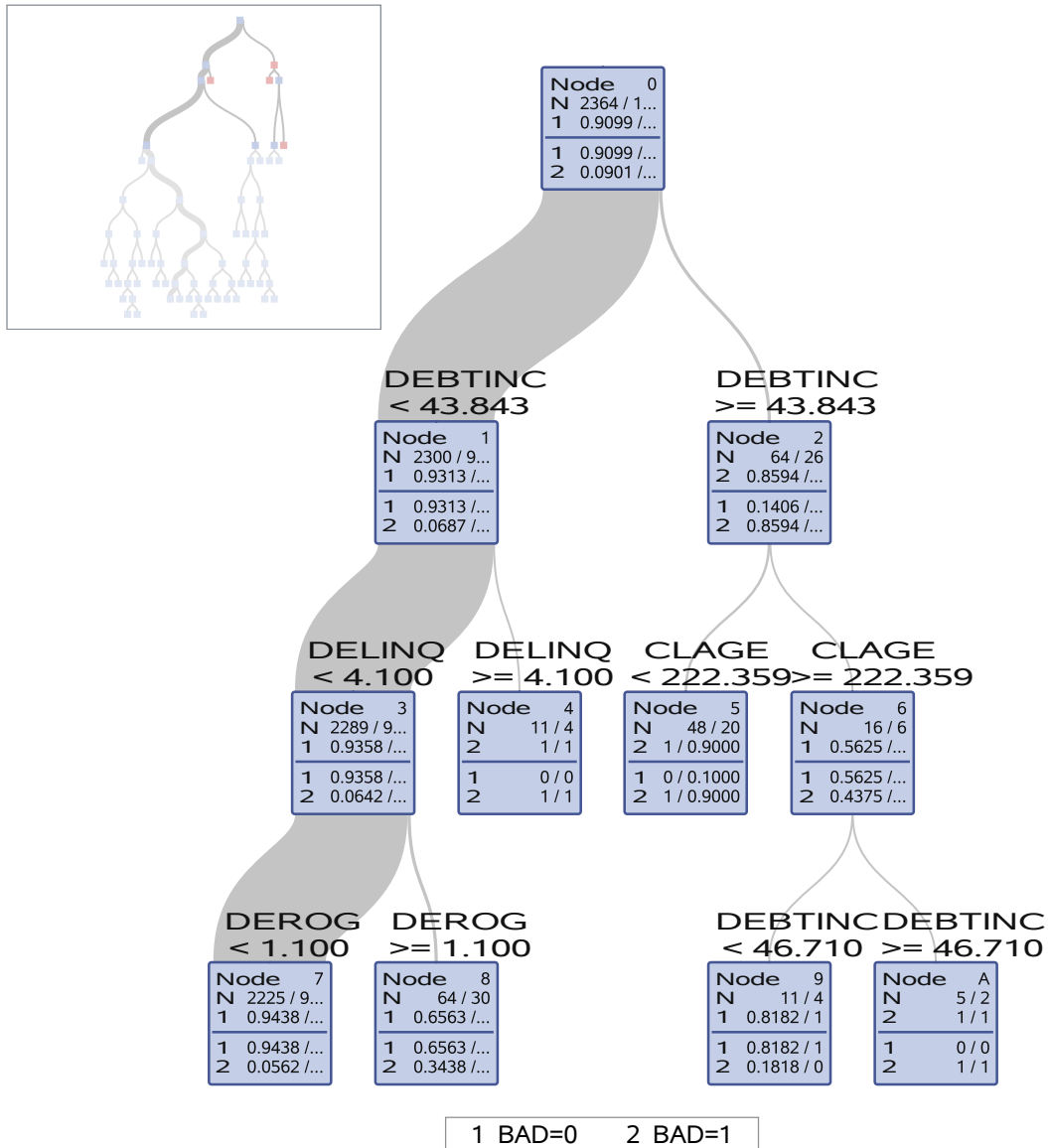
Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2364
Number of Validation Observations Used	1000

Classification Tree for BAD



The HPSPLIT Procedure

Subtree Starting at Node=0

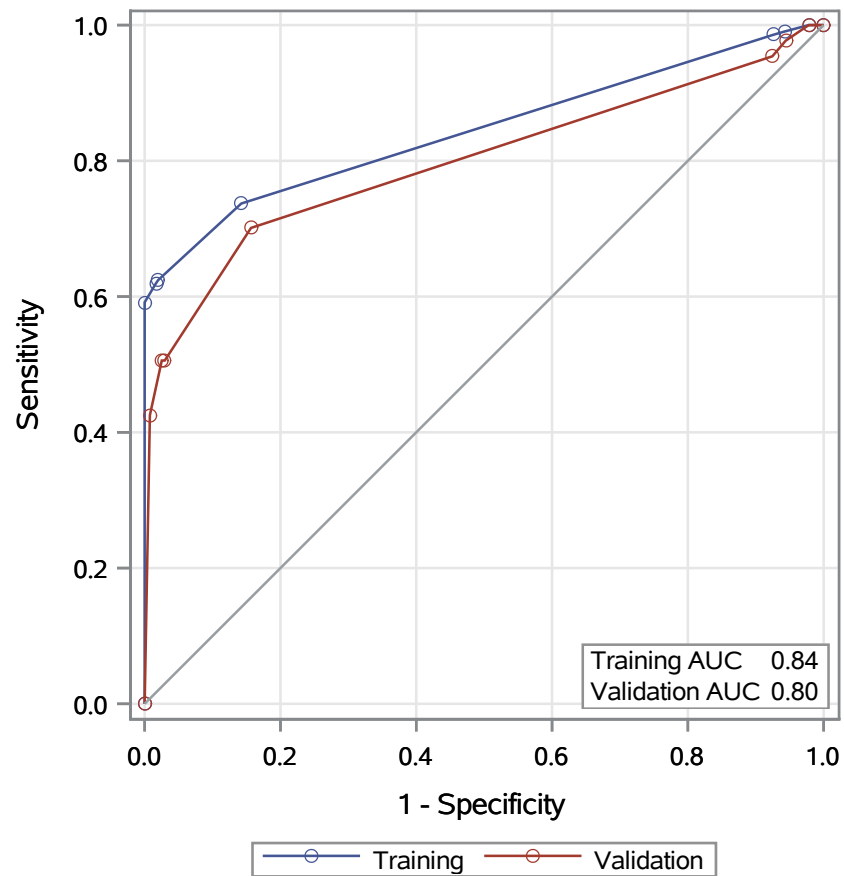


The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2151	0	0.0000
	1	87	126	0.4085
Validation	0	906	7	0.0077
	1	50	37	0.5747

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0348	0.0368	0.5915	1.0000	0.2160	0.0696	164.6	0.8442
Validation	35	0.0528	0.0570	0.4253	0.9923	0.2655	0.0930	105.5	0.7986

ROC Curve for BAD

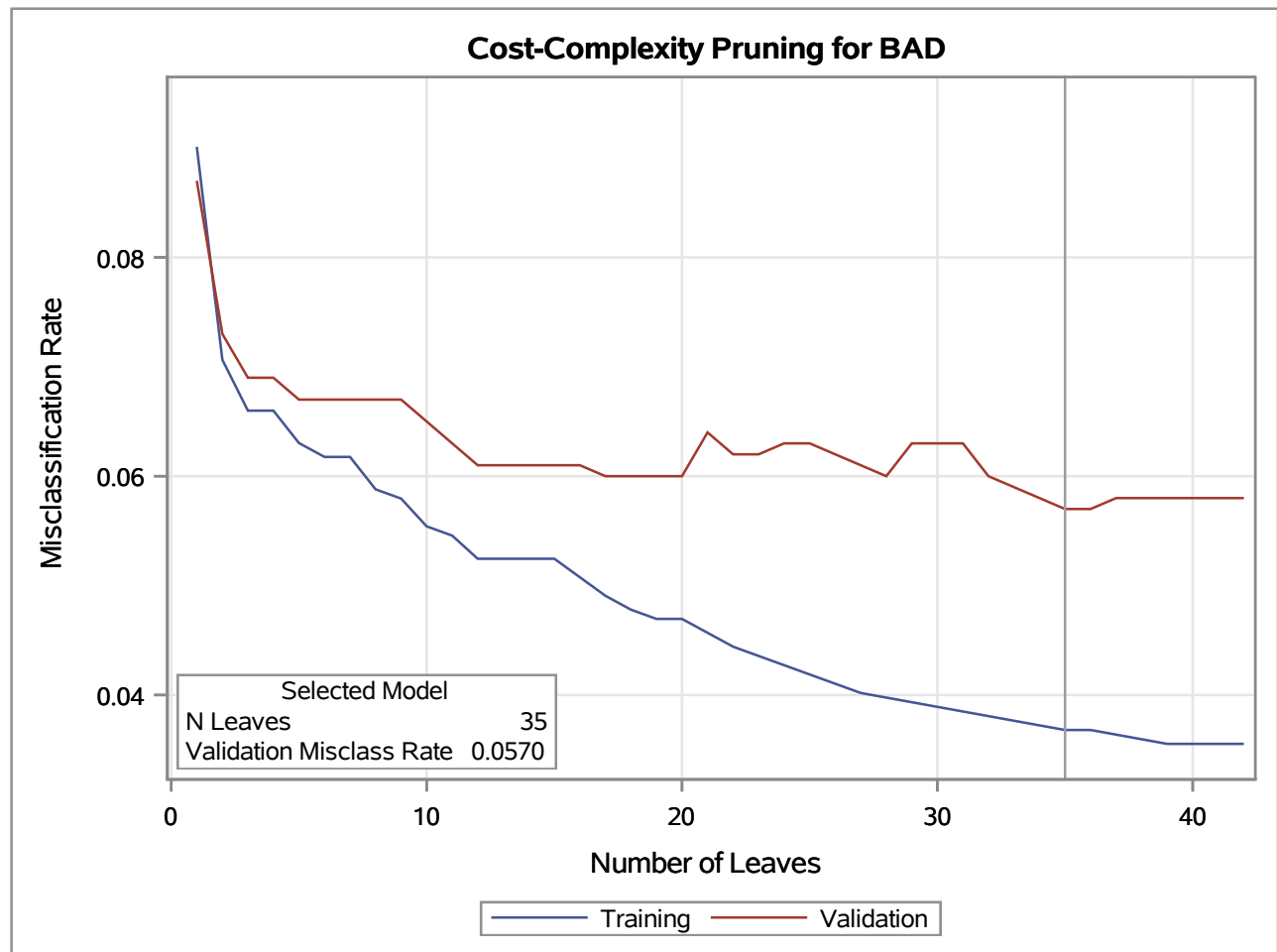


Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO < 16.64	14	0.4286		0.5714		4	0.5000	0.5000
	CLAGE < 234.036 or Missing	8	0.0000		1.0000	*	2	0.0000	1.0000
Q	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO < 16.64	14	0.4286		0.5714		4	0.5000	0.5000
	CLAGE >= 234.036	6	1.0000	*	0.0000		2	1.0000	0.0000
S	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ >= 4.03	2	0.0000		1.0000	*	1	1.0000	0.0000
T	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN < 6110	11	0.1818		0.8182		4	0.5000	0.5000
	CLAGE < 23.8416	1	1.0000	*	0.0000		1	1.0000	0.0000
W	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE < 371808 or Missing	1740	0.9695	*	0.0305		723	0.9696	0.0304
u	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE >= 371808	1	0.0000		1.0000	*	1	0.0000	1.0000
v	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Sales	35	0.7714		0.2286		9	0.8889	0.1111
	CLAGE < 105.584	4	0.0000		1.0000	*	0	.	.
x	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ >= 0.1	296	0.8953		0.1047		136	0.8603	0.1397
	NINQ < 3.12 or Missing	289	0.9100		0.0900		134	0.8657	0.1343
	DEBTINC < 8.00566	2	0.0000		1.0000	*	1	0.0000	1.0000
y	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
* Selected target level									

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.3838	1.0000	5.5353	1.0000	4
CLAGE	0.6040	5.6682	0.6092	3.3719	1.0085	8
DELINQ	0.5120	4.8043	0.5829	3.2266	1.1385	3
CLNO	0.5068	4.7557	0.4646	2.5716	0.9167	4
LOAN	0.4374	4.1041	0.3091	1.7109	0.7067	4
VALUE	0.2057	1.9306	0.2646	1.4645	1.2860	1
MORTDUE	0.2055	1.9283	0.2476	1.3705	1.2049	2
JOB	0.4023	3.7753	0.1675	0.9271	0.4163	5
NINQ	0.3064	2.8755	0.0696	0.3855	0.2273	2
DEROG	0.3418	3.2077	0.0000	0	0.0000	1



The HPSPLIT Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

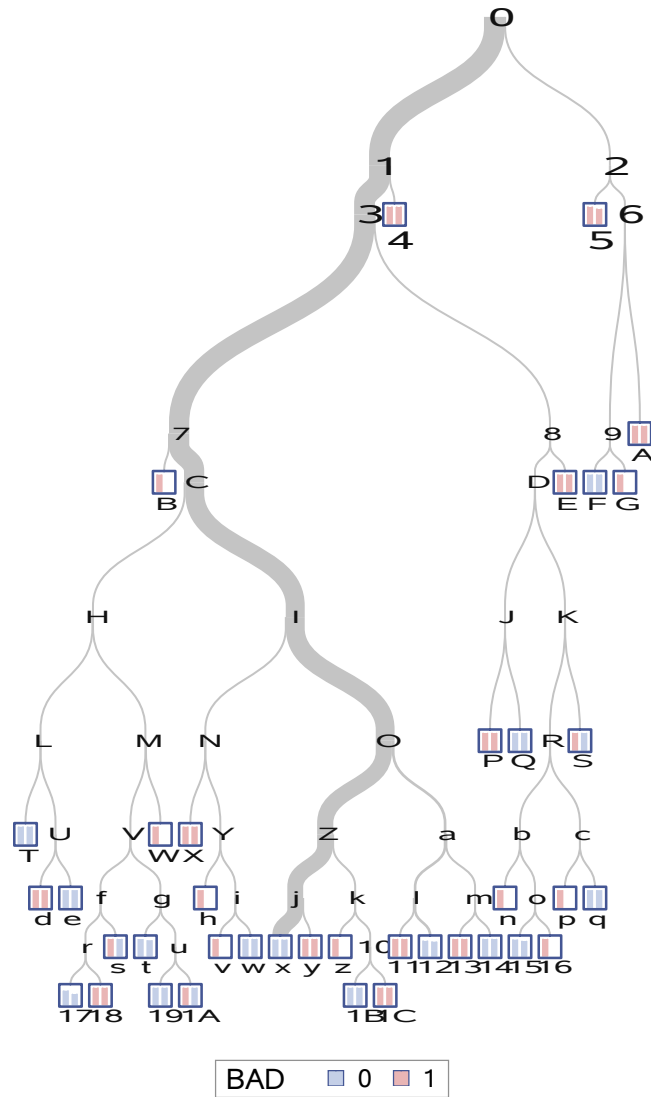
Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	CHAID
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	42
Number of Leaves After Pruning	38
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2364
Number of Validation Observations Used	1000

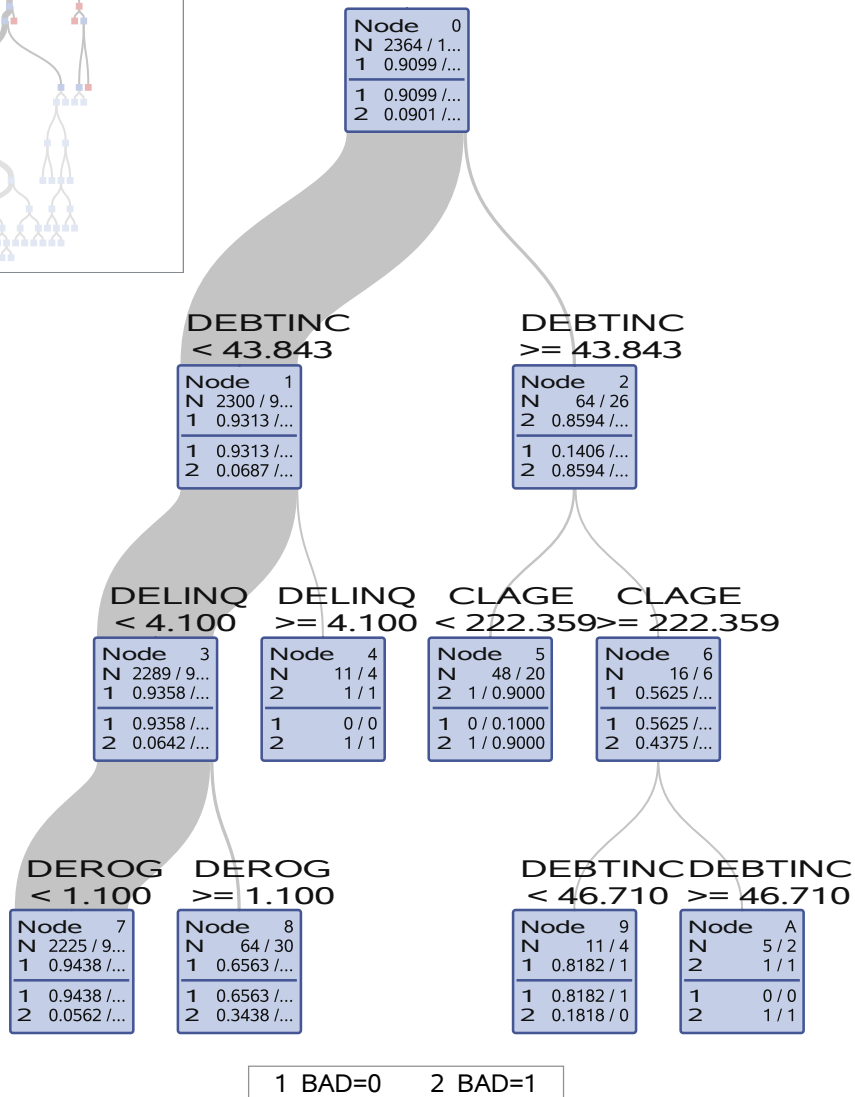
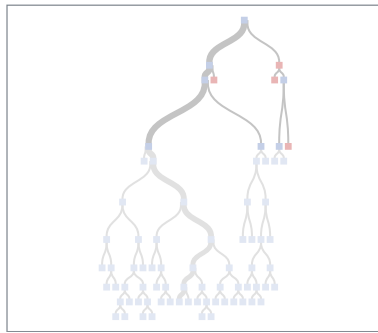
The HPSPLIT Procedure

Classification Tree for BAD



The HPSPLIT Procedure

Subtree Starting at Node=0

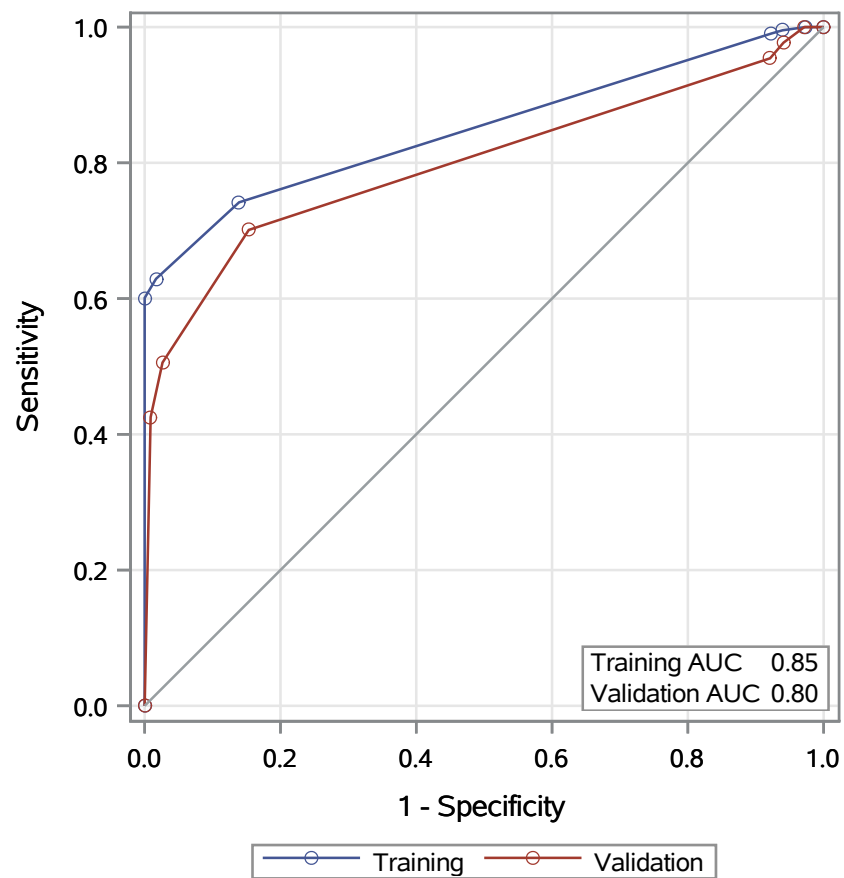


The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2151	0	0.0000
	1	85	128	0.3991
Validation	0	905	8	0.0088
	1	50	37	0.5747

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	38	0.0340	0.0360	0.6009	1.0000	0.2117	0.0681	161.0	0.8500
Validation	38	0.0537	0.0580	0.4253	0.9912	0.2652	0.0930	107.5	0.7999

ROC Curve for BAD



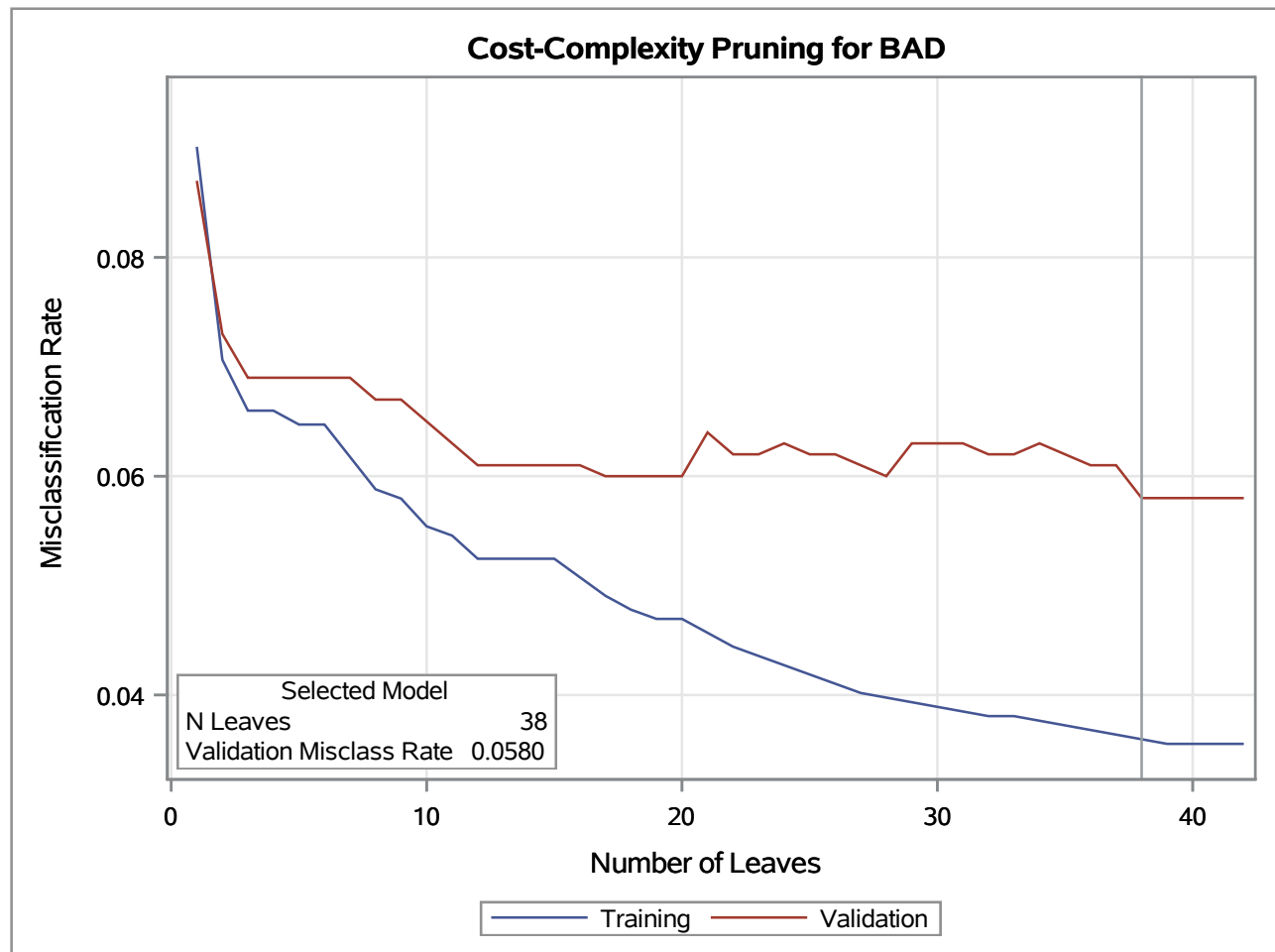
The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN < 13166	46	0.7826		0.2174		28	0.7143	0.2857
	JOB = ProfEx,Self	3	0.0000		1.0000	*	4	1.0000	0.0000
t	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN >= 13166 or Missing	78	0.9744		0.0256		33	0.9394	0.0606
	DEROG < 0.1 or Missing	73	0.9863	*	0.0137		30	0.9333	0.0667
v	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC >= 36.6758 or Missing	10	0.7000		0.3000		4	1.0000	0.0000
	JOB = Other,ProfEx,Sales,Self or Missing	8	0.8750		0.1250		4	1.0000	0.0000
	MORTDUE < 24792.8	1	0.0000		1.0000	*	0	.	.
w	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC >= 36.6758 or Missing	10	0.7000		0.3000		4	1.0000	0.0000
	JOB = Other,ProfEx,Sales,Self or Missing	8	0.8750		0.1250		4	1.0000	0.0000
	MORTDUE >= 24792.8 or Missing	7	1.0000	*	0.0000		4	1.0000	0.0000
x	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE < 371808 or Missing	1740	0.9695	*	0.0305		723	0.9696	0.0304
y	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE >= 371808	1	0.0000		1.0000	*	1	0.0000	1.0000
z	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Sales	35	0.7714		0.2286		9	0.8889	0.1111
* Selected target level									

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.4687	1.0000	5.5353	1.0000	5
CLAGE	0.5986	5.6682	0.6092	3.3719	1.0176	8
DELINQ	0.5074	4.8043	0.5829	3.2266	1.1488	3
CLNO	0.5023	4.7557	0.4646	2.5716	0.9250	4
LOAN	0.4334	4.1041	0.3091	1.7109	0.7131	4
VALUE	0.2039	1.9306	0.2646	1.4645	1.2976	1
MORTDUE	0.2470	2.3384	0.2557	1.4154	1.0354	3
JOB	0.3987	3.7753	0.1675	0.9271	0.4201	5
NINQ	0.3037	2.8755	0.0696	0.3855	0.2293	2
DEROG	0.3441	3.2579	0.0000	0	0.0000	2



Decision tree with CHISQUARE criterion**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

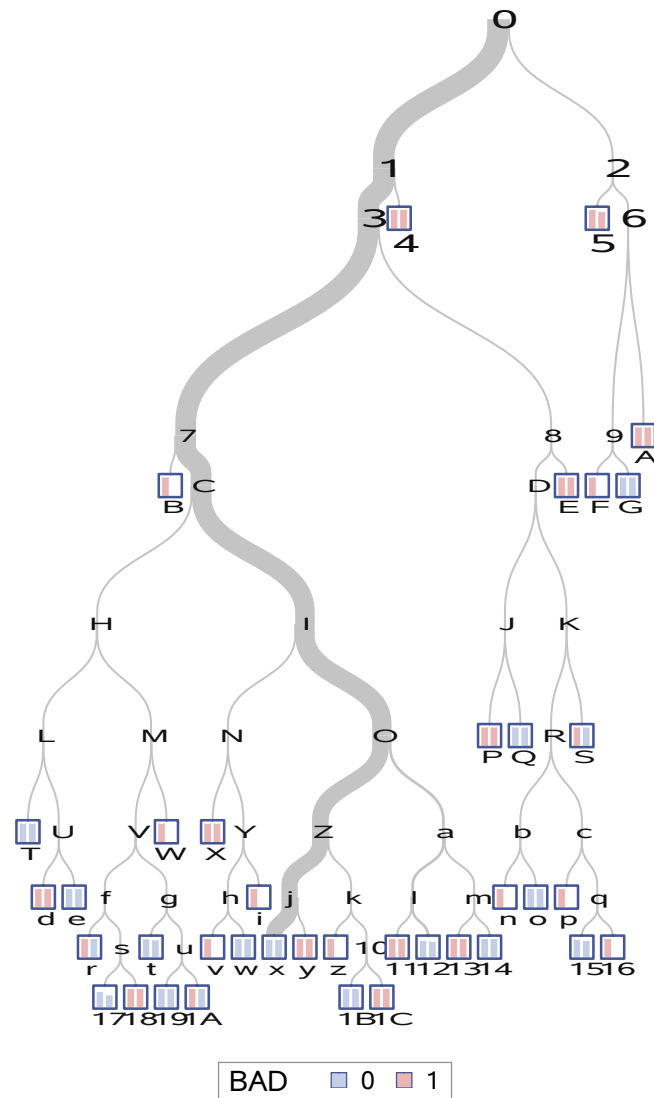
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	42
Number of Leaves After Pruning	38
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2364
Number of Validation Observations Used	1000

Decision tree with CHISQUARE criterion

The HPSPLIT Procedure

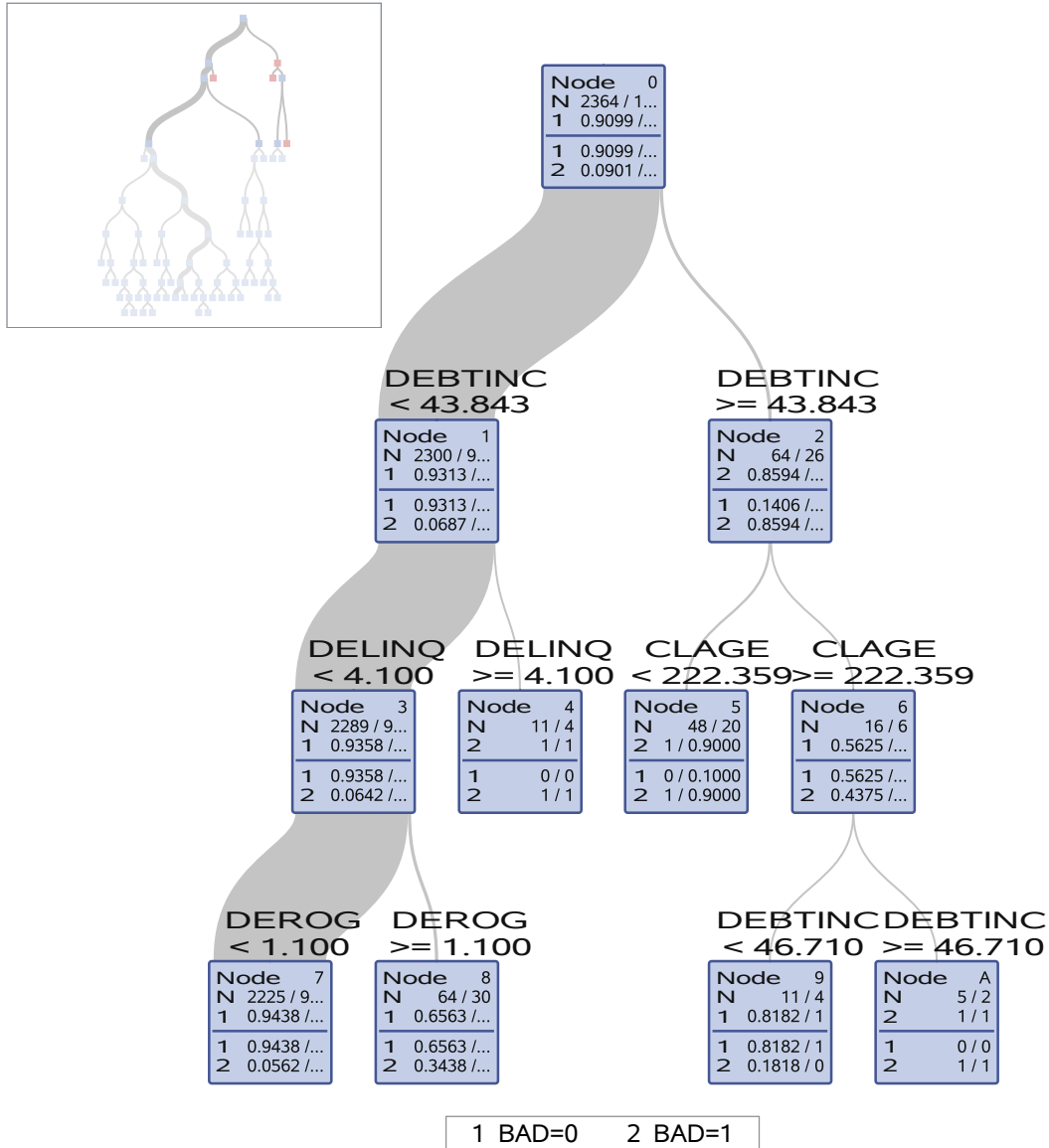
Classification Tree for BAD



Decision tree with CHISQUARE criterion

The HPSPLIT Procedure

Subtree Starting at Node=0

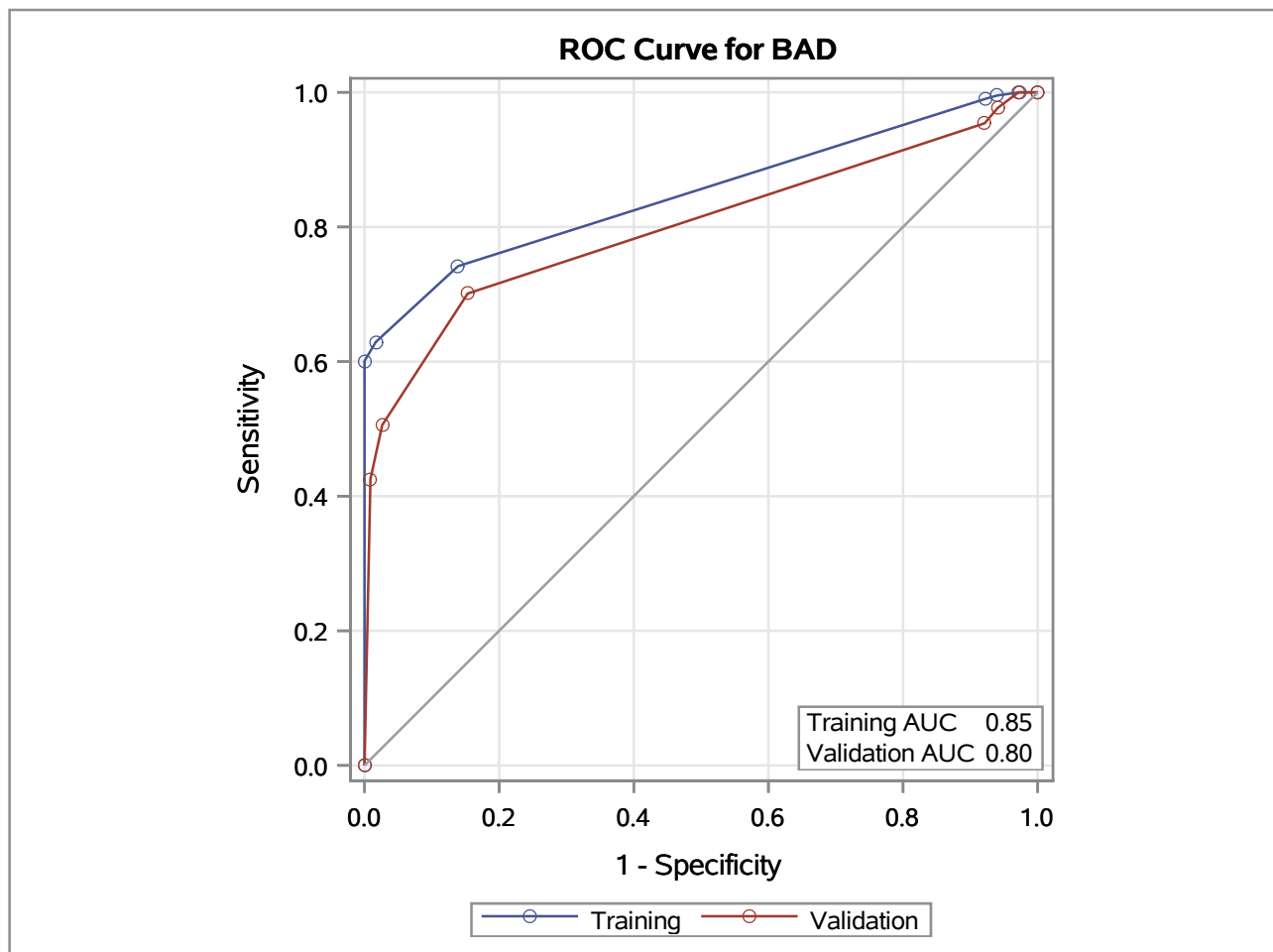


Decision tree with CHISQUARE criterion

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2151	0	0.0000
	1	85	128	0.3991
Validation	0	905	8	0.0088
	1	50	37	0.5747

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	38	0.0340	0.0360	0.6009	1.0000	0.2117	0.0681	161.0	0.8500
Validation	38	0.0537	0.0580	0.4253	0.9912	0.2652	0.0930	107.5	0.7999



Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
4	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ >= 4.1	11	0.0000		1.0000	*	4	0.0000	1.0000
5	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE < 222.359 or Missing	48	0.0000		1.0000	*	20	0.1000	0.9000
A	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC >= 46.7104	5	0.0000		1.0000	*	2	0.0000	1.0000
B	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO < 2.56	3	0.0000		1.0000	*	0	.	.
E	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO >= 30.08	7	0.0000		1.0000	*	2	0.0000	1.0000
F	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC < 46.7104 or Missing	11	0.8182		0.1818		4	1.0000	0.0000
	JOB = ProfEx	2	0.0000		1.0000	*	0	.	.
G	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC < 46.7104 or Missing	11	0.8182		0.1818		4	1.0000	0.0000
	JOB = Mgr,Office,Other,Sales,Self or Missing	9	1.0000	*	0.0000		4	1.0000	0.0000
P	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO < 16.64	14	0.4286		0.5714		4	0.5000	0.5000
	CLAGE < 234.036 or Missing	8	0.0000		1.0000	*	2	0.0000	1.0000
Q	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO < 16.64	14	0.4286		0.5714		4	0.5000	0.5000
	CLAGE >= 234.036	6	1.0000	*	0.0000		2	1.0000	0.0000
S	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ >= 4.03	2	0.0000		1.0000	*	1	1.0000	0.0000
T	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN < 6110	11	0.1818		0.8182		4	0.5000	0.5000
	CLAGE < 23.8416	1	1.0000	*	0.0000		1	1.0000	0.0000
W	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
* Selected target level									

Decision tree with CHISQUARE criterion

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	CLAGE >= 315.778	2	0.0000		1.0000	*	0	.	.
X	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC < 36.6758	3	0.0000		1.0000	*	2	0.0000	1.0000
d	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN < 6110	11	0.1818		0.8182		4	0.5000	0.5000
	CLAGE >= 23.8416 or Missing	10	0.1000		0.9000		3	0.3333	0.6667
	CLAGE < 163.971 or Missing	9	0.0000		1.0000	*	2	0.0000	1.0000
e	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN < 6110	11	0.1818		0.8182		4	0.5000	0.5000
	CLAGE >= 23.8416 or Missing	10	0.1000		0.9000		3	0.3333	0.6667
	CLAGE >= 163.971	1	1.0000	*	0.0000		1	1.0000	0.0000
i	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC >= 36.6758 or Missing	10	0.7000		0.3000		4	1.0000	0.0000
	JOB = Mgr,Office	2	0.0000		1.0000	*	0	.	
n	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ < 4.03 or Missing	41	0.8780		0.1220		23	0.9130	0.0870
	JOB = Sales,Self	3	0.3333		0.6667		3	1.0000	0.0000
	CLAGE < 140.616 or Missing	2	0.0000		1.0000	*	0	.	.
o	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ < 4.03 or Missing	41	0.8780		0.1220		23	0.9130	0.0870
	JOB = Sales,Self	3	0.3333		0.6667		3	1.0000	0.0000
	CLAGE >= 140.616	1	1.0000	*	0.0000		3	1.0000	0.0000
p	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ < 4.03 or Missing	41	0.8780		0.1220		23	0.9130	0.0870
	JOB = Mgr,Office,Other,ProfEx or Missing	38	0.9211		0.0789		20	0.9000	0.1000
	LOAN < 6992	1	0.0000		1.0000	*	0	.	.
r	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN < 13166	46	0.7826		0.2174		28	0.7143	0.2857
	JOB = ProfEx,Self	3	0.0000		1.0000	*	4	1.0000	0.0000
t	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN >= 13166 or Missing	78	0.9744		0.0256		33	0.9394	0.0606
	DEROG < 0.1 or Missing	73	0.9863	*	0.0137		30	0.9333	0.0667
v	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC >= 36.6758 or Missing	10	0.7000		0.3000		4	1.0000	0.0000
	JOB = Other,ProfEx,Sales,Self or Missing	8	0.8750		0.1250		4	1.0000	0.0000
	MORTDUE < 24792.8	1	0.0000		1.0000	*	0	.	.
w	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	CLAGE < 47.1966	13	0.5385		0.4615		6	0.6667	0.3333
	DEBTINC >= 36.6758 or Missing	10	0.7000		0.3000		4	1.0000	0.0000
	JOB = Other,ProfEx,Sales,Self or Missing	8	0.8750		0.1250		4	1.0000	0.0000
	MORTDUE >= 24792.8 or Missing	7	1.0000	*	0.0000		4	1.0000	0.0000
x	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE < 371808 or Missing	1740	0.9695	*	0.0305		723	0.9696	0.0304
y	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1741	0.9690		0.0310		724	0.9682	0.0318
	MORTDUE >= 371808	1	0.0000		1.0000	*	1	0.0000	1.0000
z	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Sales	35	0.7714		0.2286		9	0.8889	0.1111
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	CLAGE < 105.584	4	0.0000		1.0000	*	0	.	.
11	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ >= 0.1	296	0.8953		0.1047		136	0.8603	0.1397
	NINQ < 3.12 or Missing	289	0.9100		0.0900		134	0.8657	0.1343
	DEBTINC < 8.00566	2	0.0000		1.0000	*	1	0.0000	1.0000
12	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ >= 0.1	296	0.8953		0.1047		136	0.8603	0.1397
	NINQ < 3.12 or Missing	289	0.9100		0.0900		134	0.8657	0.1343
	DEBTINC >= 8.00566 or Missing	287	0.9164	*	0.0836		133	0.8722	0.1278
13	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ >= 0.1	296	0.8953		0.1047		136	0.8603	0.1397
	NINQ >= 3.12	7	0.2857		0.7143		2	0.5000	0.5000
	LOAN < 21986 or Missing	5	0.0000		1.0000	*	1	0.0000	1.0000
14	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ >= 0.1	296	0.8953		0.1047		136	0.8603	0.1397
	NINQ >= 3.12	7	0.2857		0.7143		2	0.5000	0.5000
	LOAN >= 21986	2	1.0000	*	0.0000		1	1.0000	0.0000
15	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ < 4.03 or Missing	41	0.8780		0.1220		23	0.9130	0.0870
	JOB = Mgr,Office,Other,ProfEx or Missing	38	0.9211		0.0789		20	0.9000	0.1000
	LOAN >= 6992 or Missing	37	0.9459		0.0541		20	0.9000	0.1000
	MORTDUE < 111547 or Missing	36	0.9722	*	0.0278		20	0.9000	0.1000
16	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG >= 1.1	64	0.6563		0.3438		30	0.8000	0.2000
	CLNO < 30.08 or Missing	57	0.7368		0.2632		28	0.8571	0.1429
	CLNO >= 16.64 or Missing	43	0.8372		0.1628		24	0.9167	0.0833
	NINQ < 4.03 or Missing	41	0.8780		0.1220		23	0.9130	0.0870
	JOB = Mgr,Office,Other,ProfEx or Missing	38	0.9211		0.0789		20	0.9000	0.1000
	LOAN >= 6992 or Missing	37	0.9459		0.0541		20	0.9000	0.1000
	MORTDUE >= 111547	1	0.0000		1.0000	*	0	.	.
17	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
* Selected target level									

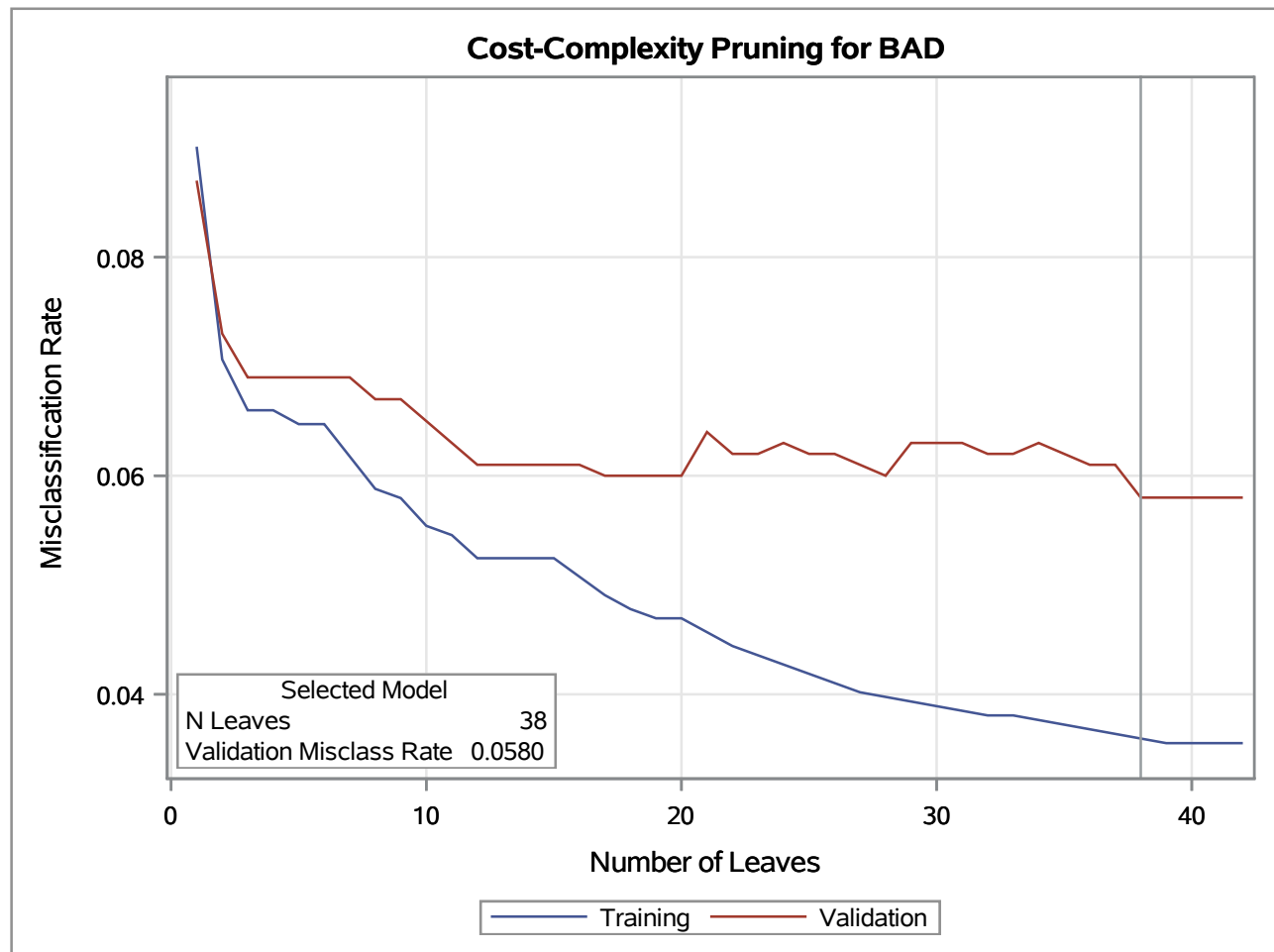
Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN < 13166	46	0.7826		0.2174		28	0.7143	0.2857
	JOB = Mgr,Office,Other,Sales or Missing	43	0.8372		0.1628		24	0.6667	0.3333
	DELINQ < 1.1 or Missing	42	0.8571	*	0.1429		23	0.6957	0.3043
18	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN < 13166	46	0.7826		0.2174		28	0.7143	0.2857
	JOB = Mgr,Office,Other,Sales or Missing	43	0.8372		0.1628		24	0.6667	0.3333
	DELINQ >= 1.1	1	0.0000		1.0000	*	1	0.0000	1.0000
19	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN >= 13166 or Missing	78	0.9744		0.0256		33	0.9394	0.0606
	DEROG >= 0.1	5	0.8000		0.2000		3	1.0000	0.0000
	DEBTINC < 33.8088 or Missing	4	1.0000	*	0.0000		2	1.0000	0.0000
1A	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	VALUE < 50634.4	137	0.8321		0.1679		65	0.8154	0.1846
	LOAN >= 6110 or Missing	126	0.8889		0.1111		61	0.8361	0.1639
	CLAGE < 315.778 or Missing	124	0.9032		0.0968		61	0.8361	0.1639
	LOAN >= 13166 or Missing	78	0.9744		0.0256		33	0.9394	0.0606
	DEROG >= 0.1	5	0.8000		0.2000		3	1.0000	0.0000
	DEBTINC >= 33.8088	1	0.0000		1.0000	*	1	1.0000	0.0000
1B	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Sales	35	0.7714		0.2286		9	0.8889	0.1111
	CLAGE >= 105.584 or Missing	31	0.8710		0.1290		9	0.8889	0.1111
	CLNO < 35.2 or Missing	27	1.0000	*	0.0000		8	1.0000	0.0000
1C	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 43.8434 or Missing	2300	0.9313		0.0687		974	0.9312	0.0688
	DELINQ < 4.1 or Missing	2289	0.9358		0.0642		970	0.9351	0.0649
	DEROG < 1.1 or Missing	2225	0.9438		0.0562		940	0.9394	0.0606
	CLNO >= 2.56 or Missing	2222	0.9451		0.0549		940	0.9394	0.0606
	VALUE >= 50634.4 or Missing	2085	0.9525		0.0475		875	0.9486	0.0514
	CLAGE >= 47.1966 or Missing	2072	0.9551		0.0449		869	0.9505	0.0495
	DELINQ < 0.1 or Missing	1776	0.9651		0.0349		733	0.9673	0.0327
	JOB = Sales	35	0.7714		0.2286		9	0.8889	0.1111
	CLAGE >= 105.584 or Missing	31	0.8710		0.1290		9	0.8889	0.1111
	CLNO >= 35.2	4	0.0000		1.0000	*	1	0.0000	1.0000
* Selected target level									

Decision tree with CHISQUARE criterion

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.4687	1.0000	5.5353	1.0000	5
CLAGE	0.5986	5.6682	0.6092	3.3719	1.0176	8
DELINQ	0.5074	4.8043	0.5829	3.2266	1.1488	3
CLNO	0.5023	4.7557	0.4646	2.5716	0.9250	4
LOAN	0.4334	4.1041	0.3091	1.7109	0.7131	4
VALUE	0.2039	1.9306	0.2646	1.4645	1.2976	1
MORTDUE	0.2470	2.3384	0.2557	1.4154	1.0354	3
JOB	0.3987	3.7753	0.1675	0.9271	0.4201	5
NINQ	0.3037	2.8755	0.0696	0.3855	0.2293	2
DEROG	0.3441	3.2579	0.0000	0	0.0000	2



Decision tree with FASTCHAID criterion**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

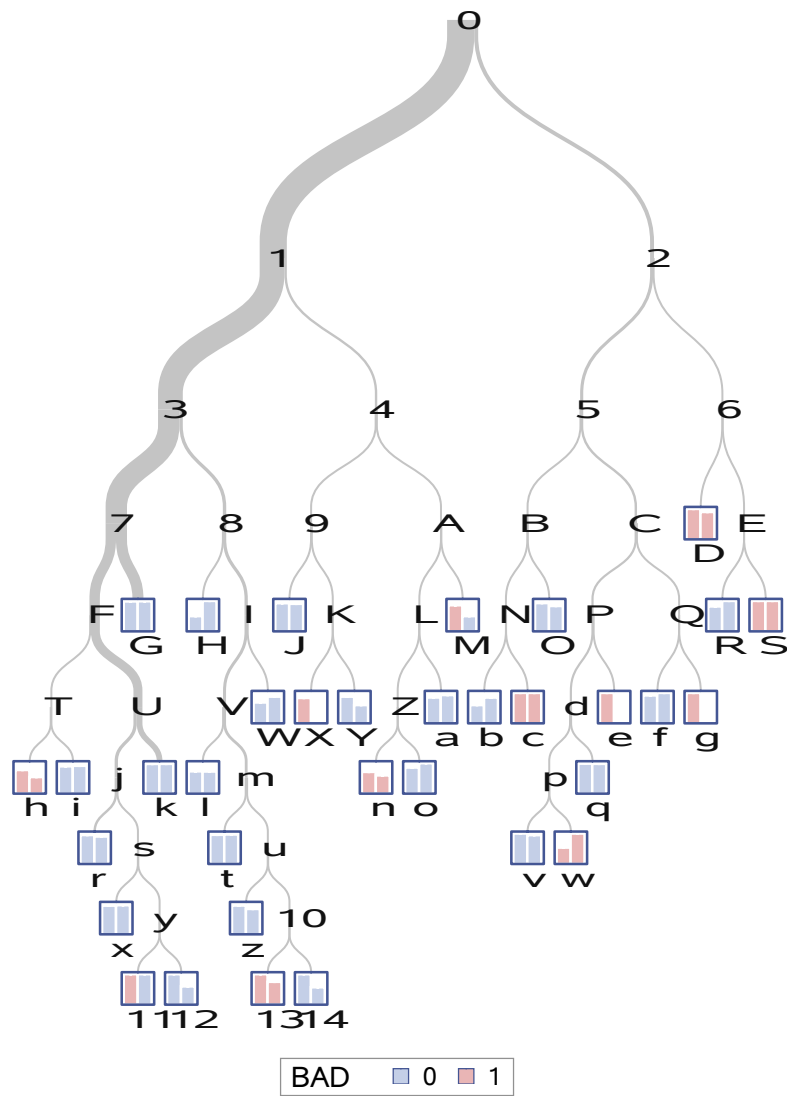
Model Information	
Split Criterion Used	FastCHAID
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	9
Number of Leaves Before Pruning	122
Number of Leaves After Pruning	34
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2364
Number of Validation Observations Used	1000

Decision tree with FASTCHAID criterion

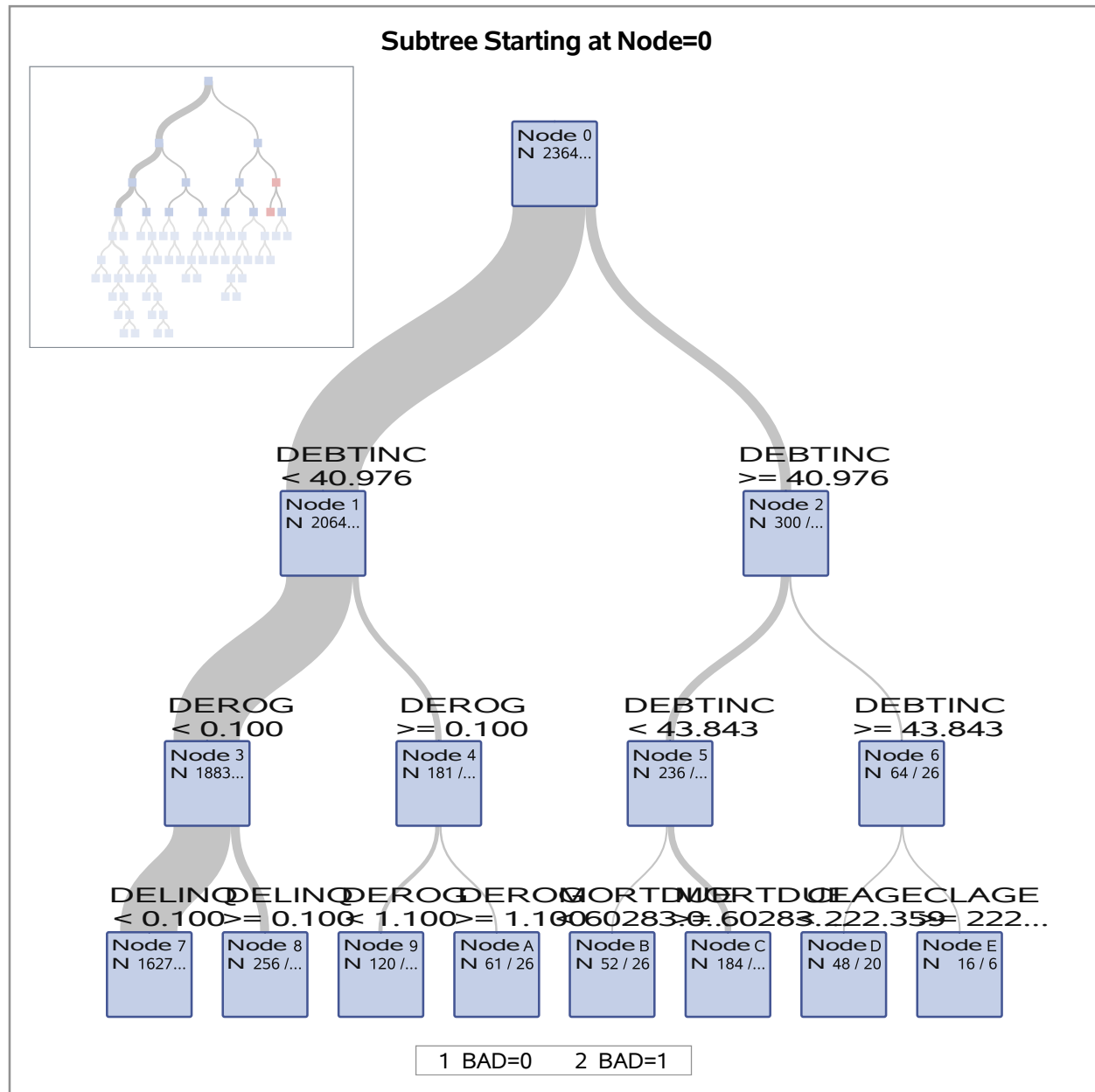
The HPSPLIT Procedure

Classification Tree for BAD



Decision tree with FASTCHAID criterion

The HPSPLIT Procedure

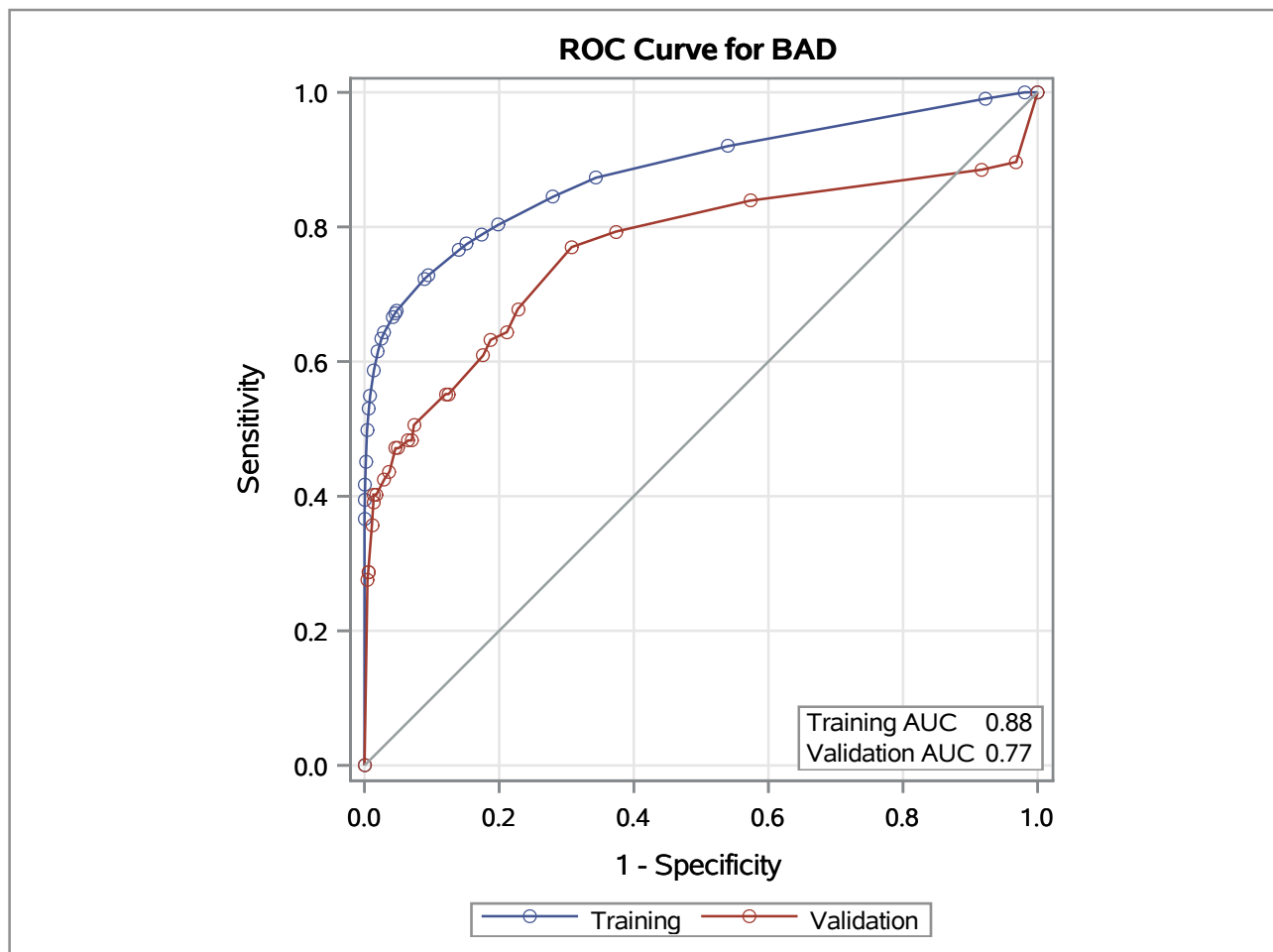


Decision tree with FASTCHAID criterion

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2137	14	0.0065
	1	100	113	0.4695
Validation	0	901	12	0.0131
	1	52	35	0.5977

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	34	0.0408	0.0482	0.5305	0.9935	0.2323	0.0815	192.7	0.8822
Validation	34	0.0601	0.0640	0.4023	0.9869	0.2717	0.1014	120.3	0.7653



The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
D	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE < 222.359 or Missing	48	0.0000		1.0000	*	20	0.1000	0.9000
G	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE >= 175.649 or Missing	837	0.9821	*	0.0179		318	0.9874	0.0126
H	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN < 6110	8	0.5000	*	0.5000		4	1.0000	0.0000
J	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG < 1.1 or Missing	120	0.8833		0.1167		57	0.8772	0.1228
	JOB = Mgr,Other,ProfEx,Sales,Self or Missing	106	0.9245	*	0.0755		52	0.9038	0.0962
M	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG >= 1.1	61	0.6393		0.3607		26	0.8077	0.1923
	NINQ >= 4.03	7	0.1429		0.8571	*	2	0.5000	0.5000
O	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE < 60283	52	0.7308		0.2692		26	0.8077	0.1923
	LOAN >= 19340 or Missing	28	0.9286	*	0.0714		12	0.8333	0.1667
R	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEBTINC < 46.7104 or Missing	11	0.8182	*	0.1818		4	1.0000	0.0000
S	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC >= 43.8434	64	0.1406		0.8594		26	0.2308	0.7692
	CLAGE >= 222.359	16	0.5625		0.4375		6	0.6667	0.3333
	DEBTINC >= 46.7104	5	0.0000		1.0000	*	2	0.0000	1.0000
W	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ >= 2.08	19	0.6842	*	0.3158		8	0.8750	0.1250
X	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG < 1.1 or Missing	120	0.8833		0.1167		57	0.8772	0.1228
	JOB = Office	14	0.5714		0.4286		5	0.6000	0.4000
	DEBTINC < 36.6758	6	0.1667		0.8333	*	0	.	.
Y	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG < 1.1 or Missing	120	0.8833		0.1167		57	0.8772	0.1228
	JOB = Office	14	0.5714		0.4286		5	0.6000	0.4000
	DEBTINC >= 36.6758 or Missing	8	0.8750	*	0.1250		5	0.6000	0.4000
a	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG >= 1.1	61	0.6393		0.3607		26	0.8077	0.1923
	NINQ < 4.03 or Missing	54	0.7037		0.2963		24	0.8333	0.1667
	MORTDUE >= 64226.4 or Missing	33	0.8485	*	0.1515		14	0.9286	0.0714
b	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	MORTDUE < 60283	52	0.7308		0.2692		26	0.8077	0.1923
	LOAN < 19340	24	0.5000		0.5000		14	0.7857	0.2143
	DELINQ < 0.1 or Missing	20	0.6000	*	0.4000		13	0.8462	0.1538
c	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE < 60283	52	0.7308		0.2692		26	0.8077	0.1923
	LOAN < 19340	24	0.5000		0.5000		14	0.7857	0.2143
	DELINQ >= 0.1	4	0.0000		1.0000	*	1	0.0000	1.0000
e	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN < 38744 or Missing	167	0.9401		0.0599		68	0.9559	0.0441
	DEROG >= 2.1	1	0.0000		1.0000	*	0	.	.
f	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN >= 38744	17	0.6471		0.3529		4	1.0000	0.0000
	CLNO < 19.2 or Missing	12	0.9167	*	0.0833		4	1.0000	0.0000
g	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN >= 38744	17	0.6471		0.3529		4	1.0000	0.0000
	CLNO >= 19.2	5	0.0000		1.0000	*	0	.	.
h	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN < 9638	107	0.8411		0.1589		58	0.8276	0.1724
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	MORTDUE < 36622.9	9	0.2222		0.7778	*	11	0.4545	0.5455
i	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN < 9638	107	0.8411		0.1589		58	0.8276	0.1724
	MORTDUE >= 36622.9 or Missing	98	0.8980	*	0.1020		47	0.9149	0.0851
k	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN >= 9638 or Missing	683	0.9561		0.0439		296	0.9493	0.0507
	VALUE >= 85039.8 or Missing	432	0.9769	*	0.0231		186	0.9785	0.0215
l	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ < 2.08 or Missing	229	0.9127		0.0873		109	0.8440	0.1560
	DEBTINC < 22.3408	15	0.7333	*	0.2667		11	0.7273	0.2727
n	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG >= 1.1	61	0.6393		0.3607		26	0.8077	0.1923
	NINQ < 4.03 or Missing	54	0.7037		0.2963		24	0.8333	0.1667
	MORTDUE < 64226.4	21	0.4762		0.5238		10	0.7000	0.3000
	CLAGE < 234.036 or Missing	14	0.2857		0.7143	*	5	0.4000	0.6000
o	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG >= 0.1	181	0.8011		0.1989		83	0.8554	0.1446
	DEROG >= 1.1	61	0.6393		0.3607		26	0.8077	0.1923
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	NINQ < 4.03 or Missing	54	0.7037		0.2963		24	0.8333	0.1667
	MORTDUE < 64226.4	21	0.4762		0.5238		10	0.7000	0.3000
	CLAGE >= 234.036	7	0.8571	*	0.1429		5	1.0000	0.0000
q	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN < 38744 or Missing	167	0.9401		0.0599		68	0.9559	0.0441
	DEROG < 2.1 or Missing	166	0.9458		0.0542		68	0.9559	0.0441
	CLAGE >= 140.616 or Missing	128	0.9844	*	0.0156		48	0.9792	0.0208
r	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN >= 9638 or Missing	683	0.9561		0.0439		296	0.9493	0.0507
	VALUE < 85039.8	251	0.9203		0.0797		110	0.9000	0.1000
	CLAGE < 128.939 or Missing	186	0.9516	*	0.0484		81	0.9012	0.0988
t	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ < 2.08 or Missing	229	0.9127		0.0873		109	0.8440	0.1560
	DEBTINC >= 22.3408 or Missing	214	0.9252		0.0748		98	0.8571	0.1429
	DELINQ < 1.1 or Missing	143	0.9580	*	0.0420		62	0.9677	0.0323
v	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN < 38744 or Missing	167	0.9401		0.0599		68	0.9559	0.0441
	DEROG < 2.1 or Missing	166	0.9458		0.0542		68	0.9559	0.0441
	CLAGE < 140.616	38	0.8158		0.1842		20	0.9000	0.1000
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	JOB = Office,Other,Self or Missing	25	1.0000	*	0.0000		19	0.9474	0.0526
w	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC >= 40.9764	300	0.7167		0.2833		124	0.7742	0.2258
	DEBTINC < 43.8434 or Missing	236	0.8729		0.1271		98	0.9184	0.0816
	MORTDUE >= 60283 or Missing	184	0.9130		0.0870		72	0.9583	0.0417
	LOAN < 38744 or Missing	167	0.9401		0.0599		68	0.9559	0.0441
	DEROG < 2.1 or Missing	166	0.9458		0.0542		68	0.9559	0.0441
	CLAGE < 140.616	38	0.8158		0.1842		20	0.9000	0.1000
	JOB = Mgr,ProfEx,Sales	13	0.4615		0.5385	*	1	0.0000	1.0000
x	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN >= 9638 or Missing	683	0.9561		0.0439		296	0.9493	0.0507
	VALUE < 85039.8	251	0.9203		0.0797		110	0.9000	0.1000
	CLAGE >= 128.939	65	0.8308		0.1692		29	0.8966	0.1034
	YOJ < 9.02 or Missing	51	0.9412	*	0.0588		23	0.9565	0.0435
z	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ < 2.08 or Missing	229	0.9127		0.0873		109	0.8440	0.1560
	DEBTINC >= 22.3408 or Missing	214	0.9252		0.0748		98	0.8571	0.1429
	DELINQ >= 1.1	71	0.8592		0.1408		36	0.6667	0.3333
	MORTDUE < 64226.4 or Missing	54	0.9444	*	0.0556		18	0.8333	0.1667
11	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN >= 9638 or Missing	683	0.9561		0.0439		296	0.9493	0.0507
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 85039.8	251	0.9203		0.0797		110	0.9000	0.1000
	CLAGE >= 128.939	65	0.8308		0.1692		29	0.8966	0.1034
	YOJ >= 9.02	14	0.4286		0.5714		6	0.6667	0.3333
	YOJ < 14.35 or Missing	8	0.0000		1.0000	*	1	1.0000	0.0000
12	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ < 0.1 or Missing	1627	0.9619		0.0381		672	0.9568	0.0432
	CLAGE < 175.649	790	0.9405		0.0595		354	0.9294	0.0706
	LOAN >= 9638 or Missing	683	0.9561		0.0439		296	0.9493	0.0507
	VALUE < 85039.8	251	0.9203		0.0797		110	0.9000	0.1000
	CLAGE >= 128.939	65	0.8308		0.1692		29	0.8966	0.1034
	YOJ >= 9.02	14	0.4286		0.5714		6	0.6667	0.3333
	YOJ >= 14.35	6	1.0000	*	0.0000		5	0.6000	0.4000
13	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ < 2.08 or Missing	229	0.9127		0.0873		109	0.8440	0.1560
	DEBTINC >= 22.3408 or Missing	214	0.9252		0.0748		98	0.8571	0.1429
	DELINQ >= 1.1	71	0.8592		0.1408		36	0.6667	0.3333
	MORTDUE >= 64226.4	17	0.5882		0.4118		18	0.5000	0.5000
	MORTDUE < 79999.8	7	0.0000		1.0000	*	4	0.2500	0.7500
14	Root Node	2364	0.9099		0.0901		1000	0.9130	0.0870
	DEBTINC < 40.9764 or Missing	2064	0.9380		0.0620		876	0.9326	0.0674
	DEROG < 0.1 or Missing	1883	0.9511		0.0489		793	0.9407	0.0593
	DELINQ >= 0.1	256	0.8828		0.1172		121	0.8512	0.1488
	LOAN >= 6110 or Missing	248	0.8952		0.1048		117	0.8462	0.1538
	NINQ < 2.08 or Missing	229	0.9127		0.0873		109	0.8440	0.1560
	DEBTINC >= 22.3408 or Missing	214	0.9252		0.0748		98	0.8571	0.1429
	DELINQ >= 1.1	71	0.8592		0.1408		36	0.6667	0.3333
* Selected target level									

Decision tree with FASTCHAID criterion

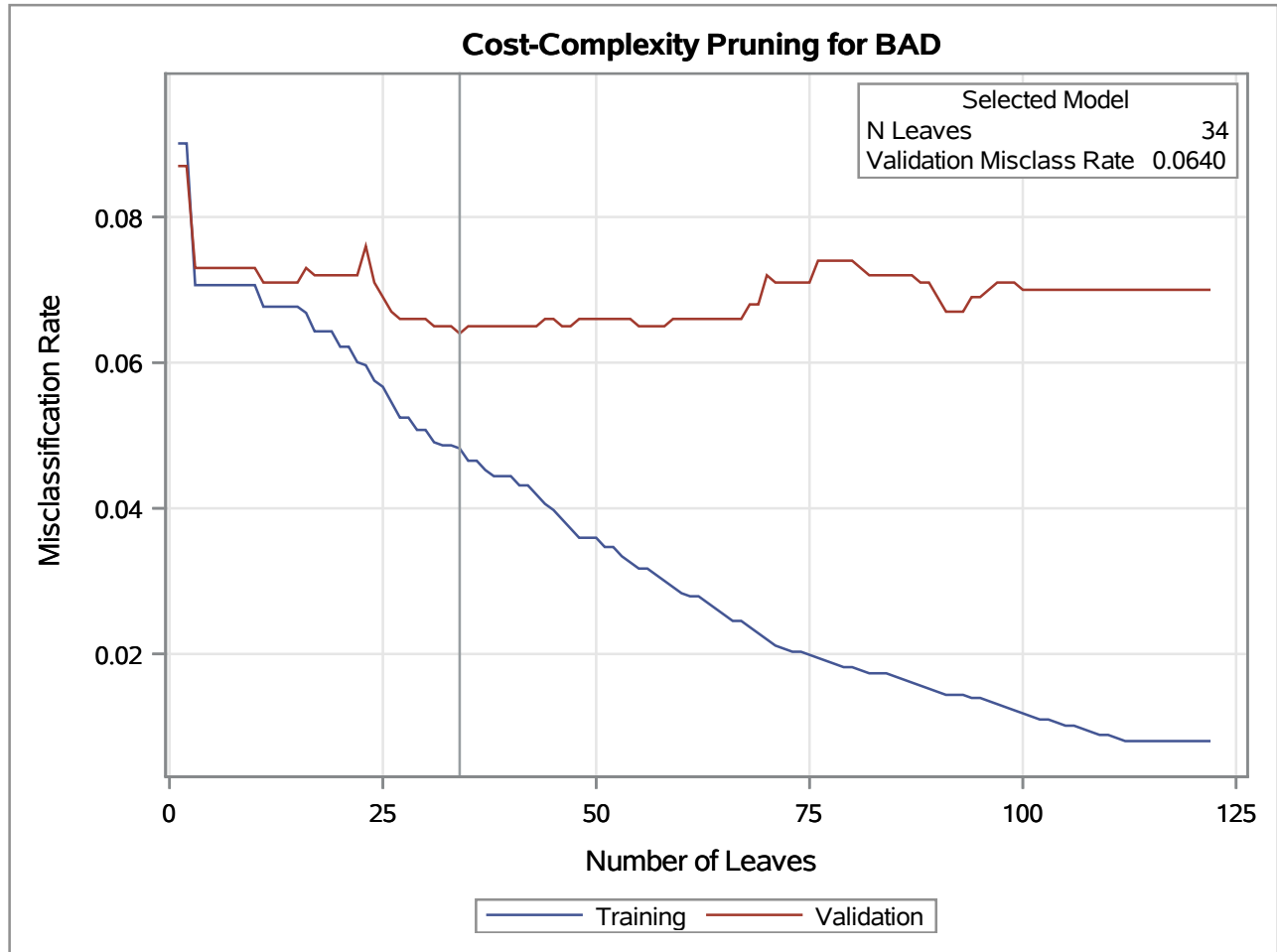
The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	MORTDUE >= 64226.4	17	0.5882		0.4118		18	0.5000	0.5000
	MORTDUE >= 79999.8 or Missing	10	1.0000	*	0.0000		14	0.5714	0.4286
* Selected target level									

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.4195	1.0000	5.1970	1.0000	5
MORTDUE	0.5339	5.0295	0.5246	2.7262	0.9824	5
DELINQ	0.2621	2.4687	0.4936	2.5655	1.8835	3
CLAGE	0.4128	3.8882	0.4860	2.5260	1.1775	5
JOB	0.3011	2.8361	0.2887	1.5005	0.9589	2
LOAN	0.3718	3.5018	0.2338	1.2153	0.6290	4
CLNO	0.2586	2.4354	0.1867	0.9700	0.7219	1
VALUE	0.1069	1.0074	0.1707	0.8871	1.5961	1
NINQ	0.2541	2.3937	0.1449	0.7531	0.5703	2
DEROG	0.3976	3.7454	0.1363	0.7084	0.3428	3
YOJ	0.3773	3.5539	0.1154	0.5996	0.3058	2

Decision tree with FASTCHAID criterion

The HPSPLIT Procedure



Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

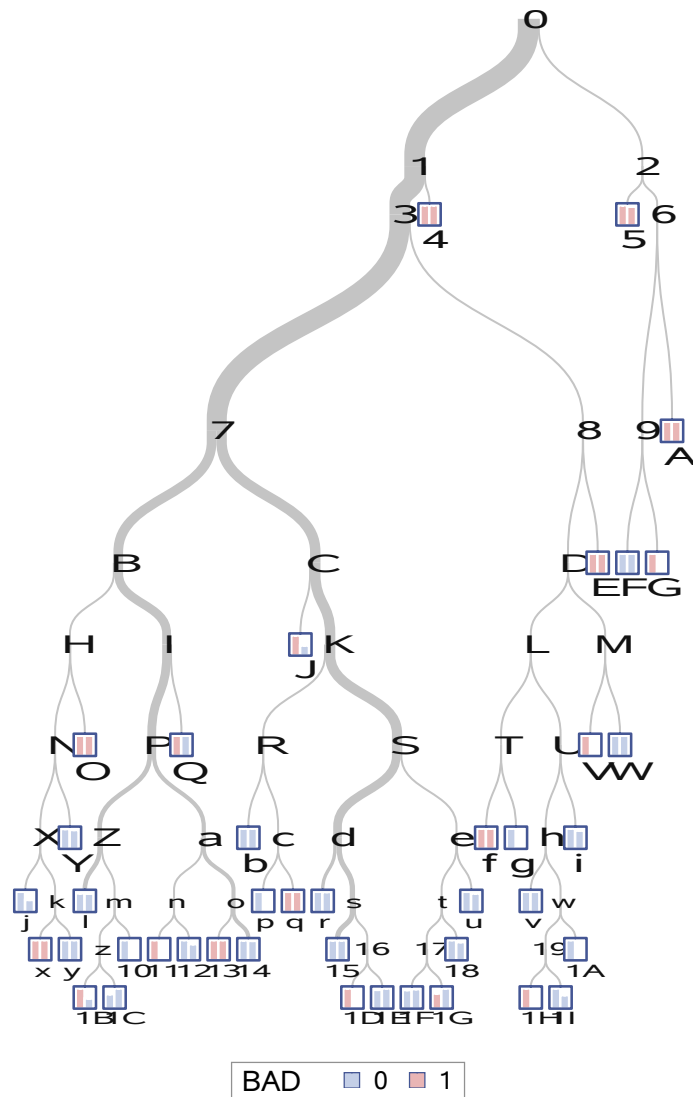
Model Information	
Split Criterion Used	Entropy
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	48
Number of Leaves After Pruning	41
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364
Number of Training Observations Used	2041
Number of Validation Observations Used	663
Number of Test Observations Used	660

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

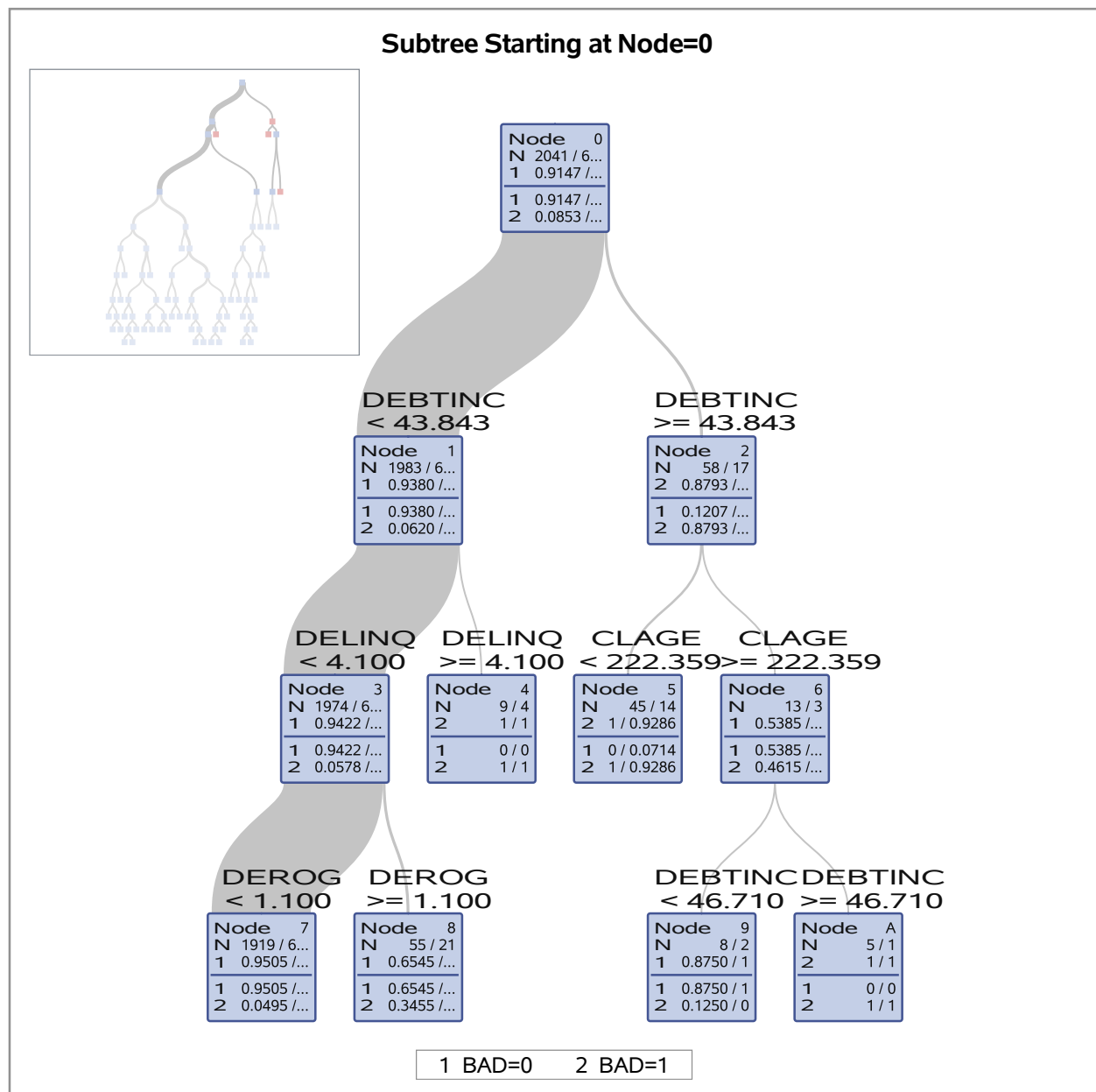
The HPSPLIT Procedure

Classification Tree for BAD



Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

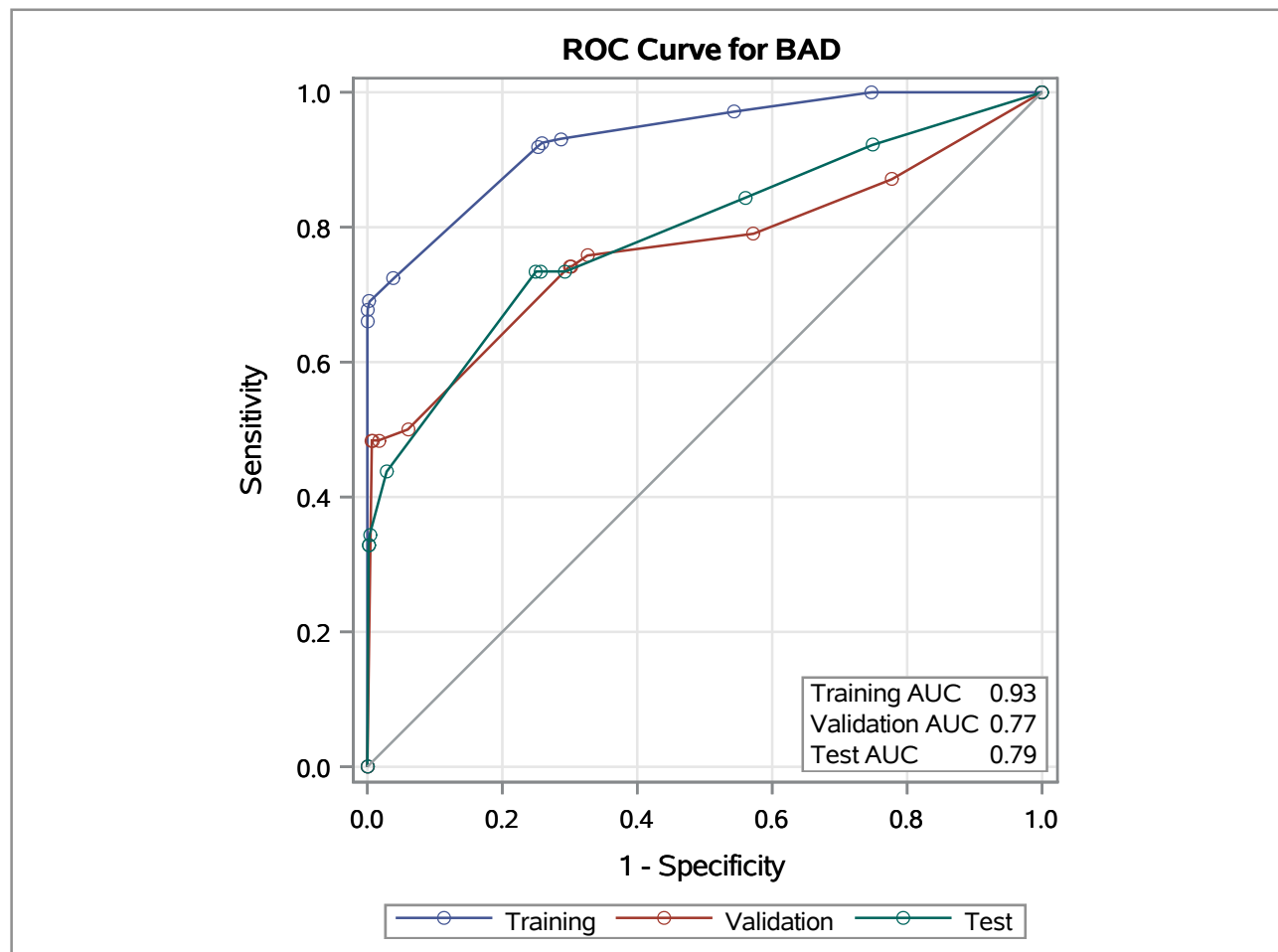


Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	1866	1	0.0005
	1	56	118	0.3218
Validation	0	596	5	0.0083
	1	32	30	0.5161
Test	0	595	1	0.0017
	1	43	21	0.6719

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	41	0.0258	0.0279	0.6782	0.9995	0.1542	0.0517	105.5	0.9325
Validation	41	0.0535	0.0558	0.4839	0.9917	0.2588	0.0922	70.9108	0.7657
Test	41	0.0613	0.0667	0.3281	0.9983	0.3000	0.1144	80.8873	0.7907



Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
4	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ >= 4.1	9	0.0000		1.0000	*	4	0.0000	1.0000
5	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC >= 43.8434	58	0.1207		0.8793		17	0.1765	0.8235
	CLAGE < 222.359 or Missing	45	0.0000		1.0000	*	14	0.0714	0.9286
A	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC >= 43.8434	58	0.1207		0.8793		17	0.1765	0.8235
	CLAGE >= 222.359	13	0.5385		0.4615		3	0.6667	0.3333
	DEBTINC >= 46.7104	5	0.0000		1.0000	*	1	0.0000	1.0000
E	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO >= 30.08	6	0.0000		1.0000	*	1	0.0000	1.0000
F	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC >= 43.8434	58	0.1207		0.8793		17	0.1765	0.8235
	CLAGE >= 222.359	13	0.5385		0.4615		3	0.6667	0.3333
	DEBTINC < 46.7104 or Missing	8	0.8750		0.1250		2	1.0000	0.0000
	DELINQ < 0.1 or Missing	7	1.0000	*	0.0000		2	1.0000	0.0000
G	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC >= 43.8434	58	0.1207		0.8793		17	0.1765	0.8235
	CLAGE >= 222.359	13	0.5385		0.4615		3	0.6667	0.3333
	DEBTINC < 46.7104 or Missing	8	0.8750		0.1250		2	1.0000	0.0000
	DELINQ >= 0.1	1	0.0000		1.0000	*	0	.	.
J	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC < 13.7397	4	0.0000		1.0000	*	2	0.5000	0.5000
O	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE < 50634.4	75	0.7867		0.2133		26	0.6923	0.3077
	CLAGE >= 140.616	8	0.0000		1.0000	*	1	0.0000	1.0000
Q	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE >= 206187	3	0.0000		1.0000	*	1	1.0000	0.0000
V	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ >= 4.03	6	0.1667		0.8333		2	1.0000	0.0000
	CLAGE < 117.261 or Missing	5	0.0000		1.0000	*	0	.	.
W	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ >= 4.03	6	0.1667		0.8333		2	1.0000	0.0000
	CLAGE >= 117.261	1	1.0000	*	0.0000		2	1.0000	0.0000
Y	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	VALUE < 50634.4	75	0.7867		0.2133		26	0.6923	0.3077
	CLAGE < 140.616 or Missing	67	0.8806		0.1194		25	0.7200	0.2800
	LOAN >= 9638 or Missing	52	0.9808	*	0.0192		15	0.9333	0.0667
b	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO < 6.4	15	0.8000		0.2000		2	0.5000	0.5000
	JOB = Mgr,Office,ProfEx,Sales,Self or Missing	8	1.0000	*	0.0000		1	1.0000	0.0000
f	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO < 16.64	7	0.4286		0.5714		2	0.0000	1.0000
	CLAGE < 234.036 or Missing	4	0.0000		1.0000	*	2	0.0000	1.0000
g	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO < 16.64	7	0.4286		0.5714		2	0.0000	1.0000
	CLAGE >= 234.036	3	1.0000	*	0.0000		0	.	.
i	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO >= 16.64 or Missing	36	0.8889		0.1111		16	0.8750	0.1250
	NINQ >= 0.13 or Missing	22	1.0000	*	0.0000		10	0.9000	0.1000
j	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE < 50634.4	75	0.7867		0.2133		26	0.6923	0.3077
	CLAGE < 140.616 or Missing	67	0.8806		0.1194		25	0.7200	0.2800
	LOAN < 9638	15	0.5333		0.4667		10	0.4000	0.6000
	YOJ < 1.23	7	1.0000	*	0.0000		5	0.6000	0.4000
I	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Mgr,Other,Sales,Self or Missing	447	0.9128		0.0872		166	0.9036	0.0964
	DEBTINC < 42.4099 or Missing	432	0.9213	*	0.0787		159	0.9057	0.0943
p	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO < 6.4	15	0.8000		0.2000		2	0.5000	0.5000
	JOB = Other	7	0.5714		0.4286		1	0.0000	1.0000
	REASON = HomImp or Missing	4	1.0000	*	0.0000		0	.	.
q	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO < 6.4	15	0.8000		0.2000		2	0.5000	0.5000
	JOB = Other	7	0.5714		0.4286		1	0.0000	1.0000
	REASON = DebtCon	3	0.0000		1.0000	*	1	0.0000	1.0000
r	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ < 0.1 or Missing	826	0.9867		0.0133		240	0.9875	0.0125
	LOAN < 15812	323	1.0000	*	0.0000		88	0.9886	0.0114
u	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ >= 0.1	152	0.9408		0.0592		50	0.9400	0.0600
	YOJ >= 16.4	46	1.0000	*	0.0000		12	0.9167	0.0833
v	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO >= 16.64 or Missing	36	0.8889		0.1111		16	0.8750	0.1250
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	NINQ < 0.13	14	0.7143		0.2857		6	0.8333	0.1667
	CLNO < 21.12	6	1.0000	*	0.0000		3	1.0000	0.0000
x	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE < 50634.4	75	0.7867		0.2133		26	0.6923	0.3077
	CLAGE < 140.616 or Missing	67	0.8806		0.1194		25	0.7200	0.2800
	LOAN < 9638	15	0.5333		0.4667		10	0.4000	0.6000
	YOJ >= 1.23 or Missing	8	0.1250		0.8750		5	0.2000	0.8000
	MORTDUE < 44509.6 or Missing	7	0.0000		1.0000	*	4	0.0000	1.0000
y	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE < 50634.4	75	0.7867		0.2133		26	0.6923	0.3077
	CLAGE < 140.616 or Missing	67	0.8806		0.1194		25	0.7200	0.2800
	LOAN < 9638	15	0.5333		0.4667		10	0.4000	0.6000
	YOJ >= 1.23 or Missing	8	0.1250		0.8750		5	0.2000	0.8000
	MORTDUE >= 44509.6	1	1.0000	*	0.0000		1	1.0000	0.0000
10	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Mgr,Other,Sales,Self or Missing	447	0.9128		0.0872		166	0.9036	0.0964
	DEBTINC >= 42.4099	15	0.6667		0.3333		7	0.8571	0.1429
	CLAGE >= 152.294	5	1.0000	*	0.0000		0	.	.
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
11	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Office,ProfEx	397	0.9748		0.0252		134	0.9478	0.0522
	CLNO < 10.24	9	0.5556		0.4444		5	0.8000	0.2000
	YOJ < 4.1	4	0.0000		1.0000	*	0	.	.
12	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Office,ProfEx	397	0.9748		0.0252		134	0.9478	0.0522
	CLNO < 10.24	9	0.5556		0.4444		5	0.8000	0.2000
	YOJ >= 4.1 or Missing	5	1.0000	*	0.0000		5	0.8000	0.2000
13	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Office,ProfEx	397	0.9748		0.0252		134	0.9478	0.0522
	CLNO >= 10.24 or Missing	388	0.9845		0.0155		129	0.9535	0.0465
	DEBTINC < 19.4737	1	0.0000		1.0000	*	1	0.0000	1.0000
14	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE < 175.649	922	0.9262		0.0738		327	0.9052	0.0948
	VALUE >= 50634.4 or Missing	847	0.9386		0.0614		301	0.9236	0.0764
	MORTDUE < 206187 or Missing	844	0.9419		0.0581		300	0.9233	0.0767
	JOB = Office,ProfEx	397	0.9748		0.0252		134	0.9478	0.0522
	CLNO >= 10.24 or Missing	388	0.9845		0.0155		129	0.9535	0.0465
	DEBTINC >= 19.4737 or Missing	387	0.9871	*	0.0129		128	0.9609	0.0391
15	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ < 0.1 or Missing	826	0.9867		0.0133		240	0.9875	0.0125
	LOAN >= 15812 or Missing	503	0.9781		0.0219		152	0.9868	0.0132
	CLNO < 44.16 or Missing	486	0.9856	*	0.0144		150	0.9867	0.0133
18	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ >= 0.1	152	0.9408		0.0592		50	0.9400	0.0600
	YOJ < 16.4 or Missing	106	0.9151		0.0849		38	0.9474	0.0526
	CLNO >= 33.28	29	1.0000	*	0.0000		10	0.9000	0.1000
1A	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ < 0.1 or Missing	826	0.9867		0.0133		240	0.9875	0.0125
	LOAN >= 15812 or Missing	503	0.9781		0.0219		152	0.9868	0.0132
	CLNO >= 44.16	17	0.7647		0.2353		2	1.0000	0.0000
	MORTDUE < 79999.8	3	0.0000		1.0000	*	0	.	.
1E	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ < 0.1 or Missing	826	0.9867		0.0133		240	0.9875	0.0125
	LOAN >= 15812 or Missing	503	0.9781		0.0219		152	0.9868	0.0132
	CLNO >= 44.16	17	0.7647		0.2353		2	1.0000	0.0000
	MORTDUE >= 79999.8 or Missing	14	0.9286	*	0.0714		2	1.0000	0.0000
1F	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ >= 0.1	152	0.9408		0.0592		50	0.9400	0.0600
	YOJ < 16.4 or Missing	106	0.9151		0.0849		38	0.9474	0.0526
	CLNO < 33.28 or Missing	77	0.8831		0.1169		28	0.9643	0.0357
	CLNO < 31.36 or Missing	73	0.9178	*	0.0822		27	0.9630	0.0370
1G	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

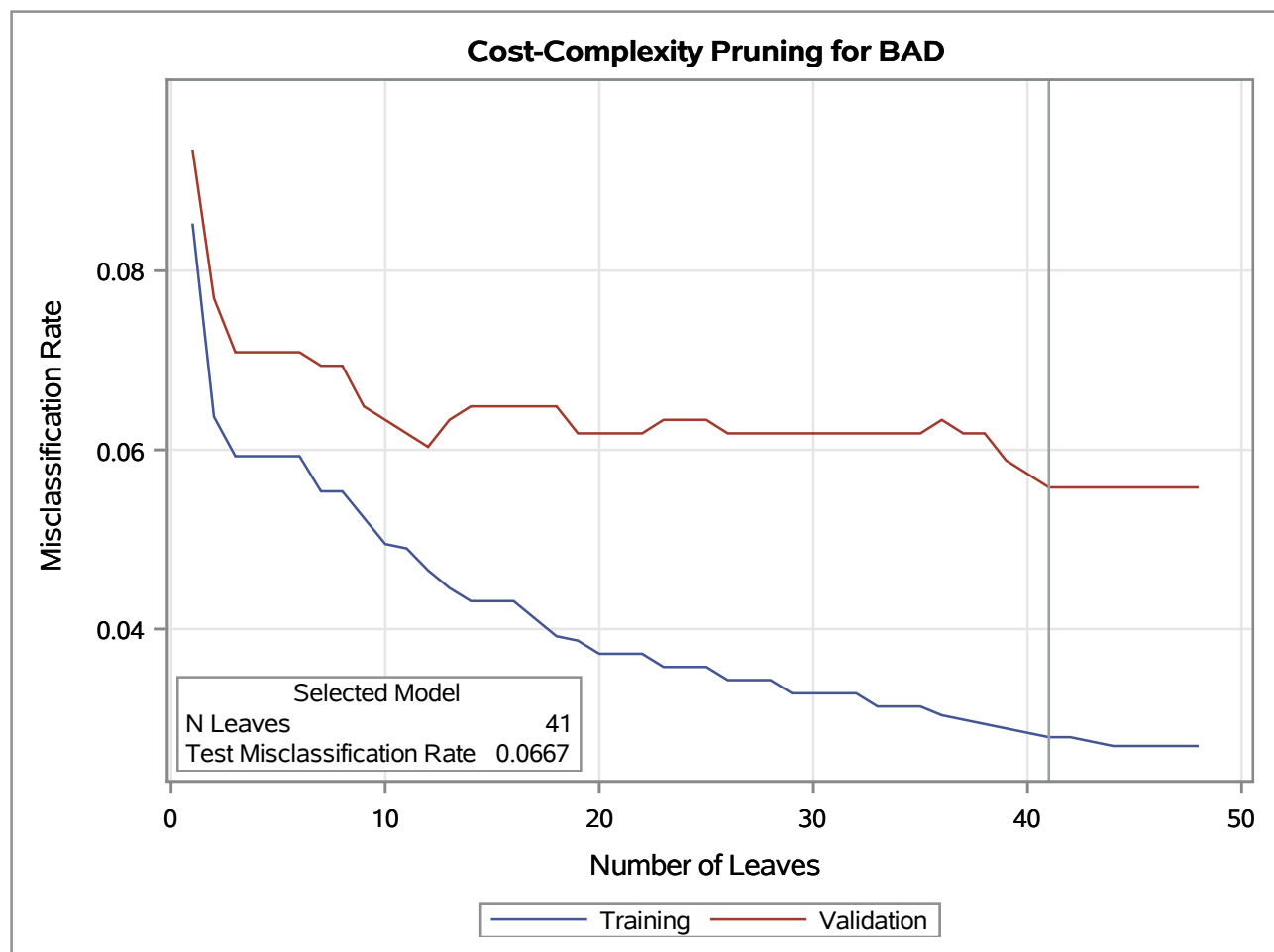
The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEROG < 1.1 or Missing	1919	0.9505		0.0495		621	0.9372	0.0628
	CLAGE >= 175.649 or Missing	997	0.9729		0.0271		294	0.9728	0.0272
	DEBTINC >= 13.7397 or Missing	993	0.9768		0.0232		292	0.9760	0.0240
	CLNO >= 6.4 or Missing	978	0.9796		0.0204		290	0.9793	0.0207
	DELINQ >= 0.1	152	0.9408		0.0592		50	0.9400	0.0600
	YOJ < 16.4 or Missing	106	0.9151		0.0849		38	0.9474	0.0526
	CLNO < 33.28 or Missing	77	0.8831		0.1169		28	0.9643	0.0357
	CLNO >= 31.36	4	0.2500		0.7500	*	1	1.0000	0.0000
1H	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO >= 16.64 or Missing	36	0.8889		0.1111		16	0.8750	0.1250
	NINQ < 0.13	14	0.7143		0.2857		6	0.8333	0.1667
	CLNO >= 21.12 or Missing	8	0.5000		0.5000		3	0.6667	0.3333
	CLNO < 28.16 or Missing	5	0.2000		0.8000		3	0.6667	0.3333
	DEBTINC < 39.5429 or Missing	4	0.0000		1.0000	*	0	.	.
1I	Root Node	2041	0.9147		0.0853		663	0.9065	0.0935
	DEBTINC < 43.8434 or Missing	1983	0.9380		0.0620		646	0.9257	0.0743
	DELINQ < 4.1 or Missing	1974	0.9422		0.0578		642	0.9315	0.0685
	DEROG >= 1.1	55	0.6545		0.3455		21	0.7619	0.2381
	CLNO < 30.08 or Missing	49	0.7347		0.2653		20	0.8000	0.2000
	NINQ < 4.03 or Missing	43	0.8140		0.1860		18	0.7778	0.2222
	CLNO >= 16.64 or Missing	36	0.8889		0.1111		16	0.8750	0.1250
	NINQ < 0.13	14	0.7143		0.2857		6	0.8333	0.1667
	CLNO >= 21.12 or Missing	8	0.5000		0.5000		3	0.6667	0.3333
	CLNO < 28.16 or Missing	5	0.2000		0.8000		3	0.6667	0.3333
	DEBTINC >= 39.5429	1	1.0000	*	0.0000		3	0.6667	0.3333
* Selected target level									

Decision tree with partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	9.6446	1.0000	4.7225	1.0000	6
DELINQ	0.4423	4.2661	0.5679	2.6818	1.2839	3
CLAGE	0.5265	5.0775	0.5457	2.5772	1.0366	6
CLNO	0.4876	4.7031	0.4467	2.1097	0.9161	9
LOAN	0.2283	2.2022	0.4381	2.0688	1.9186	2
VALUE	0.1849	1.7836	0.3177	1.5004	1.7181	1
MORTDUE	0.3488	3.3638	0.2886	1.3628	0.8274	3
JOB	0.2349	2.2658	0.2731	1.2898	1.1626	3
DEROG	0.3173	3.0604	0.1764	0.8331	0.5559	1
REASON	0.1920	1.8516	0.1711	0.8081	0.8913	1
YOJ	0.3379	3.2594	0.0941	0.4444	0.2785	3
NINQ	0.2499	2.4102	0.0000	0	0.0000	2



With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

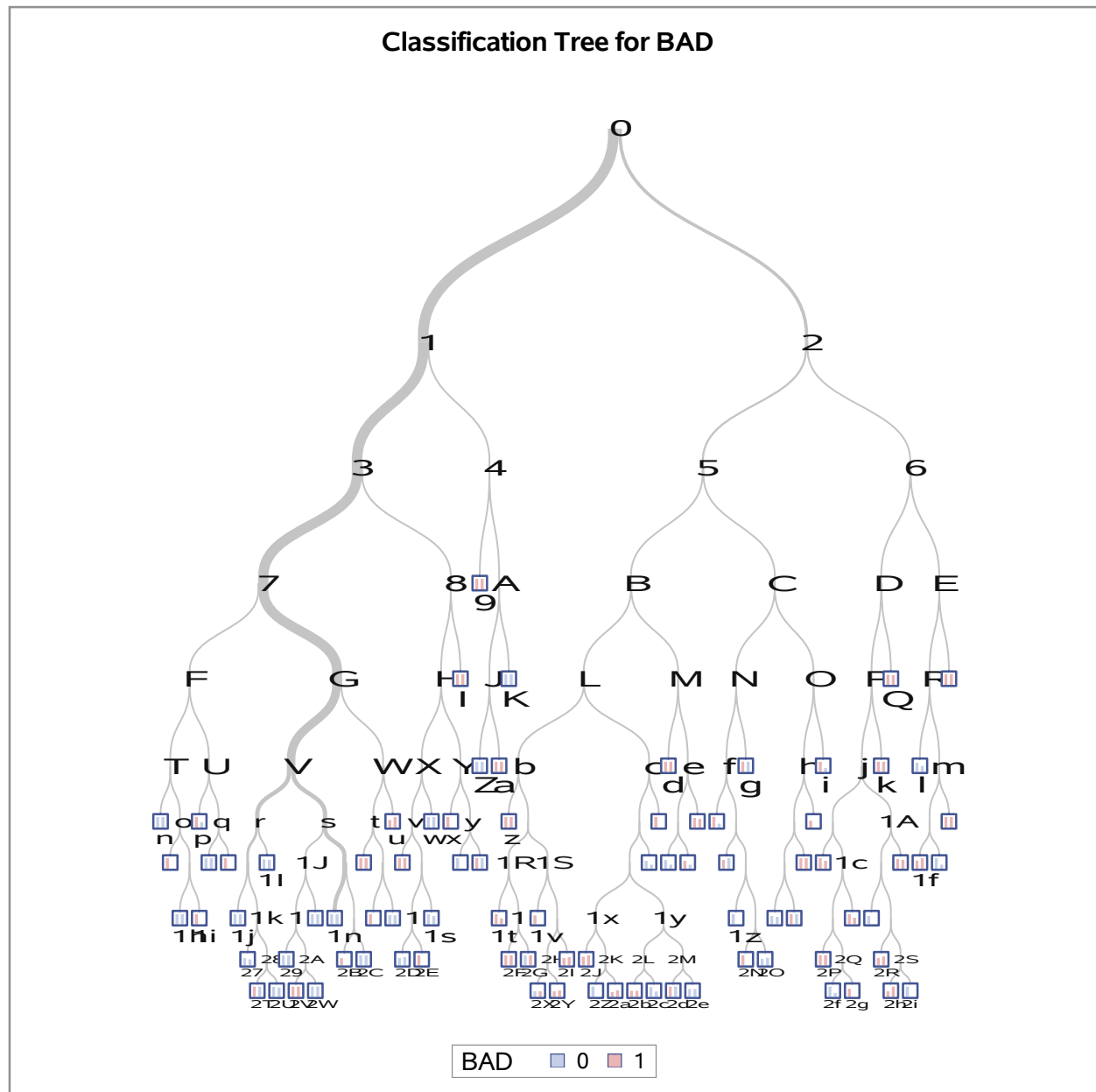
Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	Entropy
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	128
Number of Leaves After Pruning	85
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	3629
Number of Validation Observations Used	1192
Number of Test Observations Used	1139

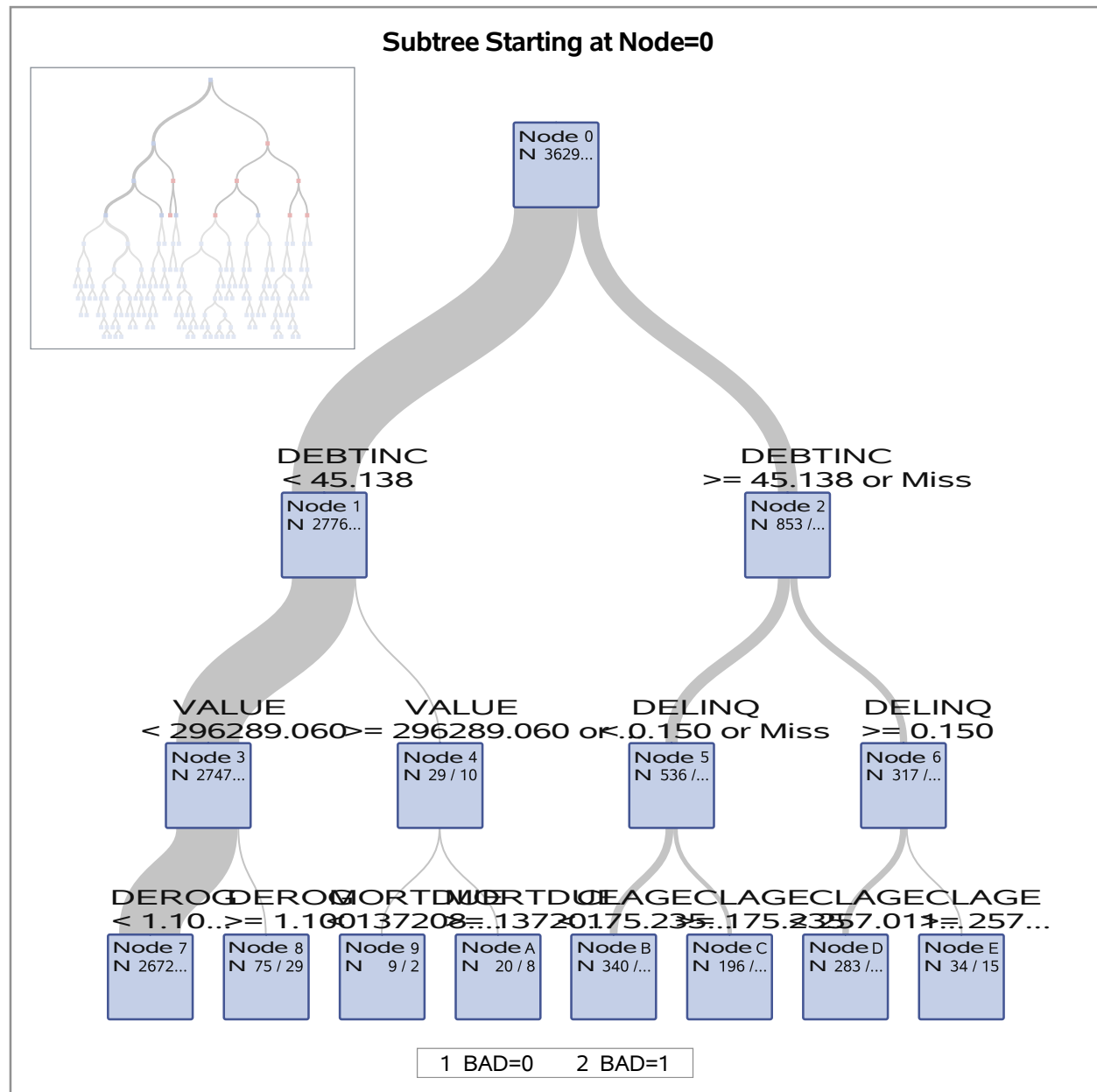
With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure



With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

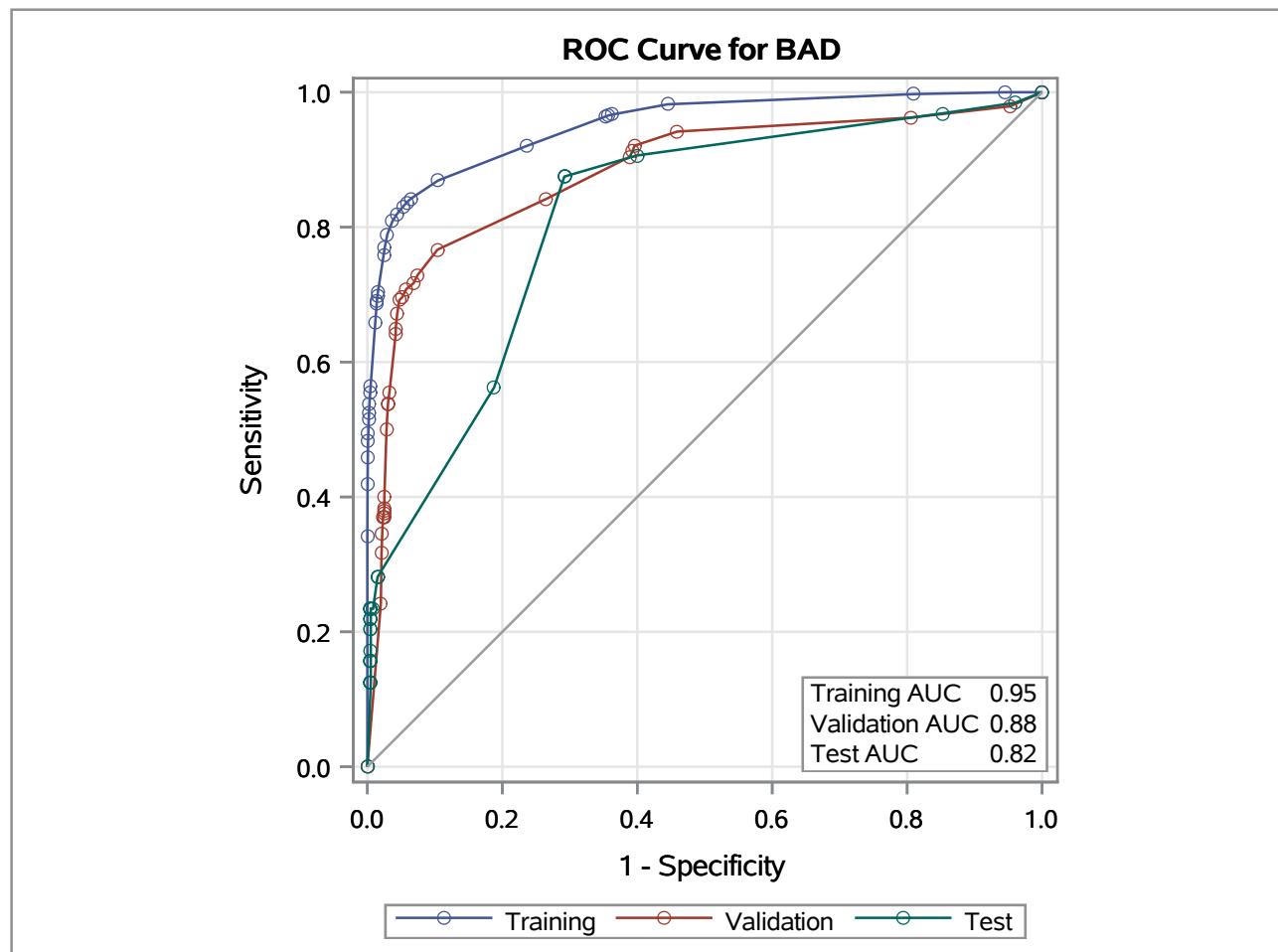


With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	2816	86	0.0296
	1	153	574	0.2105
Validation	0	910	42	0.0441
	1	79	161	0.3292
Test	0	593	3	0.0050
	1	49	15	0.7656

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	85	0.0531	0.0659	0.7895	0.9704	0.2709	0.1061	385.1	0.9512
Validation	85	0.0888	0.1015	0.6708	0.9559	0.3589	0.1438	211.7	0.8808
Test	85	0.0407	0.0457	0.2344	0.9950	0.1767	0.0706	92.7329	0.8157



With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
9	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE >= 296289 or Missing	29	0.3793		0.6207		10	0.5000	0.5000
	MORTDUE < 137209	9	0.0000		1.0000	*	2	0.0000	1.0000
I	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG >= 1.1	75	0.6533		0.3467		29	0.7931	0.2069
	CLNO >= 30.53	6	0.0000		1.0000	*	2	0.0000	1.0000
K	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE >= 296289 or Missing	29	0.3793		0.6207		10	0.5000	0.5000
	MORTDUE >= 137209 or Missing	20	0.5500		0.4500		8	0.6250	0.3750
	CLAGE >= 233.647 or Missing	7	1.0000	*	0.0000		4	1.0000	0.0000
Q	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE >= 152145 or Missing	57	0.0175		0.9825	*	19	0.0526	0.9474
S	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE >= 257.011	34	0.4706		0.5294		15	0.3333	0.6667
	NINQ >= 2.04	7	0.0000		1.0000	*	5	0.0000	1.0000
Z	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE >= 296289 or Missing	29	0.3793		0.6207		10	0.5000	0.5000
	MORTDUE >= 137209 or Missing	20	0.5500		0.4500		8	0.6250	0.3750
	CLAGE < 233.647	13	0.3077		0.6923		4	0.2500	0.7500
	MORTDUE < 196832	4	1.0000	*	0.0000		1	1.0000	0.0000
a	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE >= 296289 or Missing	29	0.3793		0.6207		10	0.5000	0.5000
* Selected target level									

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
n	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO < 4.26	59	0.7119		0.2881		21	0.9048	0.0952
	MORTDUE < 37836.8 or Missing	44	0.8864		0.1136		14	1.0000	0.0000
	CLAGE < 58.4117 or Missing	28	1.0000	*	0.0000		10	1.0000	0.0000
p	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO < 4.26	59	0.7119		0.2881		21	0.9048	0.0952
	MORTDUE >= 37836.8	15	0.2000		0.8000		7	0.7143	0.2857
	DEBTINC < 39.0542 or Missing	10	0.0000		1.0000	*	5	0.6000	0.4000
u	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ >= 0.15	389	0.8843		0.1157		138	0.8551	0.1449
	DELINQ >= 4.05	9	0.2222		0.7778	*	4	0.0000	1.0000
w	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG >= 1.1	75	0.6533		0.3467		29	0.7931	0.2069
	CLNO < 30.53 or Missing	69	0.7101		0.2899		27	0.8519	0.1481
	MORTDUE < 85535.3 or Missing	57	0.8070		0.1930		25	0.8400	0.1600
	VALUE >= 92790.9	19	1.0000	*	0.0000		5	1.0000	0.0000
x	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG >= 1.1	75	0.6533		0.3467		29	0.7931	0.2069
	CLNO < 30.53 or Missing	69	0.7101		0.2899		27	0.8519	0.1481
* Selected target level									

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	MORTDUE >= 85535.3	12	0.2500		0.7500		2	1.0000	0.0000
	CLAGE < 163.553	7	0.0000		1.0000	*	0	.	.
z	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.664
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO < 3.55	13	0.0000		1.0000	*	2	0.0000	1.0000
12	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG >= 1.1	5	0.0000		1.0000	*	0	.	.
14	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE >= 143665 or Missing	60	0.1667		0.8333		16	0.2500	0.7500
	CLNO >= 15.62 or Missing	41	0.2439		0.7561		13	0.3077	0.6923
	DEROG >= 0.1 or Missing	19	0.0526		0.9474	*	7	0.1429	0.8571
15	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ < 3.28	55	0.4182		0.5818		9	0.7778	0.2222
	CLAGE < 315.423 or Missing	47	0.4894		0.5106		8	0.7500	0.2500
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
18	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
* Selected target level									

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
1X	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ < 3.28	55	0.4182		0.5818		9	0.7778	0.2222
	CLAGE < 315.423 or Missing	47	0.4894		0.5106		8	0.7500	0.2500
	CLNO >= 8.52 or Missing	42	0.5476		0.4524		6	0.8333	0.1667
	CLAGE < 186.917	9	0.1111		0.8889	*	1	1.0000	0.0000
1a	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ >= 3.28 or Missing	141	0.7801		0.2199		39	0.7436	0.2564
	VALUE < 262373	137	0.8029		0.1971		37	0.7568	0.2432
	DEROG < 1.1 or Missing	130	0.8308		0.1692		37	0.7568	0.2432
	DEBTINC >= 47.1657	2	0.0000		1.0000	*	2	0.0000	1.0000
1b	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE < 41811.7 or Missing	57	0.0702		0.9298		21	0.2381	0.7619
	YOJ < 5.33 or Missing	34	0.0000		1.0000	*	11	0.1818	0.8182
1e	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE >= 41811.7	144	0.2639		0.7361		37	0.1081	0.8919
	NINQ >= 3.06 or Missing	29	0.0345		0.9655	*	8	0.1250	0.8750
1f	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
* Selected target level									

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
1j	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE < 175.235 or Missing	1101	0.9446		0.0554		390	0.9231	0.0769
	JOB = Mgr,Office,ProfEx,Self or Missing	685	0.9650		0.0350		219	0.9452	0.0548
	DEBTINC < 34.9984 or Missing	395	0.9949	*	0.0051		144	0.9722	0.0278
1m	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO < 8.52	38	0.8947		0.1053		11	0.8182	0.1818
	CLAGE >= 303.741 or Missing	24	1.0000	*	0.0000		6	1.0000	0.0000
1n	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO >= 8.52 or Missing	1085	0.9871		0.0129		337	0.9852	0.0148
	JOB = Mgr,Office,Other,ProfEx,Self or Missing	1068	0.9897	*	0.0103		335	0.9851	0.0149
1p	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ >= 0.15	389	0.8843		0.1157		138	0.8551	0.1449
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO >= 3.55 or Missing	177	0.3390		0.6610		62	0.2742	0.7258
	LOAN >= 6428 or Missing	145	0.3793		0.6207		49	0.2857	0.7143
	CLAGE < 58.4117	17	0.1176		0.8824	*	0	.	.
1z	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ < 3.28	55	0.4182		0.5818		9	0.7778	0.2222
	CLAGE < 315.423 or Missing	47	0.4894		0.5106		8	0.7500	0.2500
	CLNO >= 8.52 or Missing	42	0.5476		0.4524		6	0.8333	0.1667
	CLAGE >= 186.917 or Missing	33	0.6667		0.3333		5	0.8000	0.2000
	VALUE < 50395.4	5	1.0000	*	0.0000		0	.	.
21	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ >= 3.28 or Missing	141	0.7801		0.2199		39	0.7436	0.2564
	VALUE < 262373	137	0.8029		0.1971		37	0.7568	0.2432
	DEROG < 1.1 or Missing	130	0.8308		0.1692		37	0.7568	0.2432
	DEBTINC < 47.1657 or Missing	128	0.8438		0.1563		35	0.8000	0.2000
	NINQ < 4.08 or Missing	126	0.8571	*	0.1429		33	0.7879	0.2121
22	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ >= 3.28 or Missing	141	0.7801		0.2199		39	0.7436	0.2564
	VALUE < 262373	137	0.8029		0.1971		37	0.7568	0.2432
	DEROG < 1.1 or Missing	130	0.8308		0.1692		37	0.7568	0.2432
	DEBTINC < 47.1657 or Missing	128	0.8438		0.1563		35	0.8000	0.2000
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	NINQ >= 4.08	2	0.0000		1.0000	*	2	1.0000	0.0000
24	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE < 41811.7 or Missing	57	0.0702		0.9298		21	0.2381	0.7619
	YOJ >= 5.33	23	0.1739		0.8261		10	0.3000	0.7000
	DELINQ >= 1.05	9	0.0000		1.0000	*	7	0.2857	0.7143
25	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE >= 41811.7	144	0.2639		0.7361		37	0.1081	0.8919
	NINQ < 3.06	115	0.3217		0.6783		29	0.1034	0.8966
	YOJ < 0.41	7	0.8571	*	0.1429		0	.	.
27	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE < 175.235 or Missing	1101	0.9446		0.0554		390	0.9231	0.0769
	JOB = Mgr,Office,ProfEx,Self or Missing	685	0.9650		0.0350		219	0.9452	0.0548
	DEBTINC >= 34.9984	290	0.9241		0.0759		75	0.8933	0.1067
	MORTDUE < 41811.7 or Missing	38	0.7632	*	0.2368		9	0.6667	0.3333
29	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO < 8.52	38	0.8947		0.1053		11	0.8182	0.1818
	CLAGE < 303.741	14	0.7143		0.2857		5	0.6000	0.4000
	DEBTINC < 28.9148	7	1.0000	*	0.0000		2	1.0000	0.0000
2B	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO >= 8.52 or Missing	1085	0.9871		0.0129		337	0.9852	0.0148
	JOB = Sales	17	0.8235		0.1765		2	1.0000	0.0000
	CLAGE < 257.011	4	0.2500		0.7500	*	0	.	.
2C	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO >= 8.52 or Missing	1085	0.9871		0.0129		337	0.9852	0.0148
	JOB = Sales	17	0.8235		0.1765		2	1.0000	0.0000
	CLAGE >= 257.011 or Missing	13	1.0000	*	0.0000		2	1.0000	0.0000
2D	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG >= 1.1	75	0.6533		0.3467		29	0.7931	0.2069
	CLNO < 30.53 or Missing	69	0.7101		0.2899		27	0.8519	0.1481
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
2E	MORTDUE < 85535.3 or Missing	57	0.8070		0.1930		25	0.8400	0.1600
	VALUE < 92790.9 or Missing	38	0.7105		0.2895		20	0.8000	0.2000
	JOB = Mgr,Office,Other,Sales or Missing	34	0.7941		0.2059		19	0.8421	0.1579
	CLNO < 24.14 or Missing	22	0.6818		0.3182		12	0.8333	0.1667
	DELINQ < 0.15 or Missing	19	0.7895	*	0.2105		12	0.8333	0.1667
	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG >= 1.1	75	0.6533		0.3467		29	0.7931	0.2069
	CLNO < 30.53 or Missing	69	0.7101		0.2899		27	0.8519	0.1481
2F	MORTDUE < 85535.3 or Missing	57	0.8070		0.1930		25	0.8400	0.1600
	VALUE < 92790.9 or Missing	38	0.7105		0.2895		20	0.8000	0.2000
	JOB = Mgr,Office,Other,Sales or Missing	34	0.7941		0.2059		19	0.8421	0.1579
	CLNO < 24.14 or Missing	22	0.6818		0.3182		12	0.8333	0.1667
	DELINQ >= 0.15	3	0.0000		1.0000	*	0	.	.
	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
2G	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO >= 3.55 or Missing	177	0.3390		0.6610		62	0.2742	0.7258
	LOAN < 6428	32	0.1563		0.8438		13	0.2308	0.7692
	MORTDUE >= 61686	7	0.7143		0.2857		4	0.0000	1.0000
	CLAGE < 105.141 or Missing	2	0.0000		1.0000	*	2	0.0000	1.0000
	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	LOAN < 6428	32	0.1563		0.8438		13	0.2308	0.7692
	MORTDUE >= 61686	7	0.7143		0.2857		4	0.0000	1.0000
	CLAGE >= 105.141	5	1.0000	*	0.0000		2	0.0000	1.0000
2I	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO >= 3.55 or Missing	177	0.3390		0.6610		62	0.2742	0.7258
	LOAN >= 6428 or Missing	145	0.3793		0.6207		49	0.2857	0.7143
	CLAGE >= 58.4117 or Missing	128	0.4141		0.5859		49	0.2857	0.7143
	CLAGE >= 140.188	26	0.2308		0.7692	*	11	0.1818	0.8182
2J	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = ProfEx	36	0.4167		0.5833		8	0.2500	0.7500
	CLNO < 9.23 or Missing	8	0.1250		0.8750	*	1	0.0000	1.0000
2N	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ < 3.28	55	0.4182		0.5818		9	0.7778	0.2222
	CLAGE < 315.423 or Missing	47	0.4894		0.5106		8	0.7500	0.2500
	CLNO >= 8.52 or Missing	42	0.5476		0.4524		6	0.8333	0.1667
	CLAGE >= 186.917 or Missing	33	0.6667		0.3333		5	0.8000	0.2000
	VALUE >= 50395.4 or Missing	28	0.6071		0.3929		5	0.8000	0.2000
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	MORTDUE < 21937.3 or Missing	4	0.0000		1.0000	*	0	.	.
2O	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE >= 175.235	196	0.6786		0.3214		48	0.7500	0.2500
	YOJ < 3.28	55	0.4182		0.5818		9	0.7778	0.2222
	CLAGE < 315.423 or Missing	47	0.4894		0.5106		8	0.7500	0.2500
	CLNO >= 8.52 or Missing	42	0.5476		0.4524		6	0.8333	0.1667
	CLAGE >= 186.917 or Missing	33	0.6667		0.3333		5	0.8000	0.2000
	VALUE >= 50395.4 or Missing	28	0.6071		0.3929		5	0.8000	0.2000
	MORTDUE >= 21937.3	24	0.7083	*	0.2917		5	0.8000	0.2000
2P	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE < 41811.7 or Missing	57	0.0702		0.9298		21	0.2381	0.7619
	YOJ >= 5.33	23	0.1739		0.8261		10	0.3000	0.7000
	DELINQ < 1.05 or Missing	14	0.2857		0.7143		3	0.3333	0.6667
	CLNO < 12.07	5	0.0000		1.0000	*	1	0.0000	1.0000
2R	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE >= 41811.7	144	0.2639		0.7361		37	0.1081	0.8919
	NINQ < 3.06	115	0.3217		0.6783		29	0.1034	0.8966
	YOJ >= 0.41 or Missing	108	0.2870		0.7130		29	0.1034	0.8966
	JOB = Mgr,Other,ProfEx,Self or Missing	89	0.2247		0.7753	*	27	0.1111	0.8889
2T	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
* Selected target level									

* Selected target level

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE < 175.235 or Missing	1101	0.9446		0.0554		390	0.9231	0.0769
	JOB = Mgr,Office,ProfEx,Self or Missing	685	0.9650		0.0350		219	0.9452	0.0548
	DEBTINC >= 34.9984	290	0.9241		0.0759		75	0.8933	0.1067
	MORTDUE >= 41811.7	252	0.9484		0.0516		66	0.9242	0.0758
	CLAGE < 35.047	2	0.0000		1.0000	*	1	1.0000	0.0000
2U	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE < 175.235 or Missing	1101	0.9446		0.0554		390	0.9231	0.0769
	JOB = Mgr,Office,ProfEx,Self or Missing	685	0.9650		0.0350		219	0.9452	0.0548
	DEBTINC >= 34.9984	290	0.9241		0.0759		75	0.8933	0.1067
	MORTDUE >= 41811.7	252	0.9484		0.0516		66	0.9242	0.0758
	CLAGE >= 35.047 or Missing	250	0.9560	*	0.0440		65	0.9231	0.0769
2V	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO < 8.52	38	0.8947		0.1053		11	0.8182	0.1818
	CLAGE < 303.741	14	0.7143		0.2857		5	0.6000	0.4000
	DEBTINC >= 28.9148 or Missing	7	0.4286		0.5714		3	0.3333	0.6667
	MORTDUE < 37836.8 or Missing	4	0.0000		1.0000	*	2	0.0000	1.0000
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
2W	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC < 45.1378	2776	0.9334		0.0666		936	0.9252	0.0748
	VALUE < 296289	2747	0.9392		0.0608		926	0.9298	0.0702
	DEROG < 1.1 or Missing	2672	0.9472		0.0528		897	0.9342	0.0658
	CLNO >= 4.26 or Missing	2613	0.9525		0.0475		876	0.9349	0.0651
	DELINQ < 0.15 or Missing	2224	0.9645		0.0355		738	0.9499	0.0501
	CLAGE >= 175.235	1123	0.9840		0.0160		348	0.9799	0.0201
	CLNO < 8.52	38	0.8947		0.1053		11	0.8182	0.1818
	CLAGE < 303.741	14	0.7143		0.2857		5	0.6000	0.4000
	DEBTINC >= 28.9148 or Missing	7	0.4286		0.5714		3	0.3333	0.6667
	MORTDUE >= 37836.8	3	1.0000	*	0.0000		1	1.0000	0.0000
2X	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO >= 3.55 or Missing	177	0.3390		0.6610		62	0.2742	0.7258
	LOAN >= 6428 or Missing	145	0.3793		0.6207		49	0.2857	0.7143
	CLAGE >= 58.4117 or Missing	128	0.4141		0.5859		49	0.2857	0.7143
	CLAGE < 140.188 or Missing	102	0.4608		0.5392		38	0.3158	0.6842
	VALUE < 58874.5	36	0.6111	*	0.3889		8	0.3750	0.6250
2Y	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Mgr,Other,Sales,Self	190	0.3158		0.6842		64	0.2656	0.7344
	CLNO >= 3.55 or Missing	177	0.3390		0.6610		62	0.2742	0.7258
	LOAN >= 6428 or Missing	145	0.3793		0.6207		49	0.2857	0.7143
	CLAGE >= 58.4117 or Missing	128	0.4141		0.5859		49	0.2857	0.7143
	CLAGE < 140.188 or Missing	102	0.4608		0.5392		38	0.3158	0.6842
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE >= 58874.5 or Missing	66	0.3788		0.6212	*	30	0.3000	0.7000
2Z	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = ProfEx	36	0.4167		0.5833		8	0.2500	0.7500
	CLNO >= 9.23	28	0.5000		0.5000		7	0.2857	0.7143
	CLAGE < 58.4117 or Missing	3	1.0000	*	0.0000		0	.	.
2a	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = ProfEx	36	0.4167		0.5833		8	0.2500	0.7500
	CLNO >= 9.23	28	0.5000		0.5000		7	0.2857	0.7143
	CLAGE >= 58.4117	25	0.4400		0.5600	*	7	0.2857	0.7143
2b	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = Office or Missing	34	0.6471		0.3529		17	0.5882	0.4118
* Selected target level									

Decision tree with missing values
With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	LOAN < 13532 or Missing	23	0.7826		0.2174		11	0.4545	0.5455
	MORTDUE < 53736.3	6	0.3333		0.6667	*	6	0.3333	0.6667
2c	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = Office or Missing	34	0.6471		0.3529		17	0.5882	0.4118
	LOAN < 13532 or Missing	23	0.7826		0.2174		11	0.4545	0.5455
	MORTDUE >= 53736.3 or Missing	17	0.9412	*	0.0588		5	0.6000	0.4000
2d	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
	JOB = Office or Missing	34	0.6471		0.3529		17	0.5882	0.4118
	LOAN >= 13532	11	0.3636		0.6364		6	0.8333	0.1667
	CLAGE < 46.7293 or Missing	6	0.0000		1.0000	*	1	1.0000	0.0000
2e	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ < 0.15 or Missing	536	0.4701		0.5299		157	0.4522	0.5478
	CLAGE < 175.235 or Missing	340	0.3500		0.6500		109	0.3211	0.6789
	VALUE < 143665	280	0.3893		0.6107		93	0.3333	0.6667
	JOB = Office,ProfEx or Missing	90	0.5444		0.4556		29	0.4828	0.5172
	DEROG < 1.1 or Missing	85	0.5765		0.4235		29	0.4828	0.5172
	LOAN < 19748 or Missing	70	0.5286		0.4714		25	0.4800	0.5200
* Selected target level									

Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	JOB = Office or Missing	34	0.6471		0.3529		17	0.5882	0.4118
	LOAN >= 13532	11	0.3636		0.6364		6	0.8333	0.1667
	CLAGE >= 46.7293	5	0.8000	*	0.2000		5	0.8000	0.2000
2f	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE < 41811.7 or Missing	57	0.0702		0.9298		21	0.2381	0.7619
	YOJ >= 5.33	23	0.1739		0.8261		10	0.3000	0.7000
	DELINQ < 1.05 or Missing	14	0.2857		0.7143		3	0.3333	0.6667
	CLNO >= 12.07 or Missing	9	0.4444		0.5556		2	0.5000	0.5000
	NINQ < 1.02	3	1.0000	*	0.0000		2	0.5000	0.5000
2g	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE < 41811.7 or Missing	57	0.0702		0.9298		21	0.2381	0.7619
	YOJ >= 5.33	23	0.1739		0.8261		10	0.3000	0.7000
	DELINQ < 1.05 or Missing	14	0.2857		0.7143		3	0.3333	0.6667
	CLNO >= 12.07 or Missing	9	0.4444		0.5556		2	0.5000	0.5000
	NINQ >= 1.02 or Missing	6	0.1667		0.8333	*	0	.	.
2h	Root Node	3629	0.7997		0.2003		1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354		256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139		99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481		84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142		65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910		58	0.1552	0.8448
	MORTDUE >= 41811.7	144	0.2639		0.7361		37	0.1081	0.8919
* Selected target level									

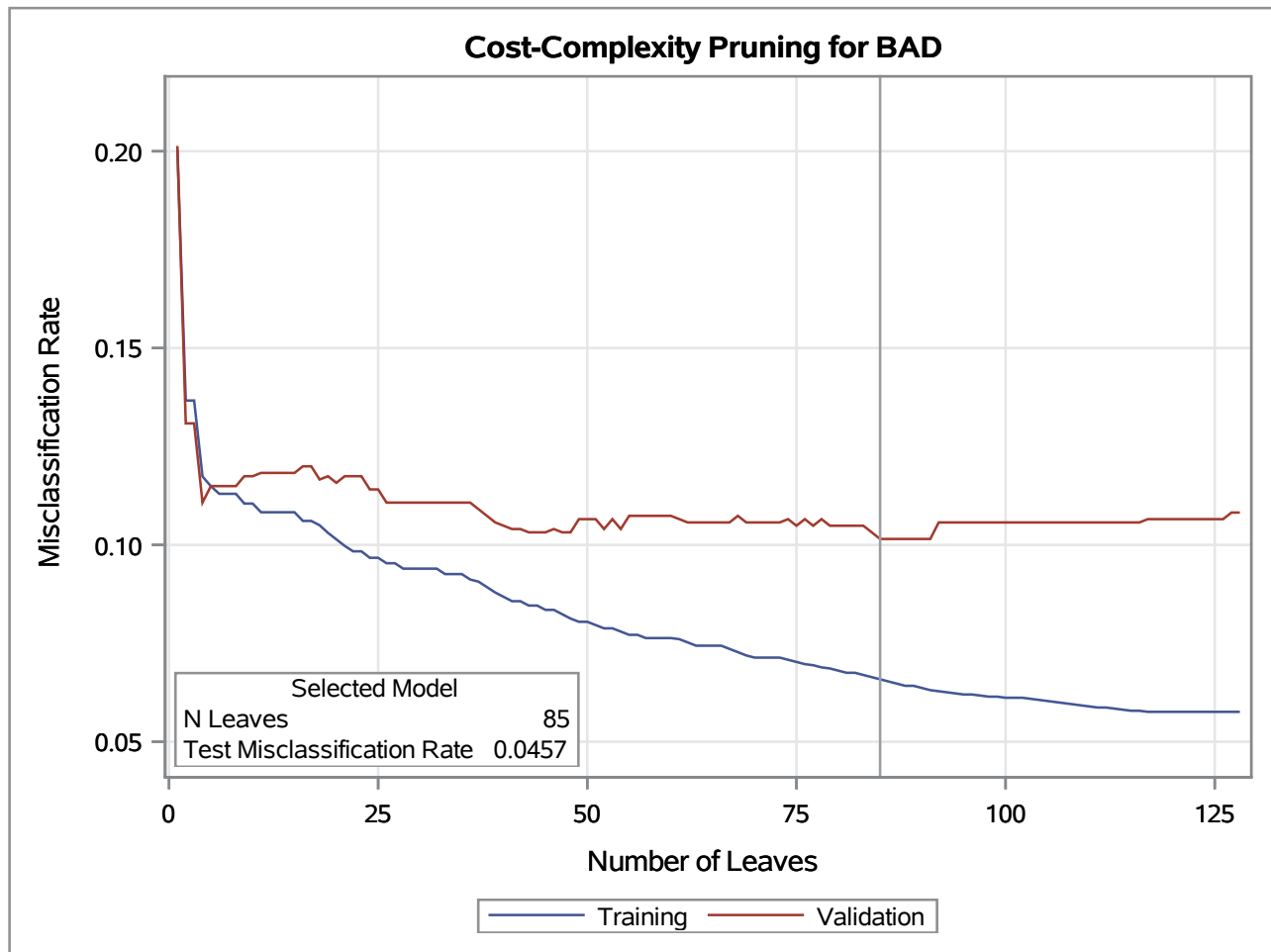
Decision tree with missing values

With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample

The HPSPLIT Procedure

Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	NINQ < 3.06	115	0.3217		0.6783	29	0.1034	0.8966
	YOJ >= 0.41 or Missing	108	0.2870		0.7130	29	0.1034	0.8966
	JOB = Office,Sales	19	0.5789		0.4211	2	0.0000	1.0000
	VALUE < 92790.9 or Missing	13	0.3846		0.6154	2	0.0000	1.0000
2i	Root Node	3629	0.7997		0.2003	1192	0.7987	0.2013
	DEBTINC >= 45.1378 or Missing	853	0.3646		0.6354	256	0.3359	0.6641
	DELINQ >= 0.15	317	0.1861		0.8139	99	0.1515	0.8485
	CLAGE < 257.011 or Missing	283	0.1519		0.8481	84	0.1190	0.8810
	VALUE < 152145	226	0.1858		0.8142	65	0.1385	0.8615
	DELINQ < 4.05 or Missing	201	0.2090		0.7910	58	0.1552	0.8448
	MORTDUE >= 41811.7	144	0.2639		0.7361	37	0.1081	0.8919
	NINQ < 3.06	115	0.3217		0.6783	29	0.1034	0.8966
	YOJ >= 0.41 or Missing	108	0.2870		0.7130	29	0.1034	0.8966
	JOB = Office,Sales	19	0.5789		0.4211	2	0.0000	1.0000
	VALUE >= 92790.9	6	1.0000	*	0.0000	0	.	.
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	20.9254	1.0000	12.0385	1.0000	6
CLAGE	0.4127	8.6366	0.3753	4.5180	0.9093	17
DELINQ	0.3547	7.4212	0.3703	4.4576	1.0441	7
MORTDUE	0.3278	6.8588	0.2228	2.6821	0.6797	10
JOB	0.2089	4.3719	0.1837	2.2114	0.8792	6
CLNO	0.2939	6.1496	0.1824	2.1961	0.6207	13
VALUE	0.3129	6.5474	0.1780	2.1428	0.5689	9
NINQ	0.1749	3.6602	0.1192	1.4354	0.6817	4
YOJ	0.1880	3.9333	0.0869	1.0461	0.4623	3
DEROG	0.2256	4.7200	0.0703	0.8467	0.3118	4
REASON	0.0879	1.8397	0.0361	0.4351	0.4111	1
LOAN	0.1410	2.9509	0.0196	0.2357	0.1388	4

Decision tree with missing values**With a partition of 60% in Training sample, 20% in test sample and 20% in validation sample****The HPSPLIT Procedure**

Decision tree with a partition of 70% of data in training sample and 30% in validation sample

Tree with all values

The HPSPLIT Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

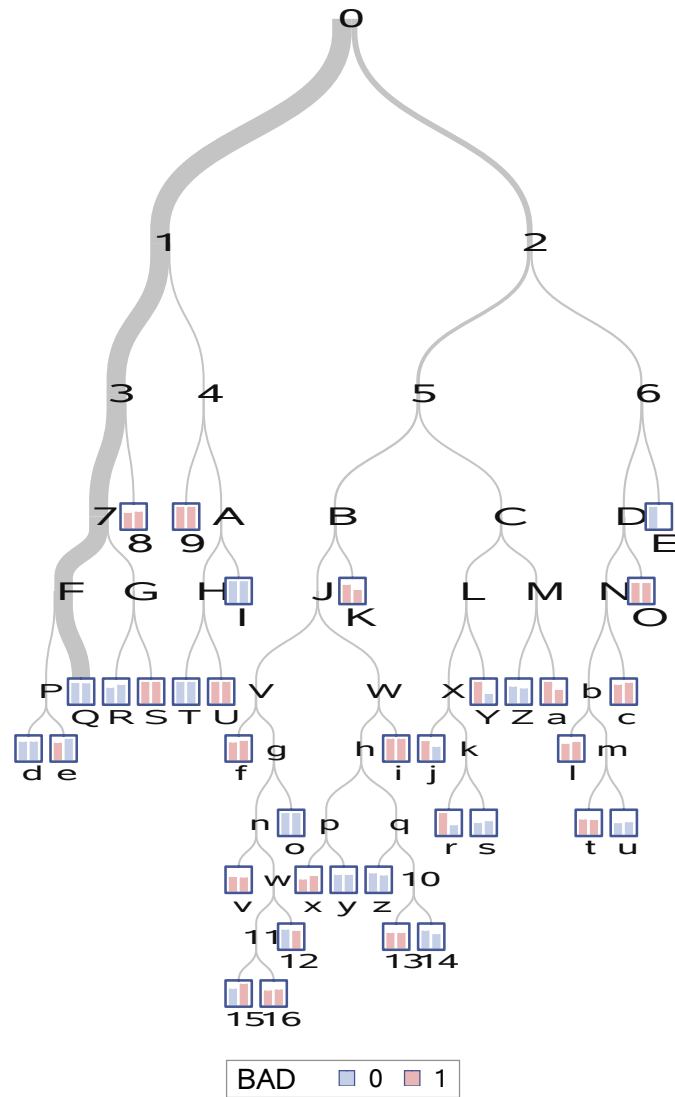
Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

Decision tree with a partition of 70% of data in training sample and 30% in validation sample

Tree with all values

The HPSPLIT Procedure

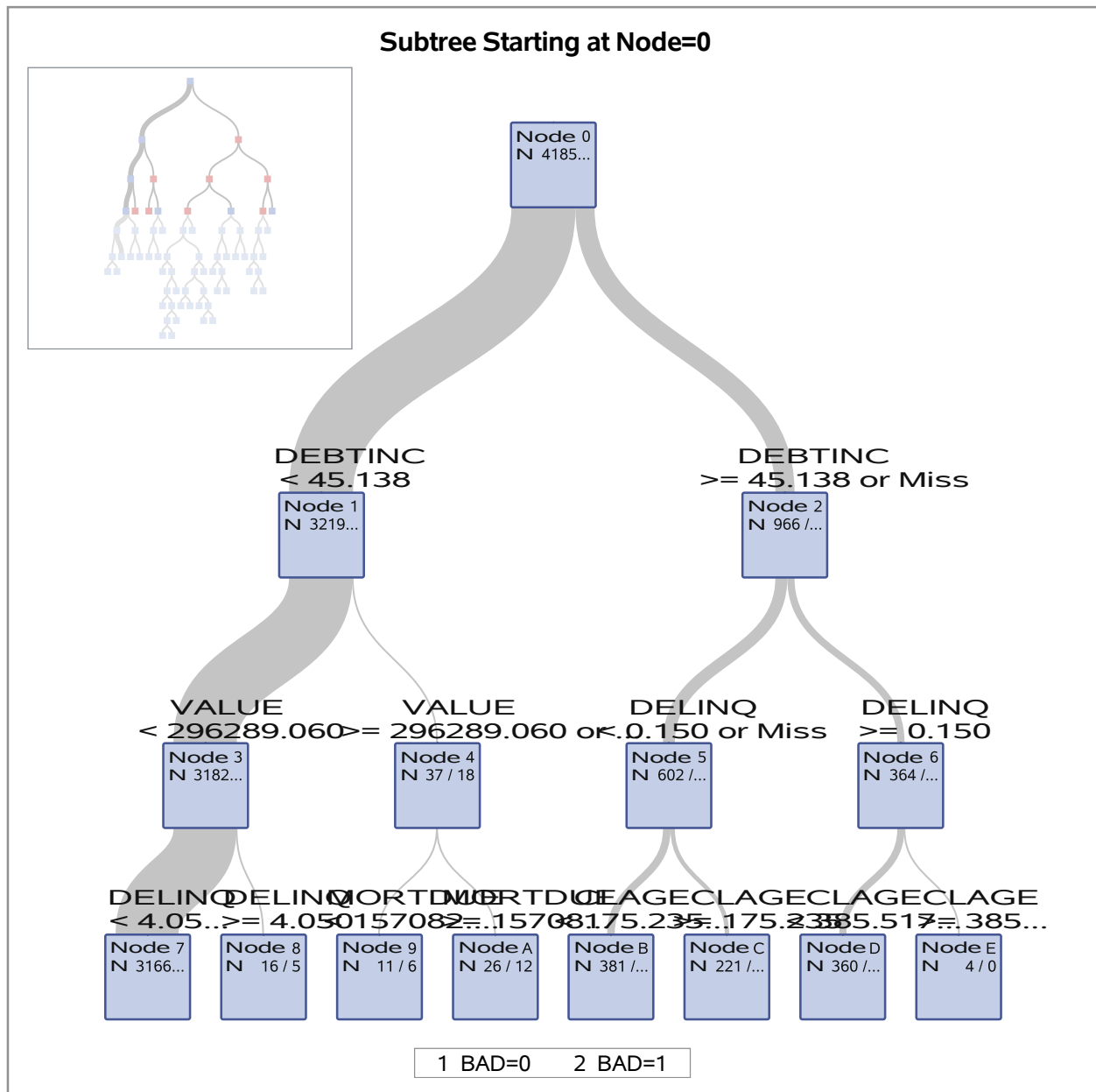
Classification Tree for BAD



Decision tree with a partition of 70% of data in training sample and 30% in validation sample

Tree with all values

The HPSPLIT Procedure



Decision tree with a partition of 70% of data in training sample and 30% in validation sample

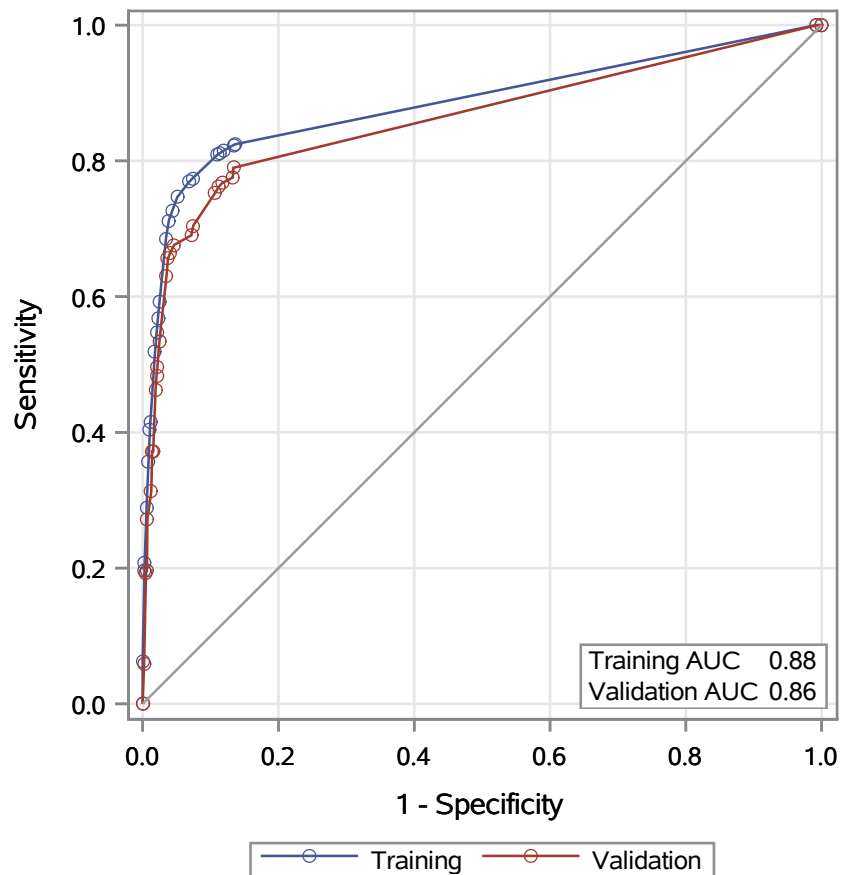
Tree with all values

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
* Selected target level									

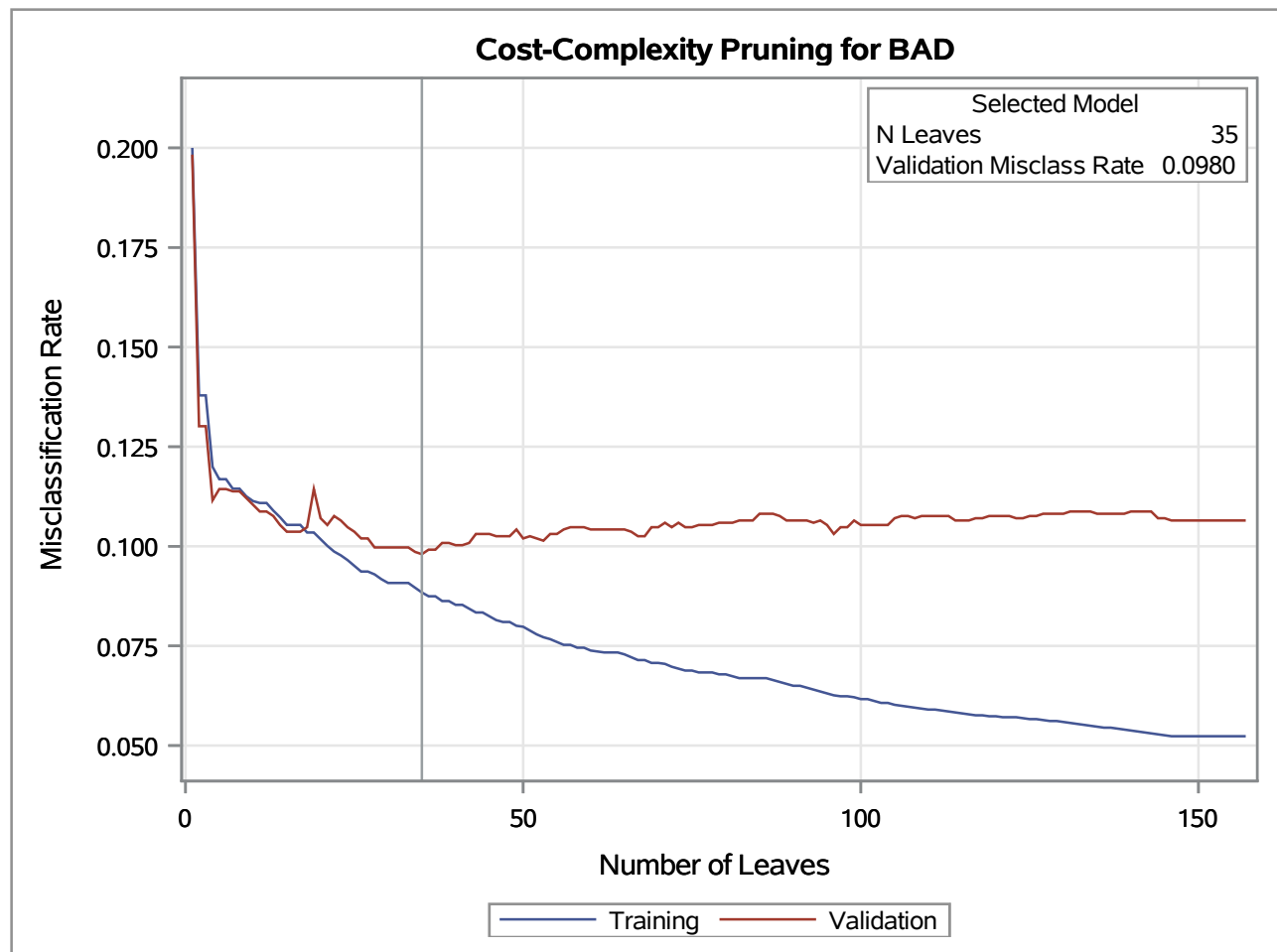
Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897		21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000		4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897		21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	*	17	0.2353	0.7647
* Selected target level									

Decision tree with a partition of 70% of data in training sample and 30% in validation sample

Tree with all values

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node 3**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

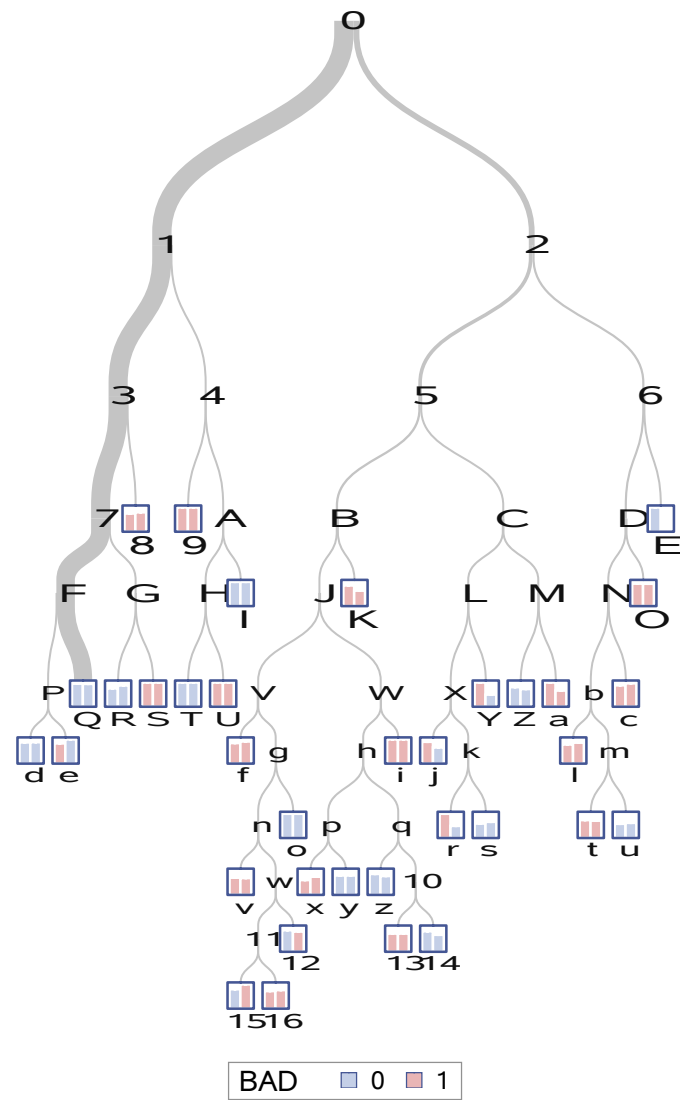
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node 3

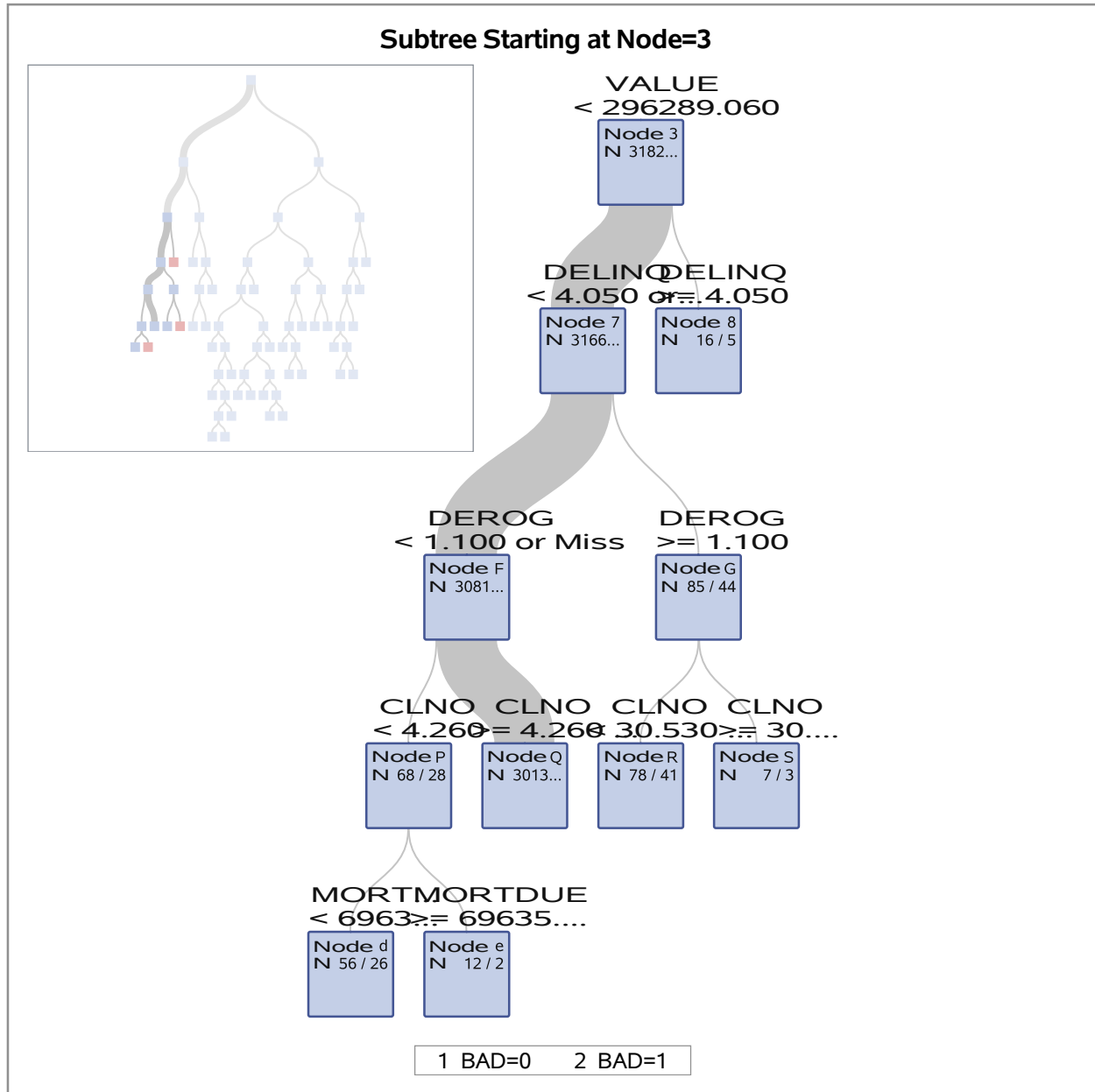
The HPSPLIT Procedure

Classification Tree for BAD



View the subtree starting at Node 3

The HPSPLIT Procedure



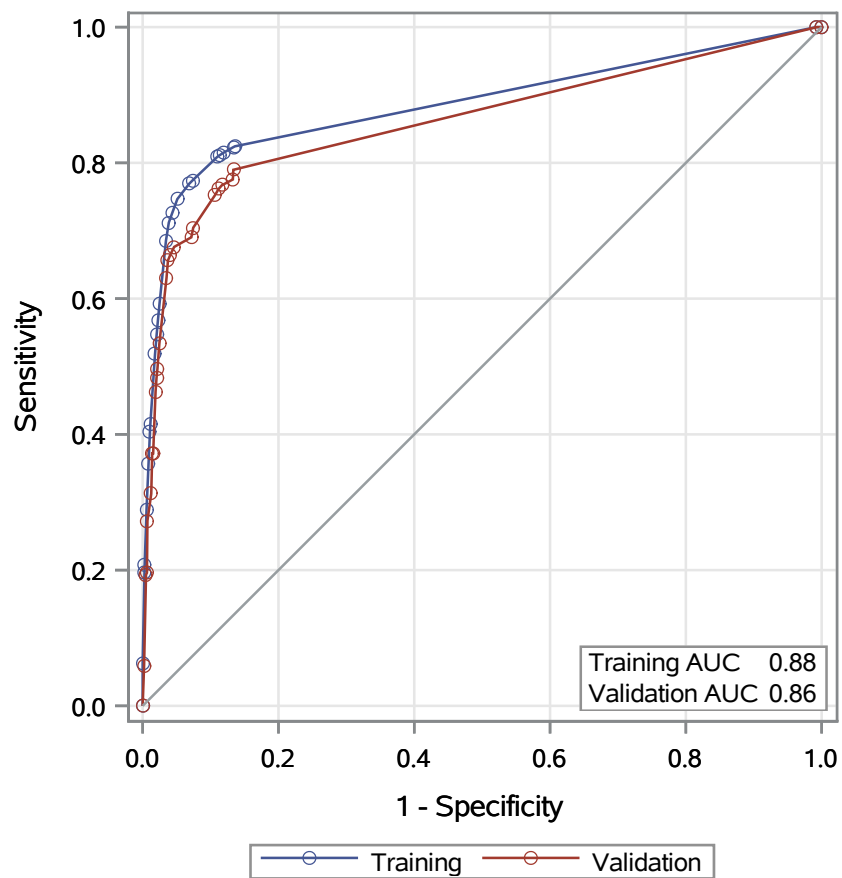
View the subtree starting at Node 3

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node 3

The HPSPLIT Procedure

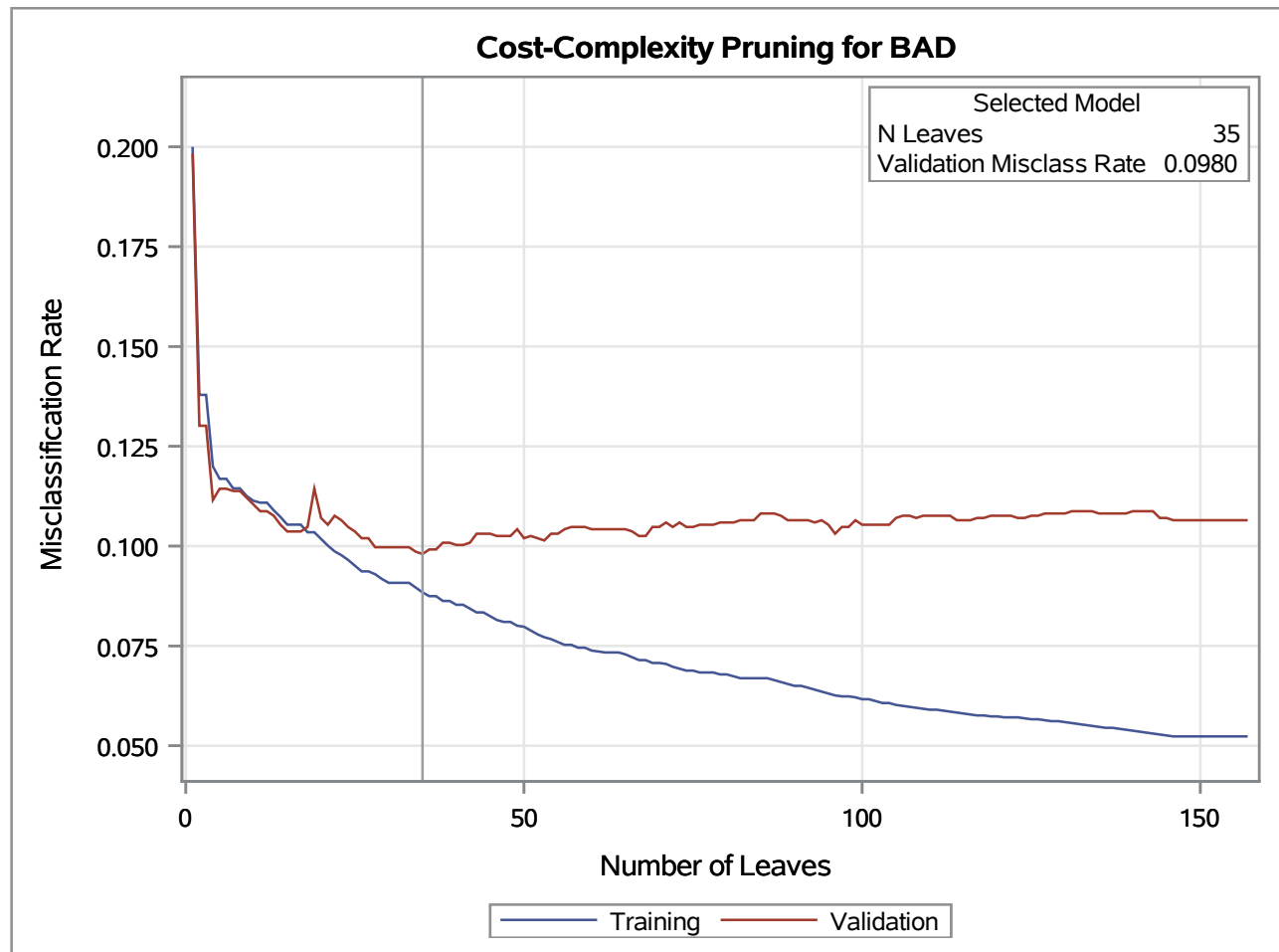
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node 3

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node 4**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

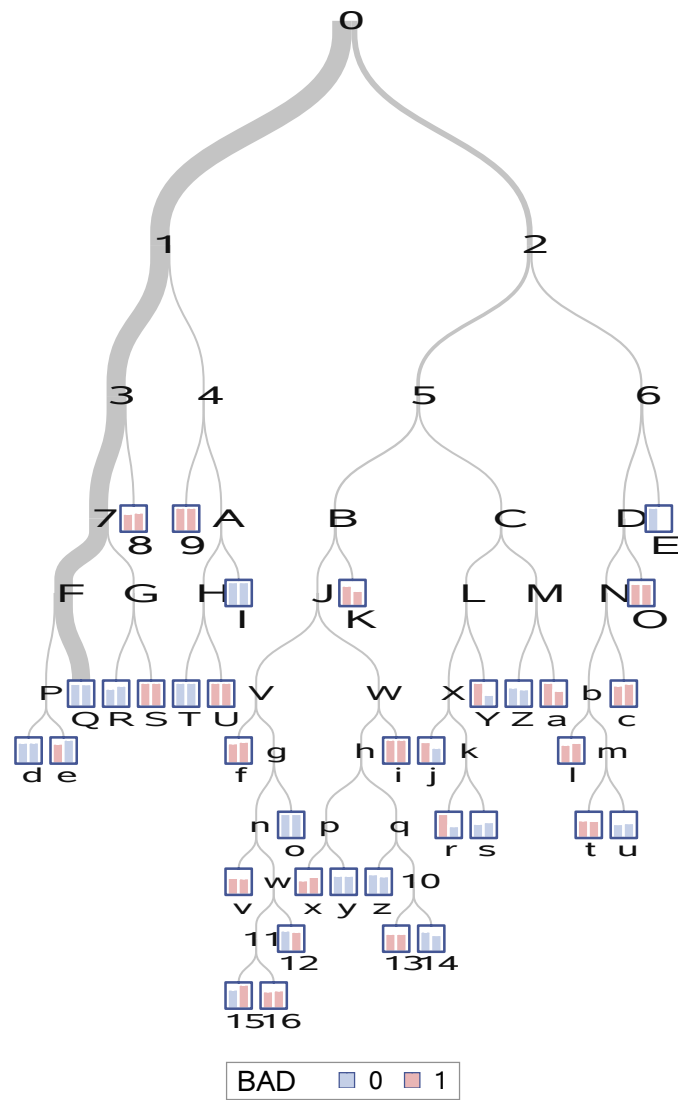
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node 4

The HPSPLIT Procedure

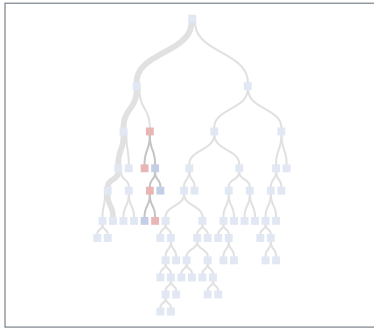
Classification Tree for BAD



View the subtree starting at Node 4

The HPSPLIT Procedure

Subtree Starting at Node=4



VALUE
 ≥ 296289.060 or Miss

Node	4
N	37 / 18
2	0.5946 / ...
1	0.4054 / ...
2	0.5946 / ...

MORTDUEMORTDUE
 $< 157082. \geq 157082.93...$

Node	9
N	11 / 6
2	1 / 1
1	0 / 0
2	1 / 1

Node	A
N	26 / 12
1	0.5769 / ...
1	0.5769 / ...
2	0.4231 / ...

CLAGE CLAGE
 $< 245.329 \geq 245.32...$

Node	H
N	17 / 7
2	0.6471 / ...
1	0.3529 / ...
2	0.6471 / ...

Node	I
N	9 / 5
1	1 / 1
1	1 / 1
2	0 / 0

MORTDUEMORTDUE
 $< 196831. \geq 196831.63...$

Node	T
N	6 / 2
1	1 / 1
1	1 / 1
2	0 / 0

Node	U
N	11 / 5
2	1 / 1
1	0 / 0
2	1 / 1

1 BAD=0 2 BAD=1

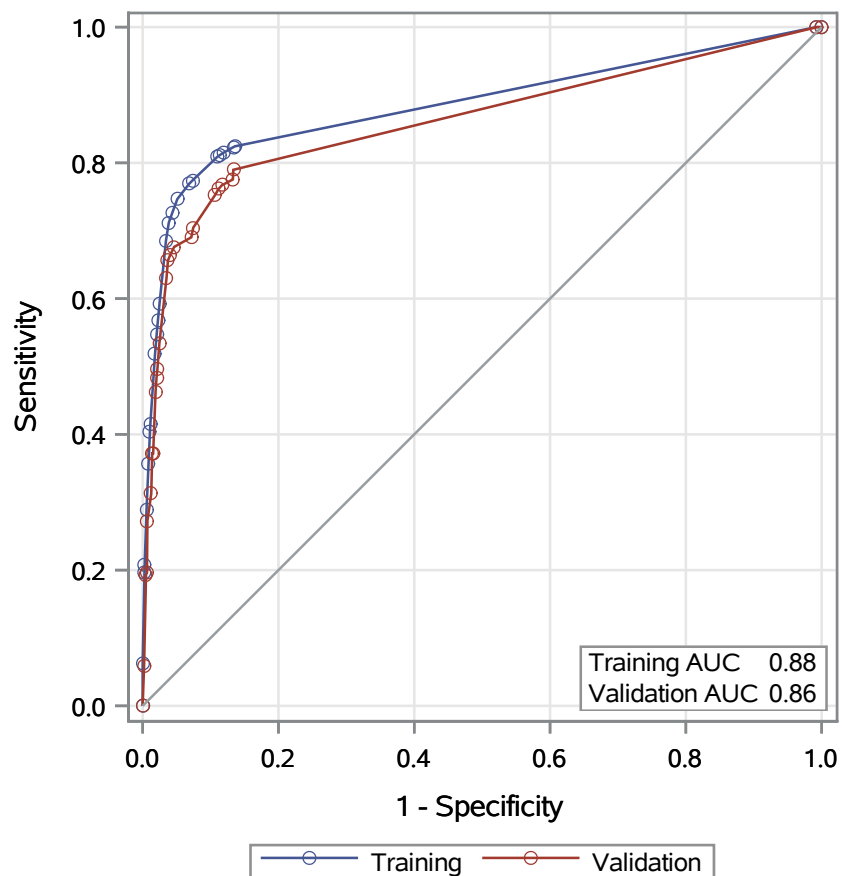
View the subtree starting at Node 4

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.368
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node 4

The HPSPLIT Procedure

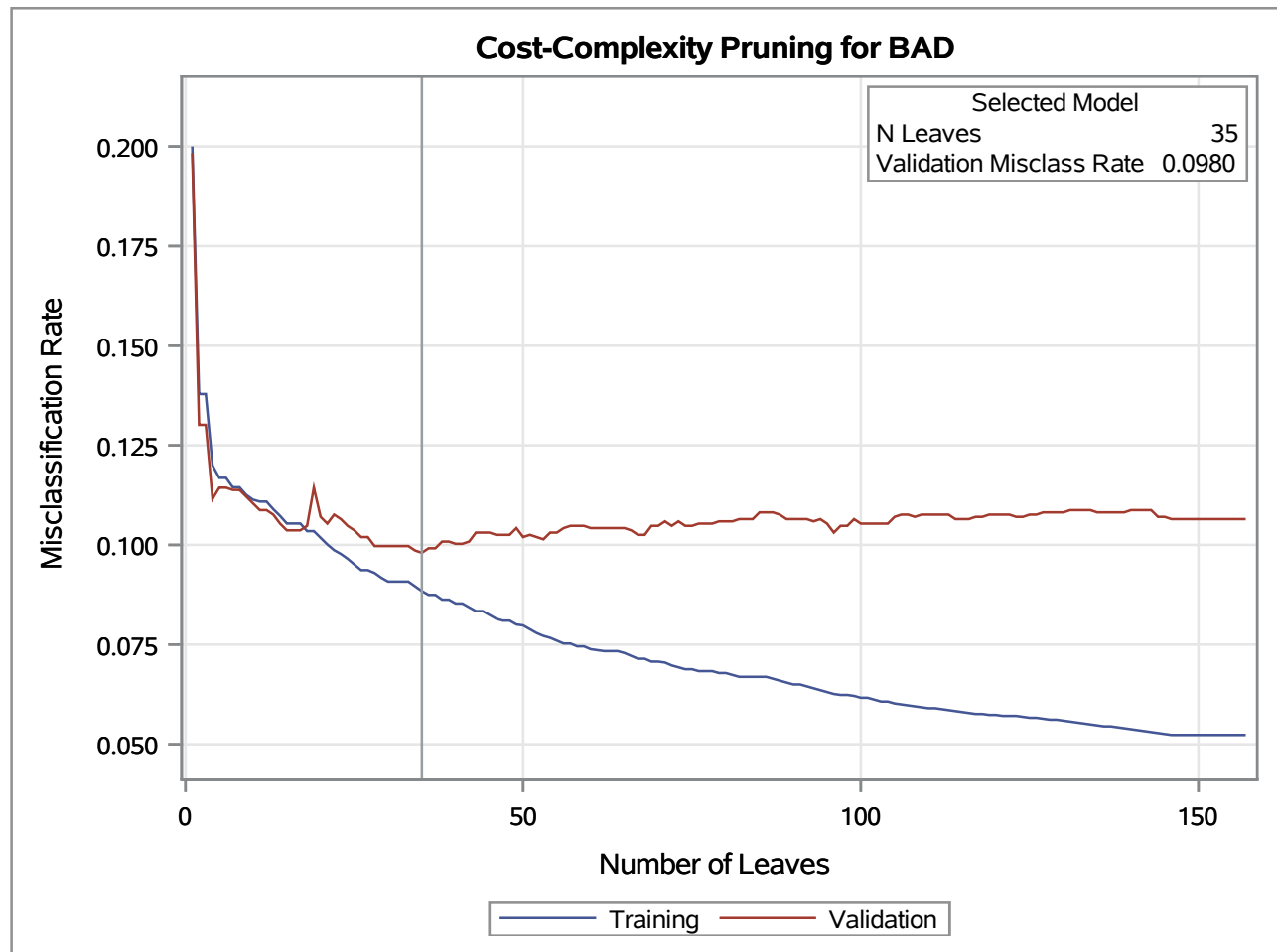
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node 4

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node 5**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

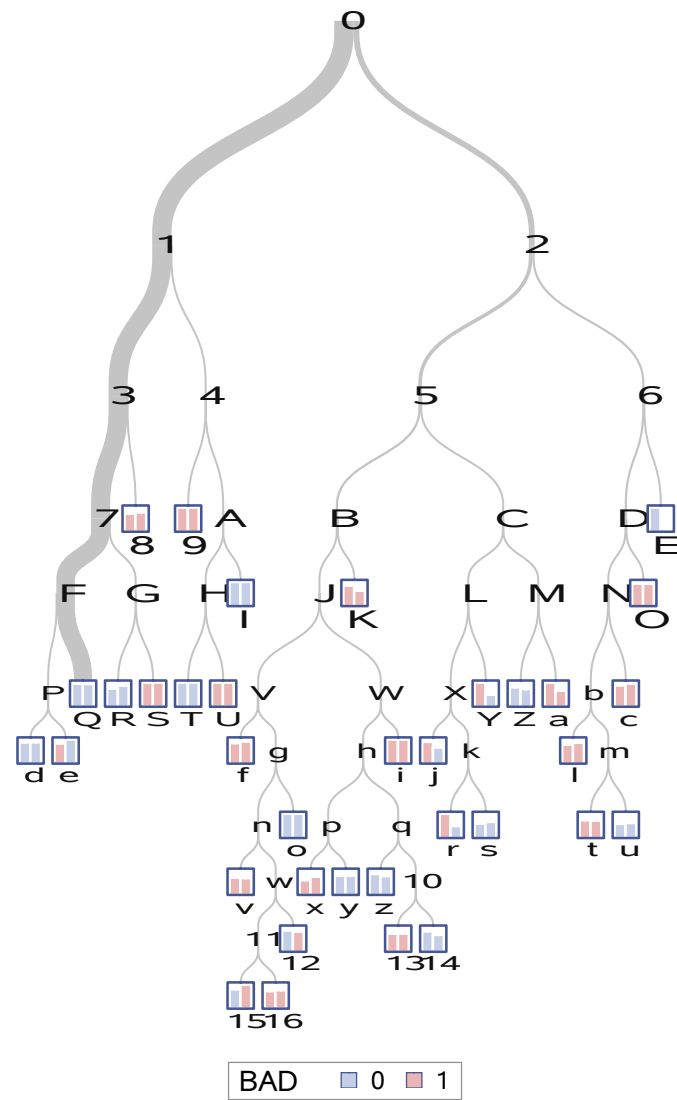
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node 5

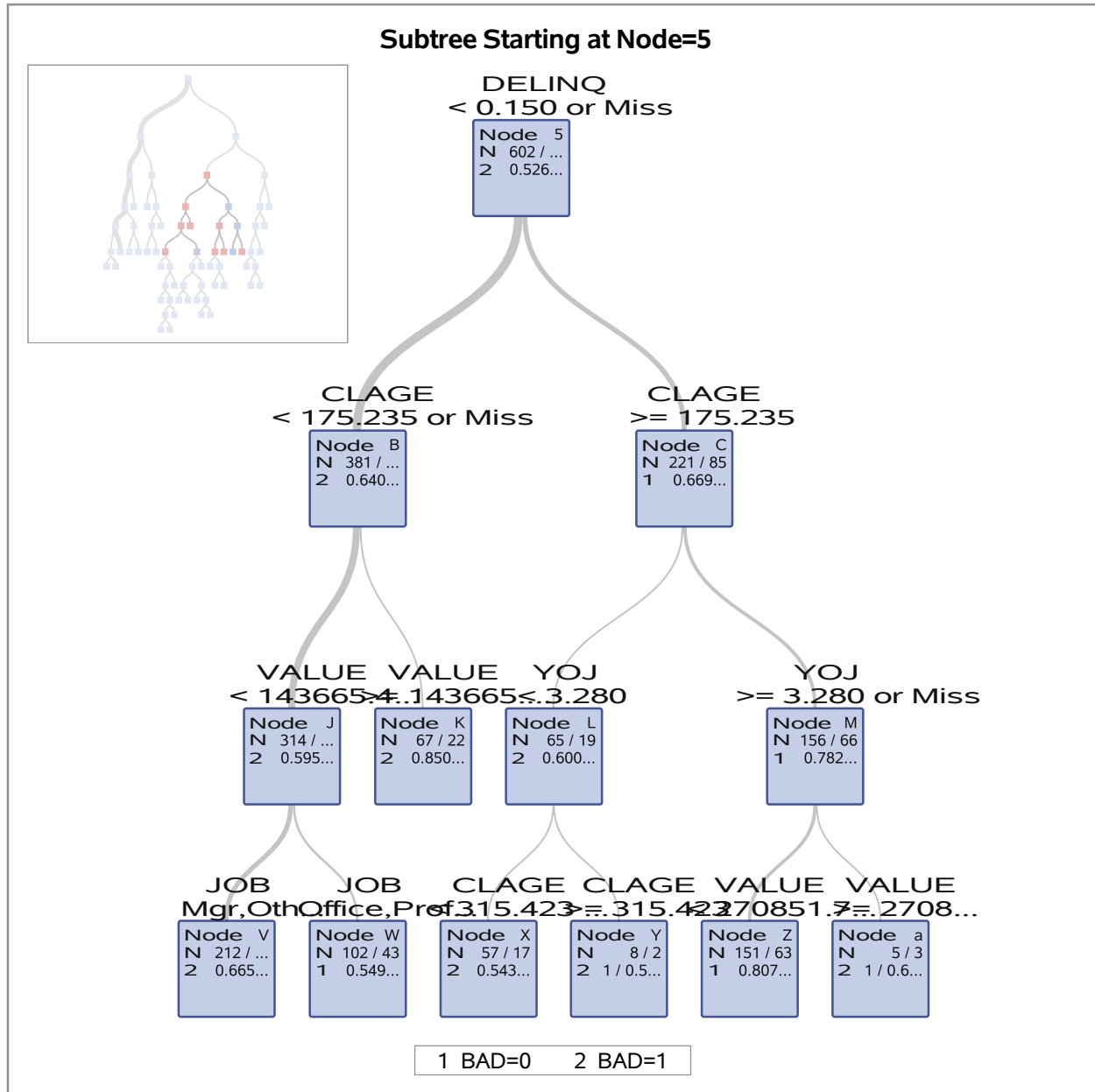
The HPSPLIT Procedure

Classification Tree for BAD



View the subtree starting at Node 5

The HPSPLIT Procedure



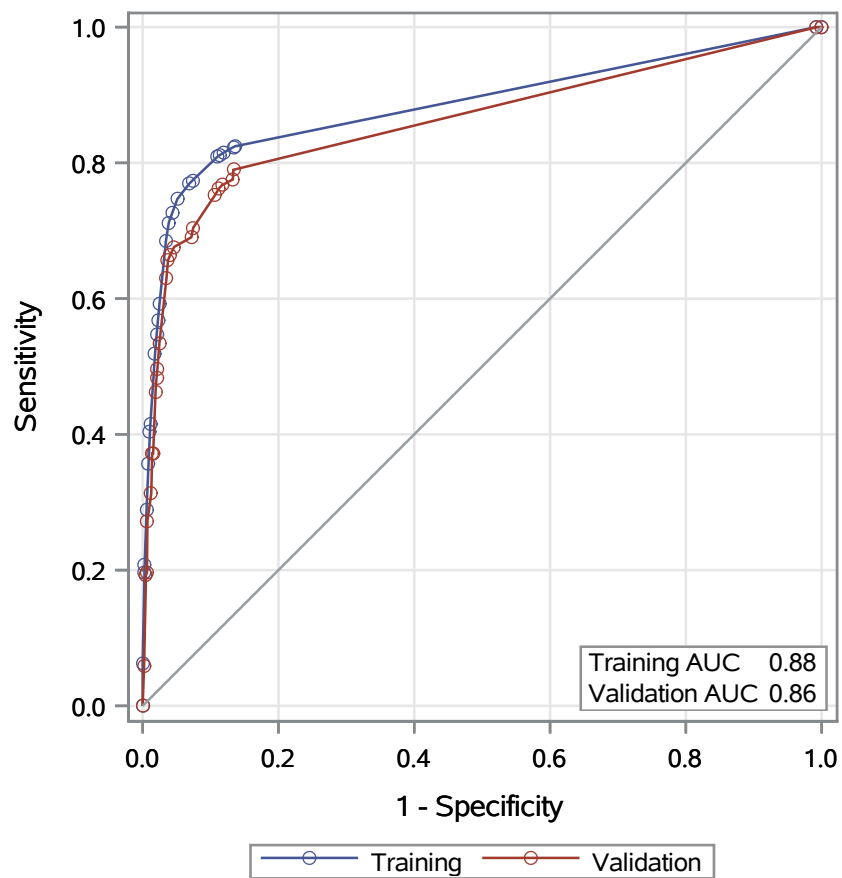
View the subtree starting at Node 5

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node 5

The HPSPLIT Procedure

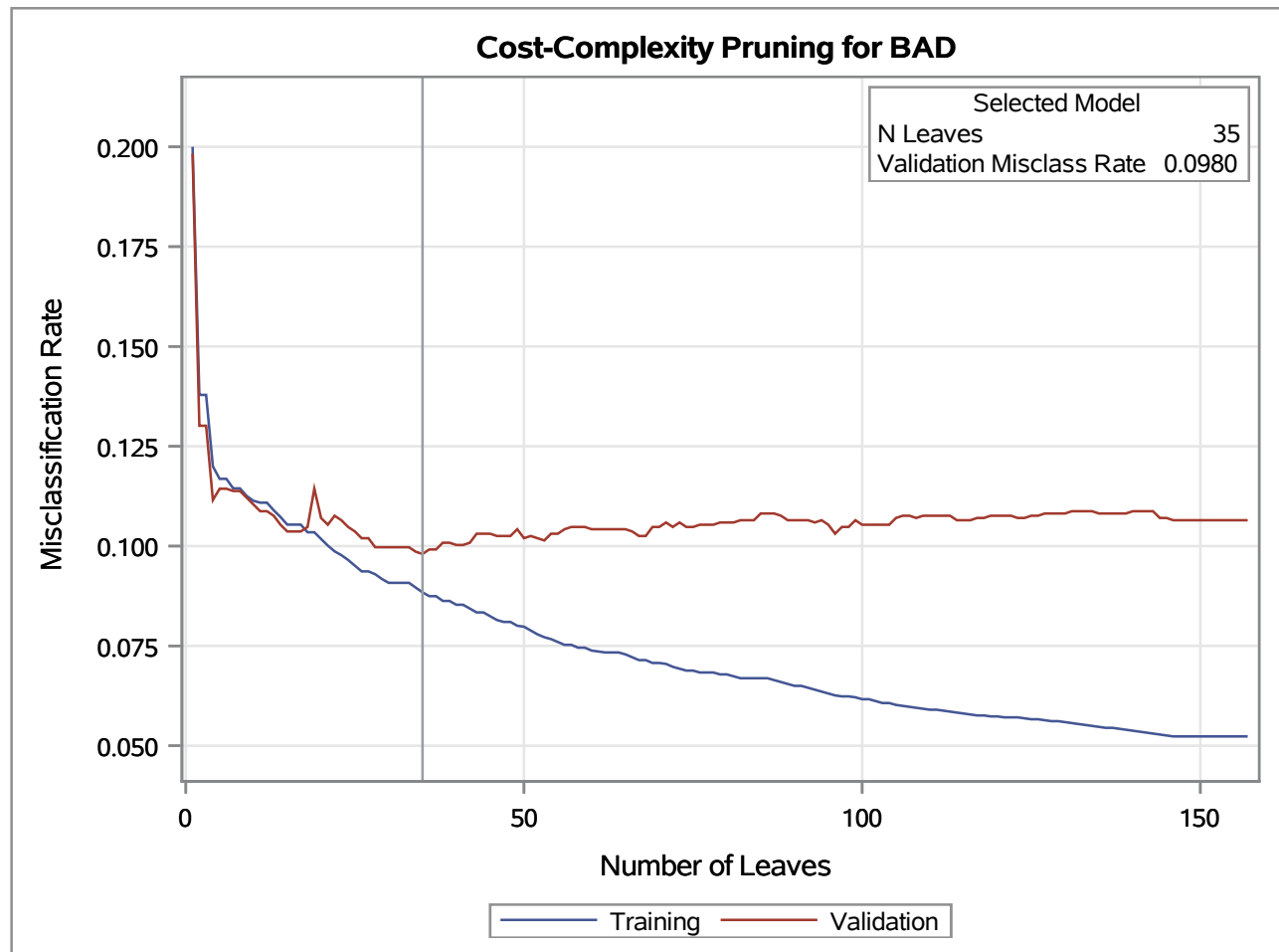
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node 5

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node J**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

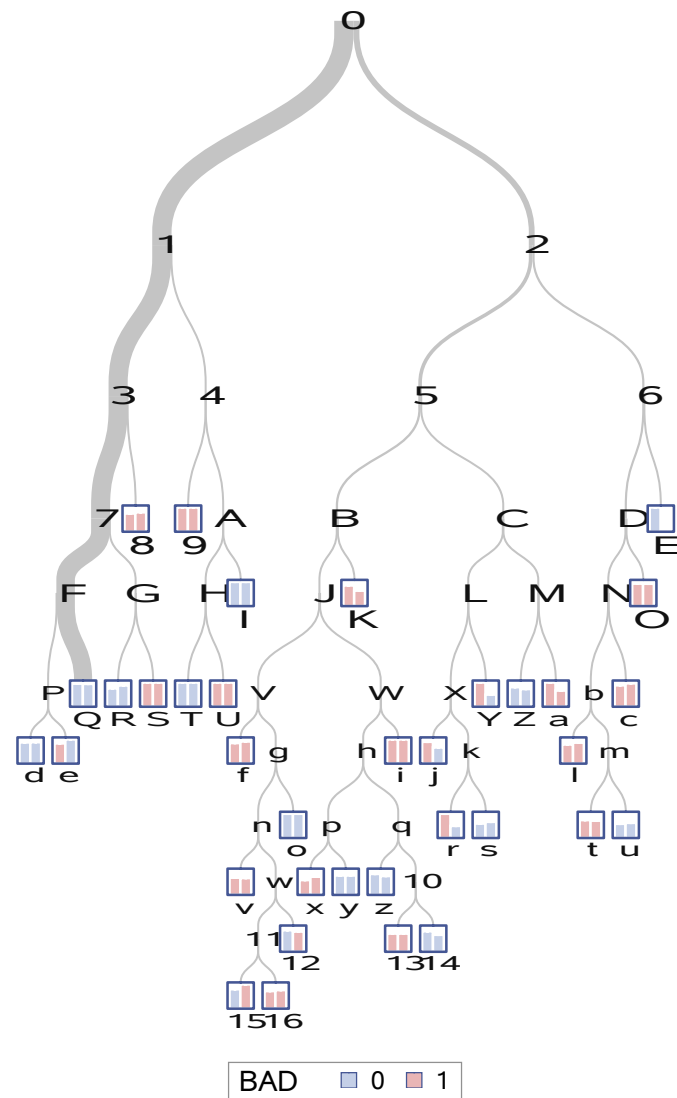
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node J

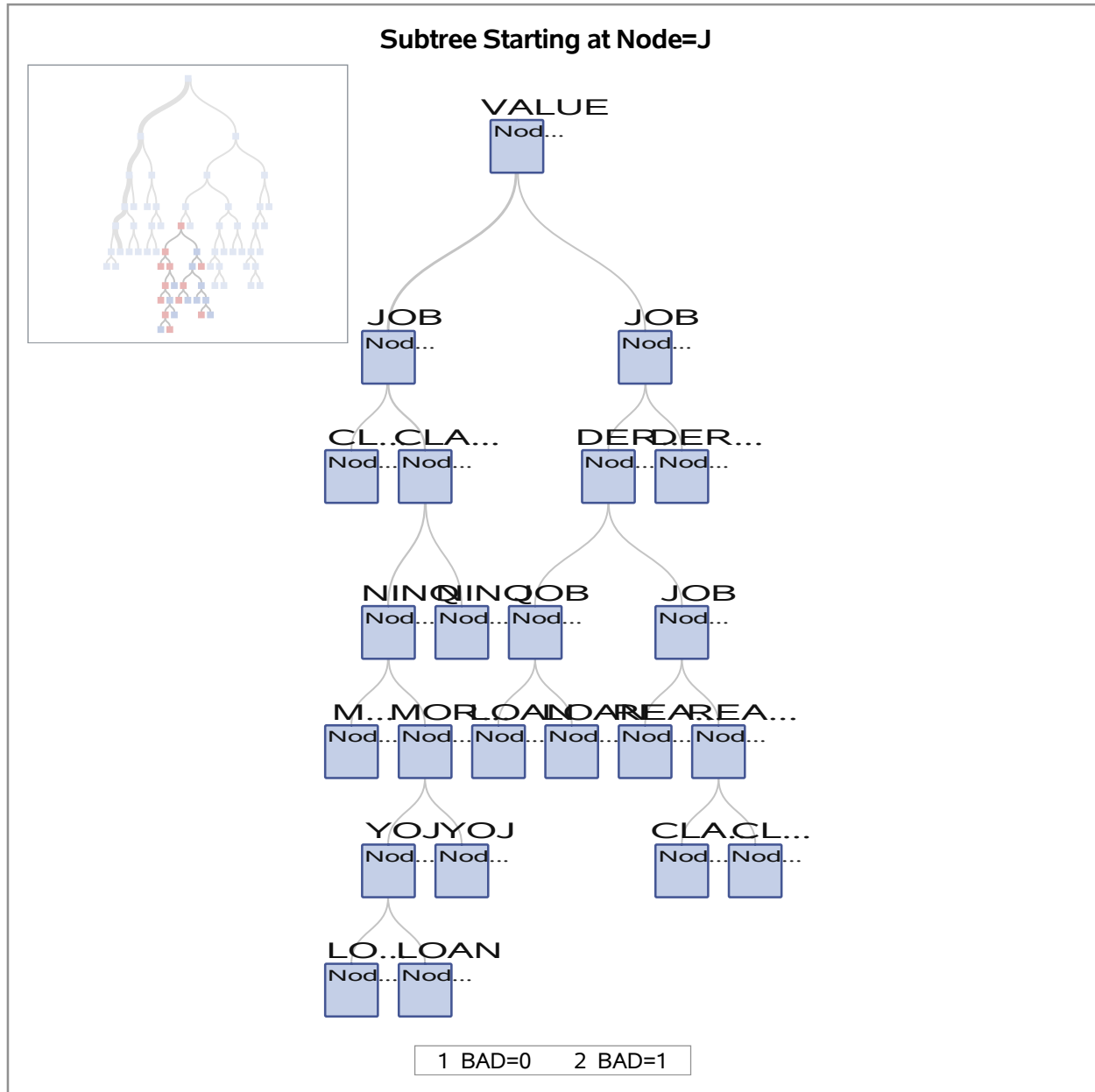
The HPSPLIT Procedure

Classification Tree for BAD



View the subtree starting at Node J

The HPSPLIT Procedure



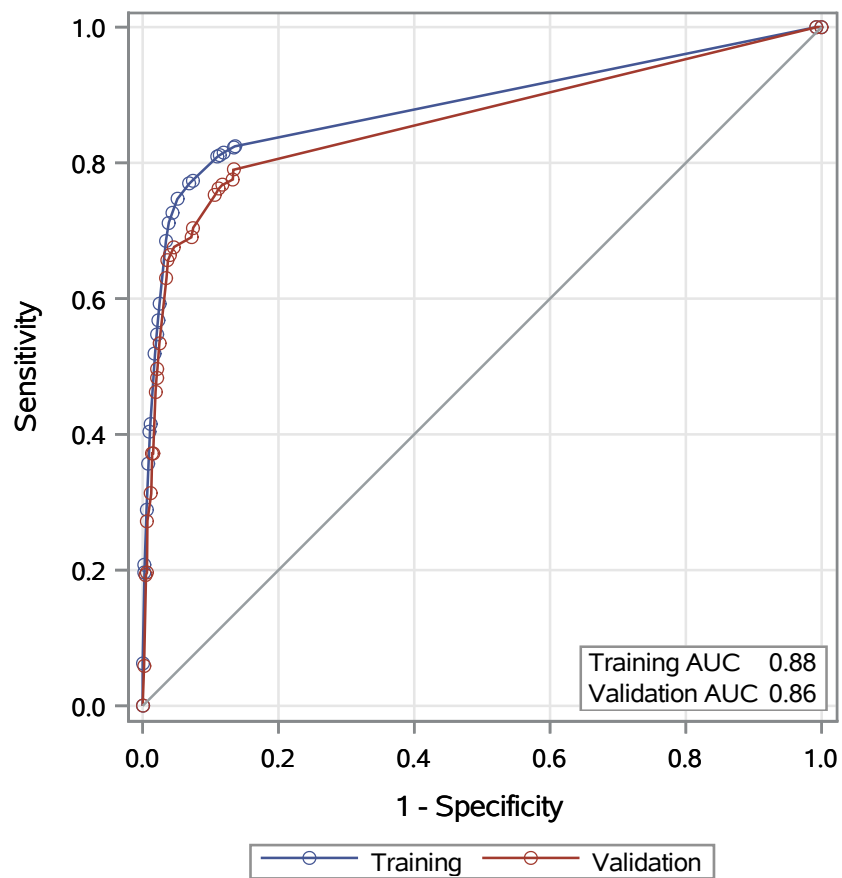
View the subtree starting at Node J

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.368
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node J

The HPSPLIT Procedure

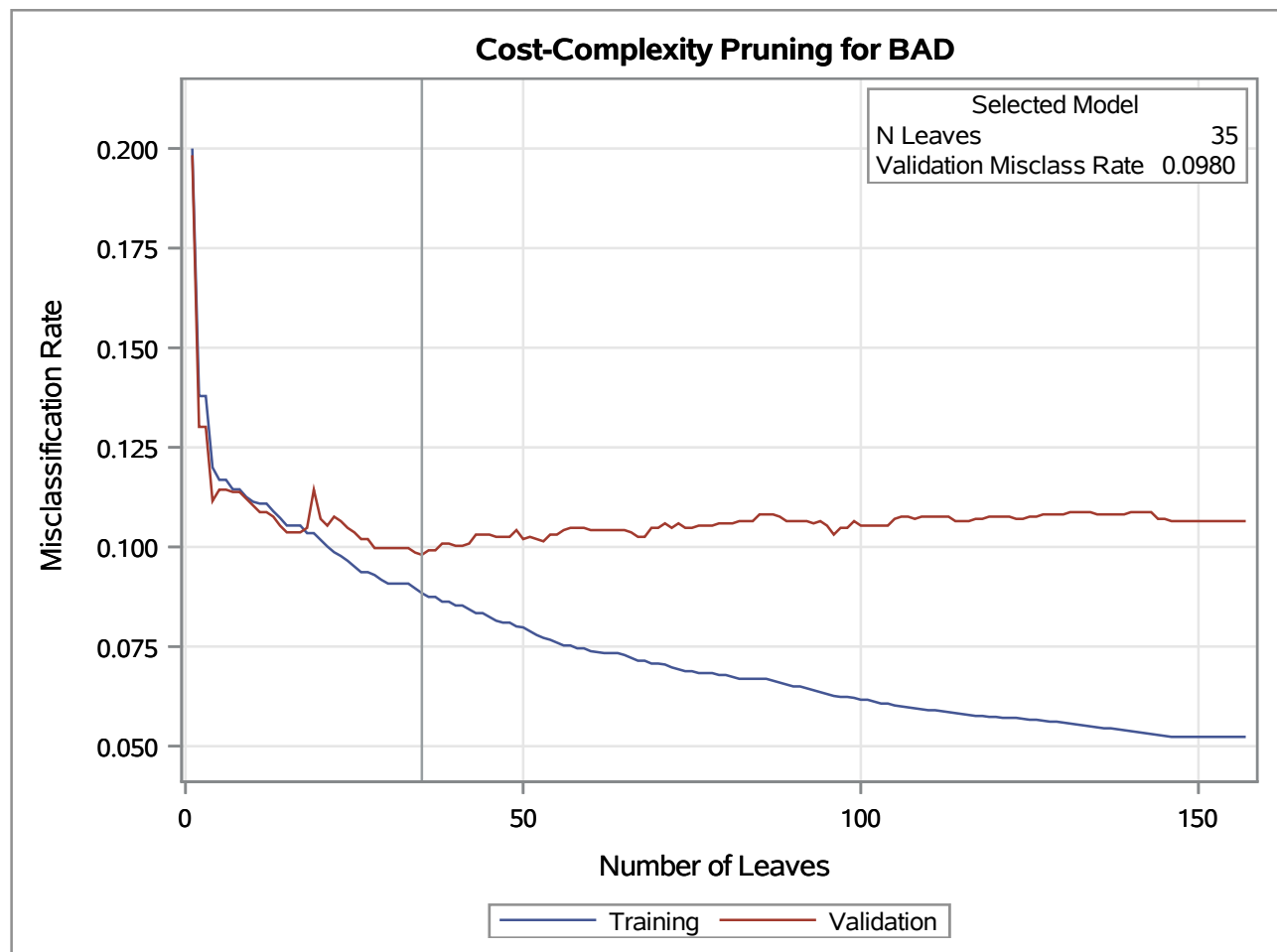
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node J

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node C**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

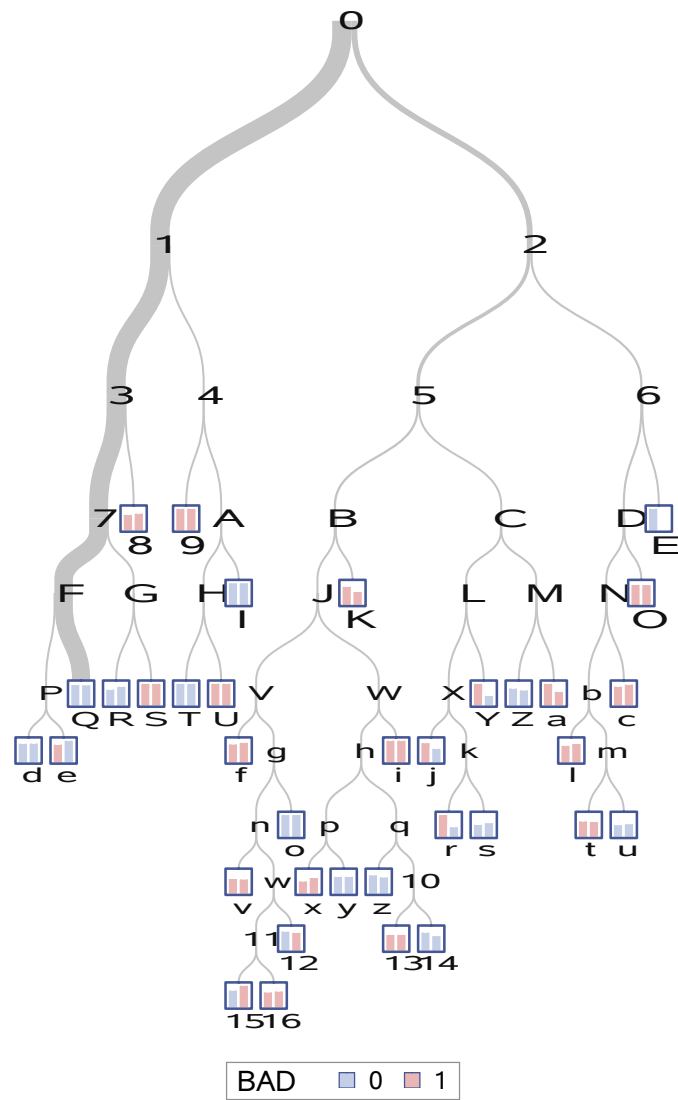
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node C

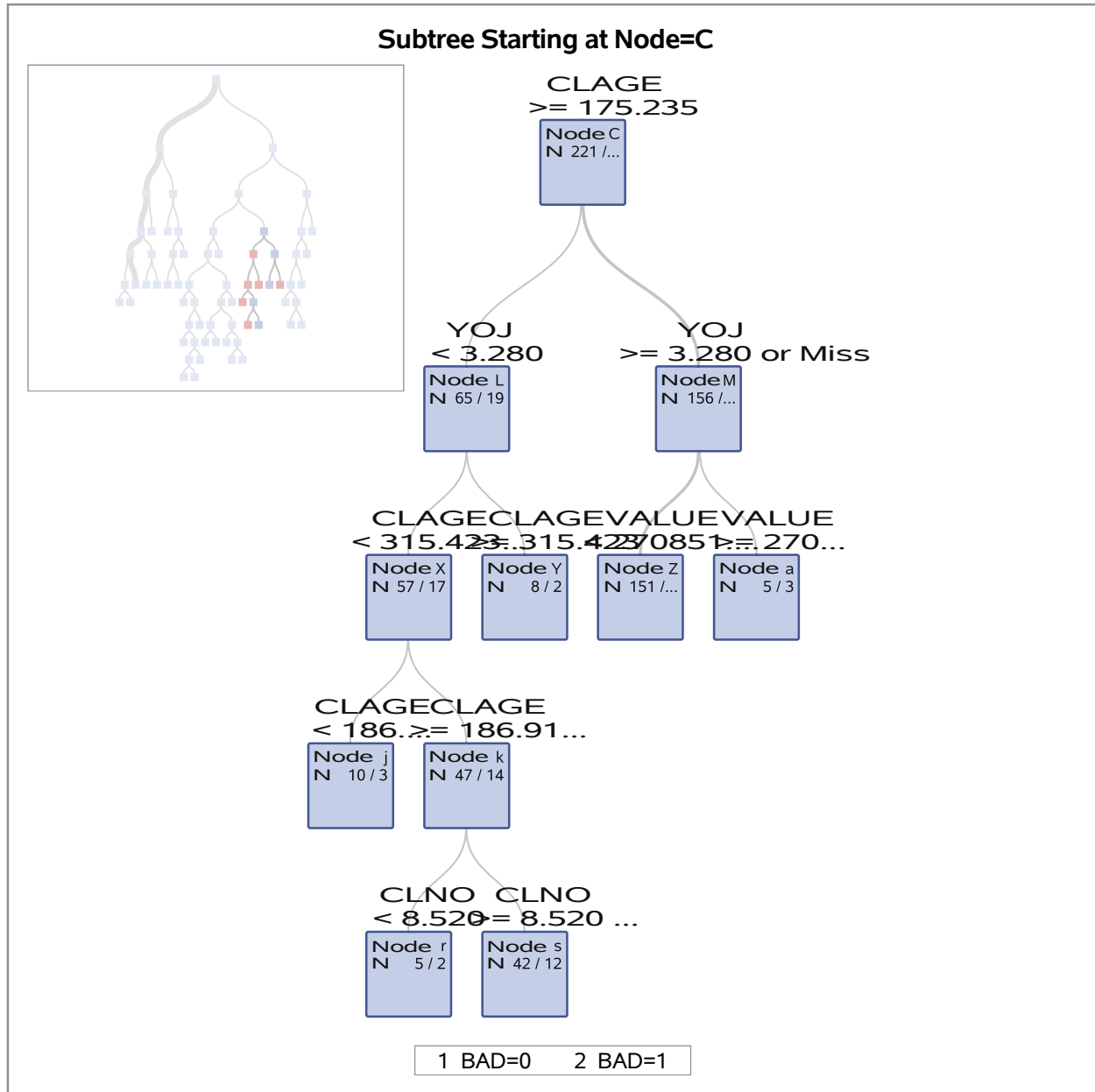
The HPSPLIT Procedure

Classification Tree for BAD



View the subtree starting at Node C

The HPSPLIT Procedure



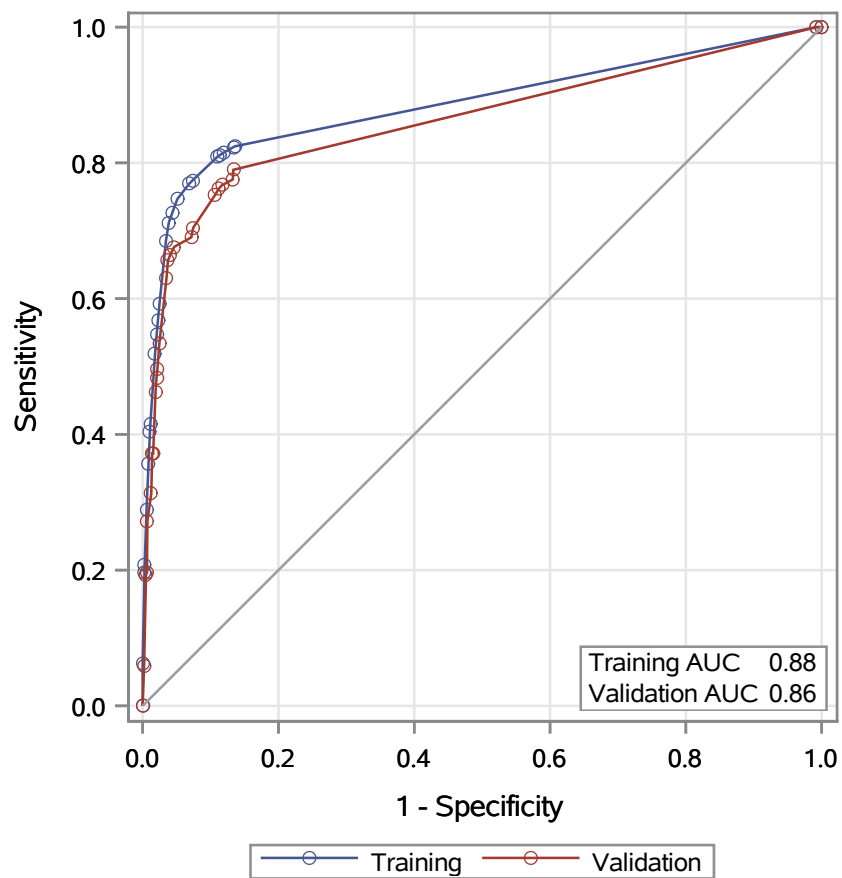
View the subtree starting at Node C

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node C

The HPSPLIT Procedure

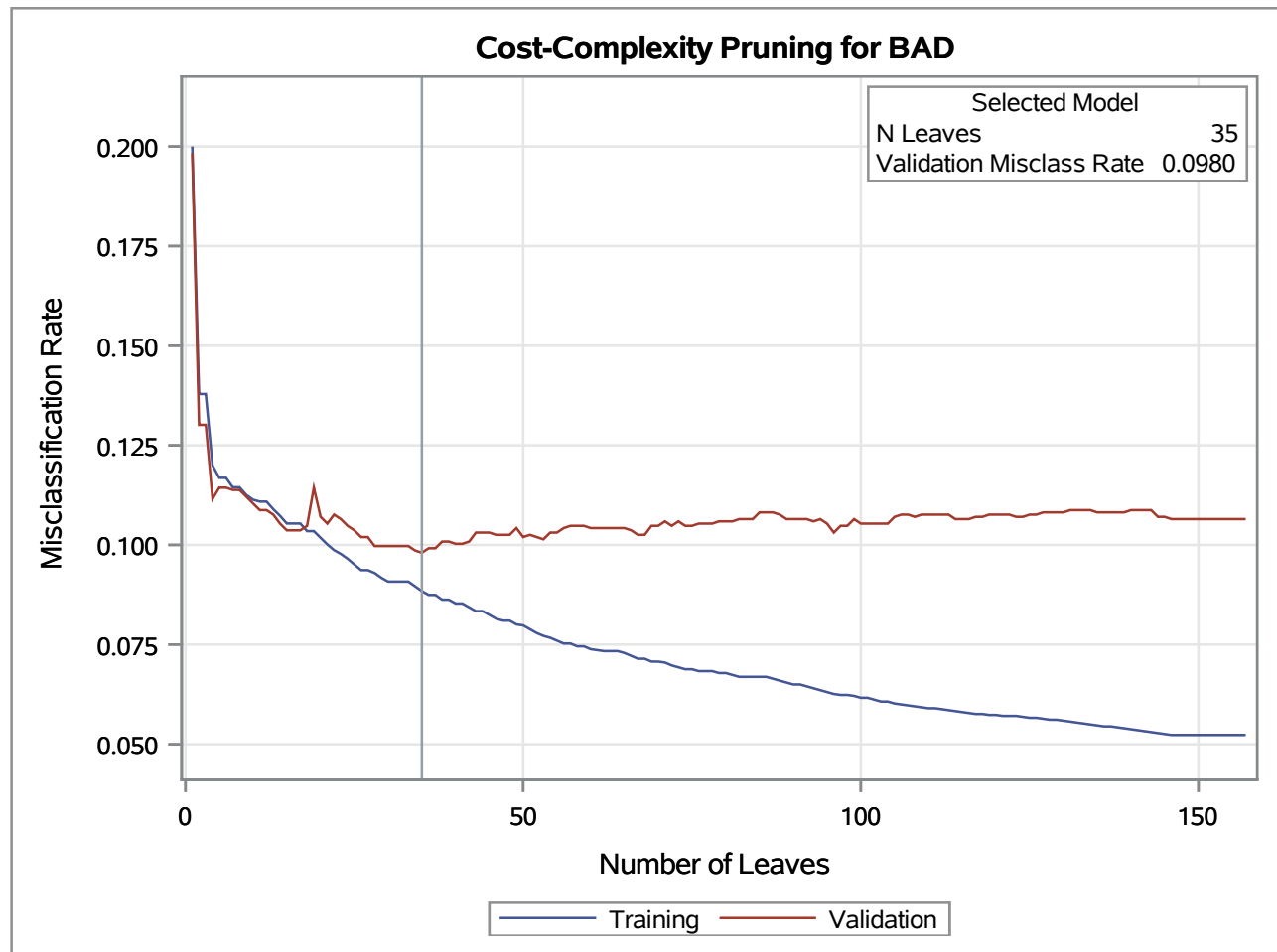
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node C

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



View the subtree starting at Node 6**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

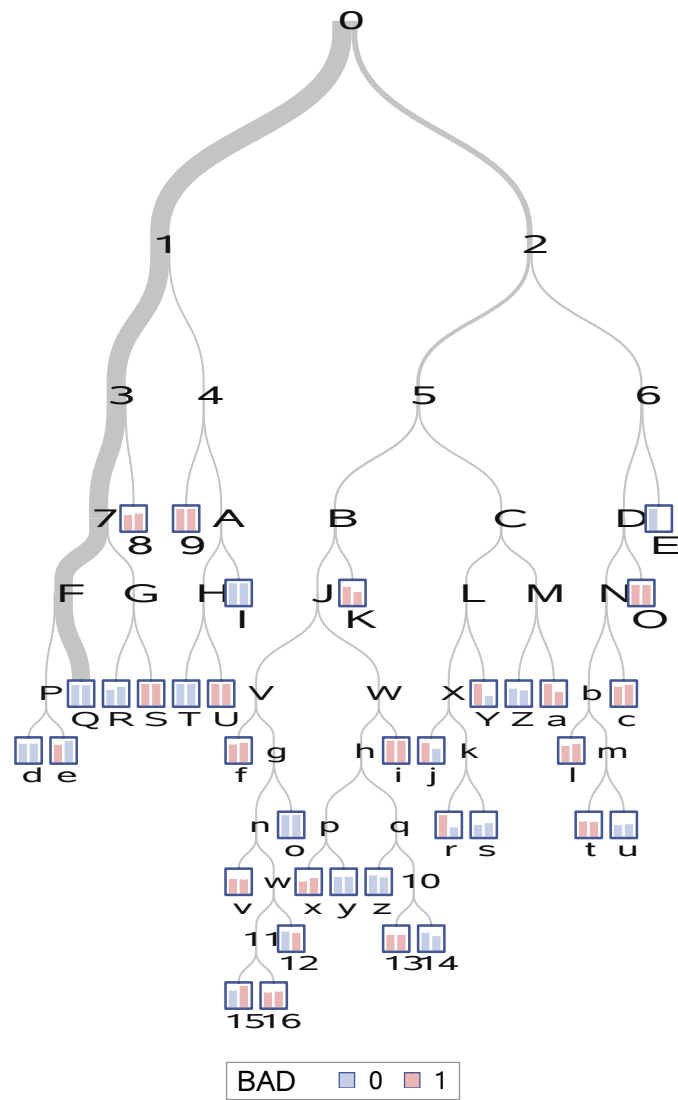
Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	10
Maximum Tree Depth Achieved	10
Tree Depth	10
Number of Leaves Before Pruning	157
Number of Leaves After Pruning	35
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	5960
Number of Training Observations Used	4185
Number of Validation Observations Used	1775

View the subtree starting at Node 6

The HPSPLIT Procedure

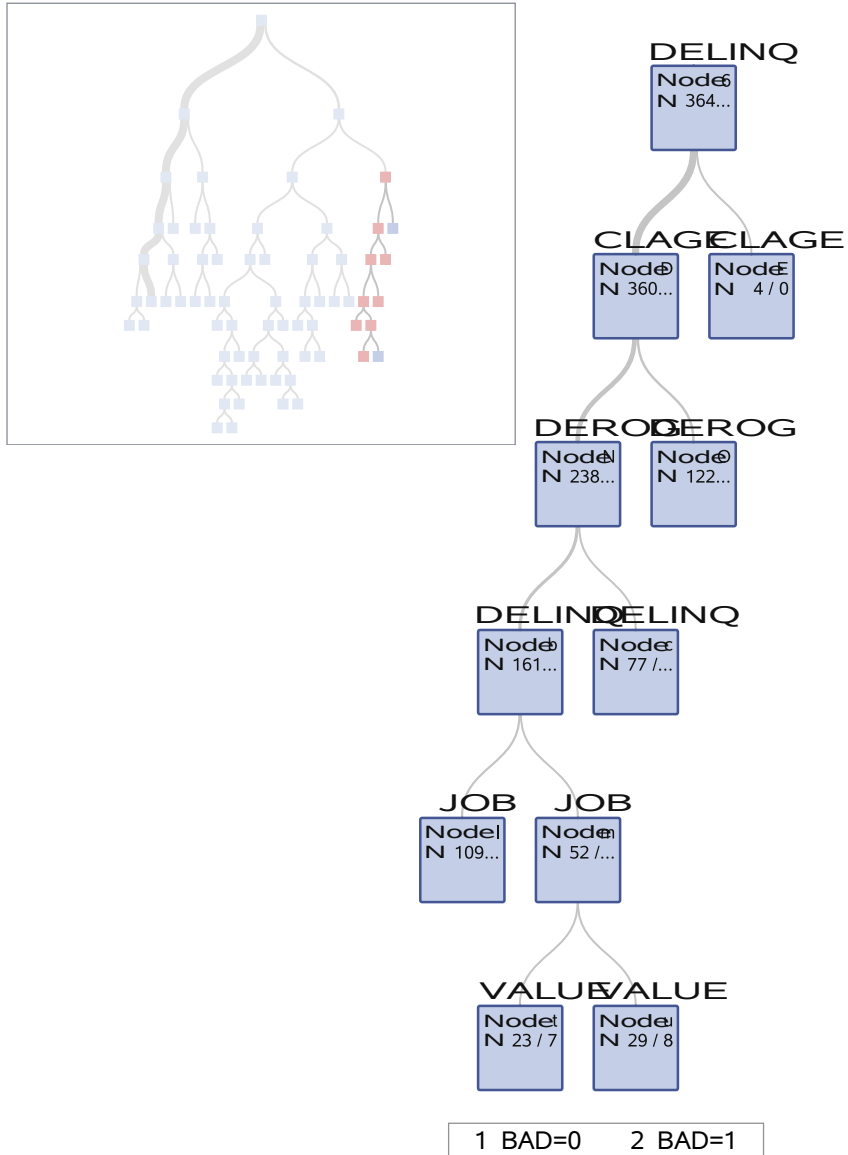
Classification Tree for BAD



View the subtree starting at Node 6

The HPSPLIT Procedure

Subtree Starting at Node=6



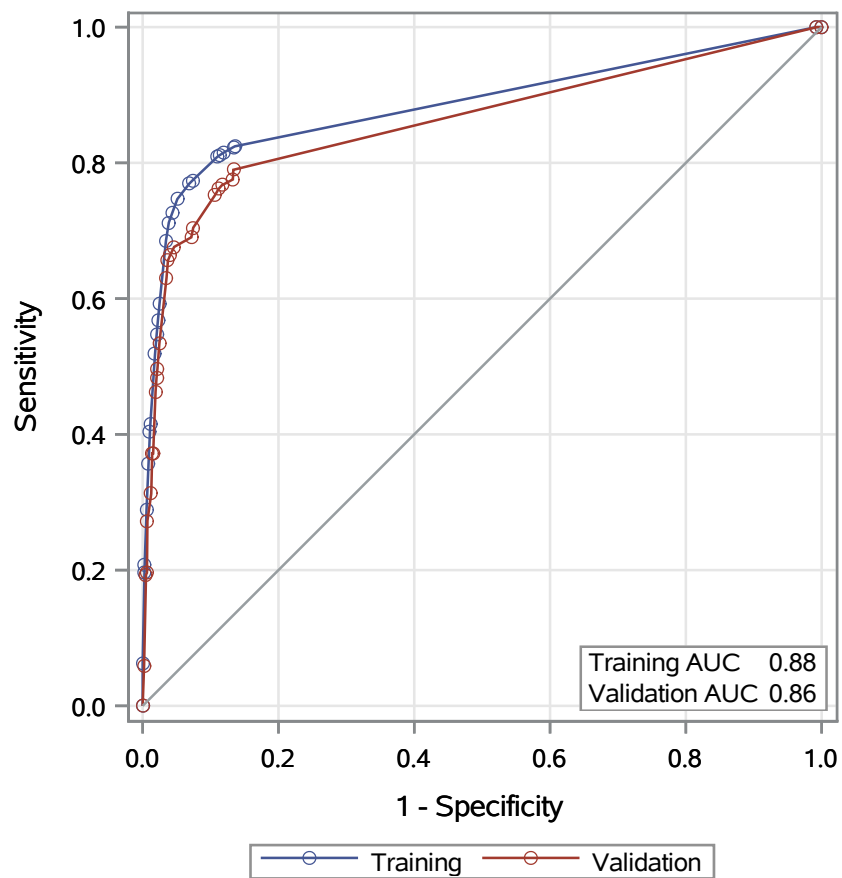
View the subtree starting at Node 6

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Training	0	3219	129	0.0385
	1	241	596	0.2879
Validation	0	1370	53	0.0372
	1	121	231	0.3438

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Training	35	0.0736	0.0884	0.7121	0.9615	0.3835	0.1473	616.4	0.8842
Validation	35	0.0837	0.0980	0.6563	0.9628	0.3982	0.1532	297.2	0.8608

ROC Curve for BAD



The HPSPLIT Procedure

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
8	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ >= 4.05	16	0.2500		0.7500	*	5	0.2000	0.8000
9	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE < 157083	11	0.0000		1.0000	*	6	0.0000	1.0000
E	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE >= 385.517	4	1.0000	*	0.0000		0	.	.
I	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE >= 245.329 or Missing	9	1.0000	*	0.0000		5	1.0000	0.0000
K	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE >= 143665 or Missing	67	0.1493		0.8507	*	22	0.3636	0.6364
O	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG >= 0.1	122	0.0738		0.9262	*	51	0.0784	0.9216
Q	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO >= 4.26 or Missing	3013	0.9512	*	0.0488		1297	0.9429	0.0571
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
R	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO < 30.53 or Missing	78	0.7564	*	0.2436		41	0.8780	0.1220
S	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG >= 1.1	85	0.6941		0.3059		44	0.8182	0.1818
	CLNO >= 30.53	7	0.0000		1.0000	*	3	0.0000	1.0000
T	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE < 196832	6	1.0000	*	0.0000		2	1.0000	0.0000
U	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE >= 296289 or Missing	37	0.4054		0.5946		18	0.3889	0.6111
	MORTDUE >= 157083 or Missing	26	0.5769		0.4231		12	0.5833	0.4167
	CLAGE < 245.329	17	0.3529		0.6471		7	0.2857	0.7143
	MORTDUE >= 196832 or Missing	11	0.0000		1.0000	*	5	0.0000	1.0000
Y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE >= 315.423	8	0.0000		1.0000	*	2	0.5000	0.5000
Z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE < 270852	151	0.8079	*	0.1921		63	0.7302	0.2698
a	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ >= 3.28 or Missing	156	0.7821		0.2179		66	0.7121	0.2879
	VALUE >= 270852 or Missing	5	0.0000		1.0000	*	3	0.3333	0.6667
c	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ >= 2.1	77	0.1169		0.8831	*	28	0.0357	0.9643
d	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE < 69635.8 or Missing	56	0.8750	*	0.1250		26	0.8846	0.1154
e	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC < 45.1378	3219	0.9304		0.0696		1392	0.9282	0.0718
	VALUE < 296289	3182	0.9365		0.0635		1374	0.9352	0.0648
	DELINQ < 4.05 or Missing	3166	0.9400		0.0600		1369	0.9379	0.0621
	DEROG < 1.1 or Missing	3081	0.9468		0.0532		1325	0.9419	0.0581
	CLNO < 4.26	68	0.7500		0.2500		28	0.8929	0.1071
	MORTDUE >= 69635.8	12	0.1667		0.8333	*	2	1.0000	0.0000
f	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
* Selected target level									

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE < 58.4117 or Missing	46	0.1522		0.8478	*	23	0.0870	0.9130
i	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG >= 1.1	5	0.0000		1.0000	*	3	0.0000	1.0000
j	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE < 186.917	10	0.1000		0.9000	*	3	0.6667	0.3333
l	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Mgr,Other,Self	109	0.2110		0.7890	*	37	0.1351	0.8649
o	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ >= 10.03 or Missing	8	1.0000	*	0.0000		3	1.0000	0.0000
r	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
* Selected target level									

The HPSPLIT Procedure

Node Information									
ID	Path	Training Data				Validation Data			
		Count	0		1		Count	0	1
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO < 8.52	5	0.0000		1.0000	*	2	0.5000	0.5000
s	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE >= 175.235	221	0.6697		0.3303		85	0.6941	0.3059
	YOJ < 3.28	65	0.4000		0.6000		19	0.6316	0.3684
	CLAGE < 315.423 or Missing	57	0.4561		0.5439		17	0.6471	0.3529
	CLAGE >= 186.917 or Missing	47	0.5319		0.4681		14	0.6429	0.3571
	CLNO >= 8.52 or Missing	42	0.5952	*	0.4048		12	0.6667	0.3333
t	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE < 84311.8 or Missing	23	0.2609		0.7391	*	7	0.2857	0.7143
u	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ >= 0.15	364	0.1868		0.8132		131	0.1298	0.8702
	CLAGE < 385.517 or Missing	360	0.1778		0.8222		131	0.1298	0.8702
	DEROG < 0.1 or Missing	238	0.2311		0.7689		80	0.1625	0.8375
	DELINQ < 2.1 or Missing	161	0.2857		0.7143		52	0.2308	0.7692
	JOB = Office,ProfEx,Sales or Missing	52	0.4423		0.5577		15	0.4667	0.5333
	VALUE >= 84311.8	29	0.5862	*	0.4138		8	0.6250	0.3750
v	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE < 61686 or Missing	110	0.2909		0.7091	*	49	0.3061	0.6939
x	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN < 15308 or Missing	36	0.3889		0.6111	*	12	0.2500	0.7500
y	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = ProfEx	46	0.4783		0.5217		17	0.4118	0.5882
	LOAN >= 15308	10	0.8000	*	0.2000		5	0.8000	0.2000
z	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
* Selected target level									

Node Information									
ID	Path	Training Data					Validation Data		
		Count	0		1		Count	0	1
	REASON = HomeImp or Missing	22	0.8636	*	0.1364		9	0.7778	0.2222
12	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651		102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145		79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456		76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000		27	0.1852	0.8148
	YOJ >= 10.25	9	0.8889	*	0.1111		6	0.1667	0.8333
13	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE < 105.141 or Missing	16	0.2500		0.7500	*	4	0.2500	0.7500
14	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266		252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404		167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955		145	0.3241	0.6759
	JOB = Office,ProfEx or Missing	102	0.5490		0.4510		43	0.5116	0.4884
	DEROG < 1.1 or Missing	97	0.5773		0.4227		40	0.5500	0.4500
	JOB = Office or Missing	51	0.6667		0.3333		23	0.6522	0.3478
	REASON = DebtCon	29	0.5172		0.4828		14	0.5714	0.4286
	CLAGE >= 105.141	13	0.8462	*	0.1538		10	0.7000	0.3000
15	Root Node	4185	0.8000		0.2000		1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346		383	0.3420	0.6580
* Selected target level									

View the subtree starting at Node 6

The HPSPLIT Procedure

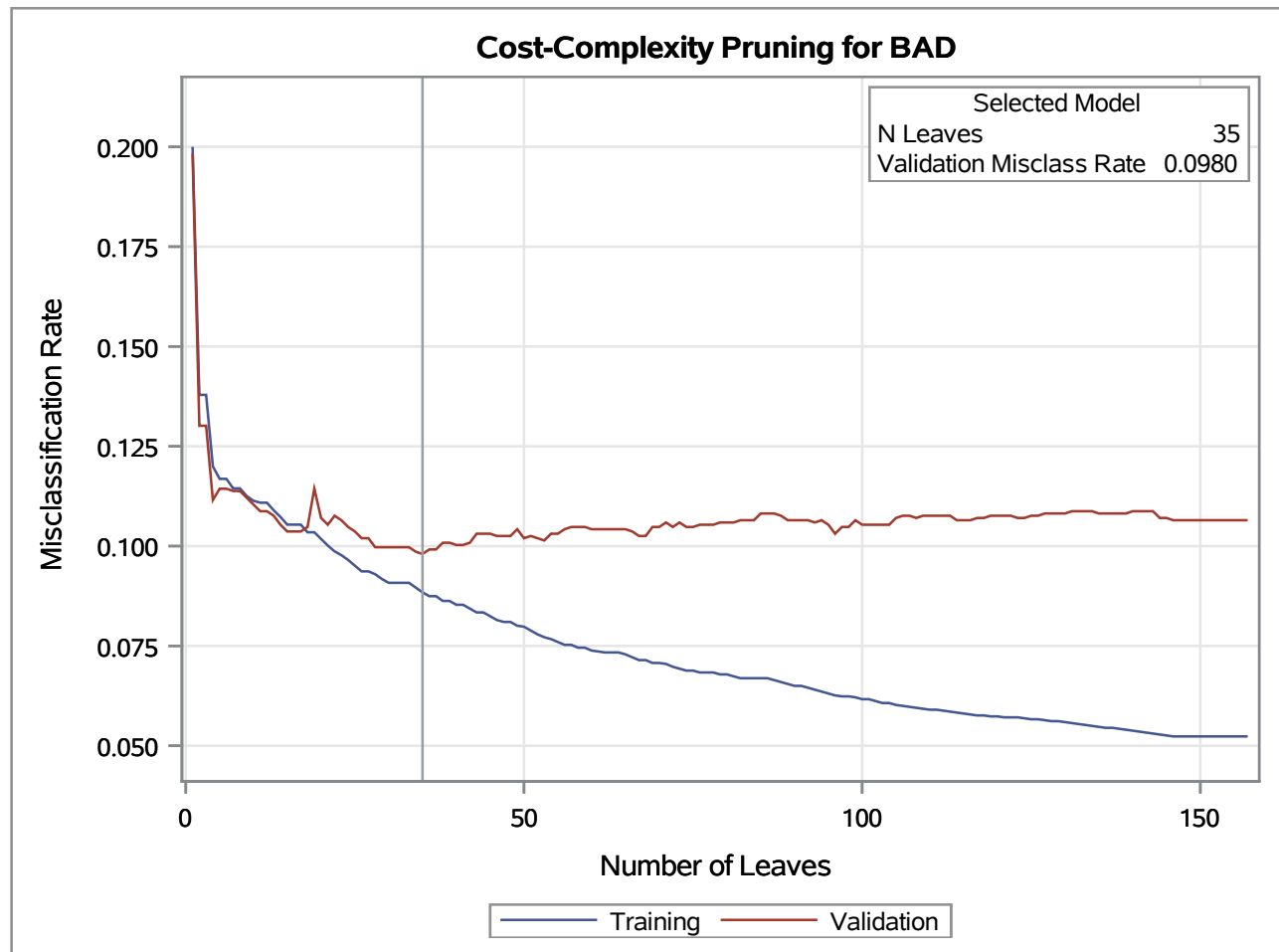
Node Information								
ID	Path	Training Data				Validation Data		
		Count	0		1	Count	0	1
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN < 9092	10	0.8000	*	0.2000	4	0.0000	1.0000
16	Root Node	4185	0.8000		0.2000	1775	0.8017	0.1983
	DEBTINC >= 45.1378 or Missing	966	0.3654		0.6346	383	0.3420	0.6580
	DELINQ < 0.15 or Missing	602	0.4734		0.5266	252	0.4524	0.5476
	CLAGE < 175.235 or Missing	381	0.3596		0.6404	167	0.3293	0.6707
	VALUE < 143665	314	0.4045		0.5955	145	0.3241	0.6759
	JOB = Mgr,Other,Sales,Self	212	0.3349		0.6651	102	0.2451	0.7549
	CLAGE >= 58.4117	166	0.3855		0.6145	79	0.2911	0.7089
	NINQ < 10.03	158	0.3544		0.6456	76	0.2632	0.7368
	MORTDUE >= 61686	48	0.5000		0.5000	27	0.1852	0.8148
	YOJ < 10.25 or Missing	39	0.4103		0.5897	21	0.1905	0.8095
	LOAN >= 9092 or Missing	29	0.2759		0.7241	17	0.2353	0.7647
* Selected target level								

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEBTINC	1.0000	21.7799	1.0000	14.3509	1.0000	1
DELINQ	0.3417	7.4428	0.3423	4.9125	1.0017	3
CLAGE	0.3317	7.2246	0.3140	4.5065	0.9467	7
VALUE	0.2788	6.0713	0.2370	3.4013	0.8502	4
JOB	0.1577	3.4349	0.1927	2.7657	1.2220	3
MORTDUE	0.2330	5.0743	0.1657	2.3773	0.7110	4
CLNO	0.1831	3.9876	0.1470	2.1099	0.8030	3
NINQ	0.1157	2.5193	0.1261	1.8099	1.0903	1

View the subtree starting at Node 6

The HPSPLIT Procedure

Variable Importance						
Variable	Training		Validation		Relative Ratio	Count
	Relative	Importance	Relative	Importance		
DEROG	0.1933	4.2098	0.0995	1.4276	0.5147	3
LOAN	0.1191	2.5944	0.0941	1.3501	0.7898	2
REASON	0.0796	1.7327	0.0356	0.5112	0.4477	1
YOJ	0.1879	4.0920	0.0000	0	0.0000	2



Decision tree with cross validation on the training sample**The HPSPLIT Procedure**

Performance Information	
Execution Mode	Single-Machine
Number of Threads	2

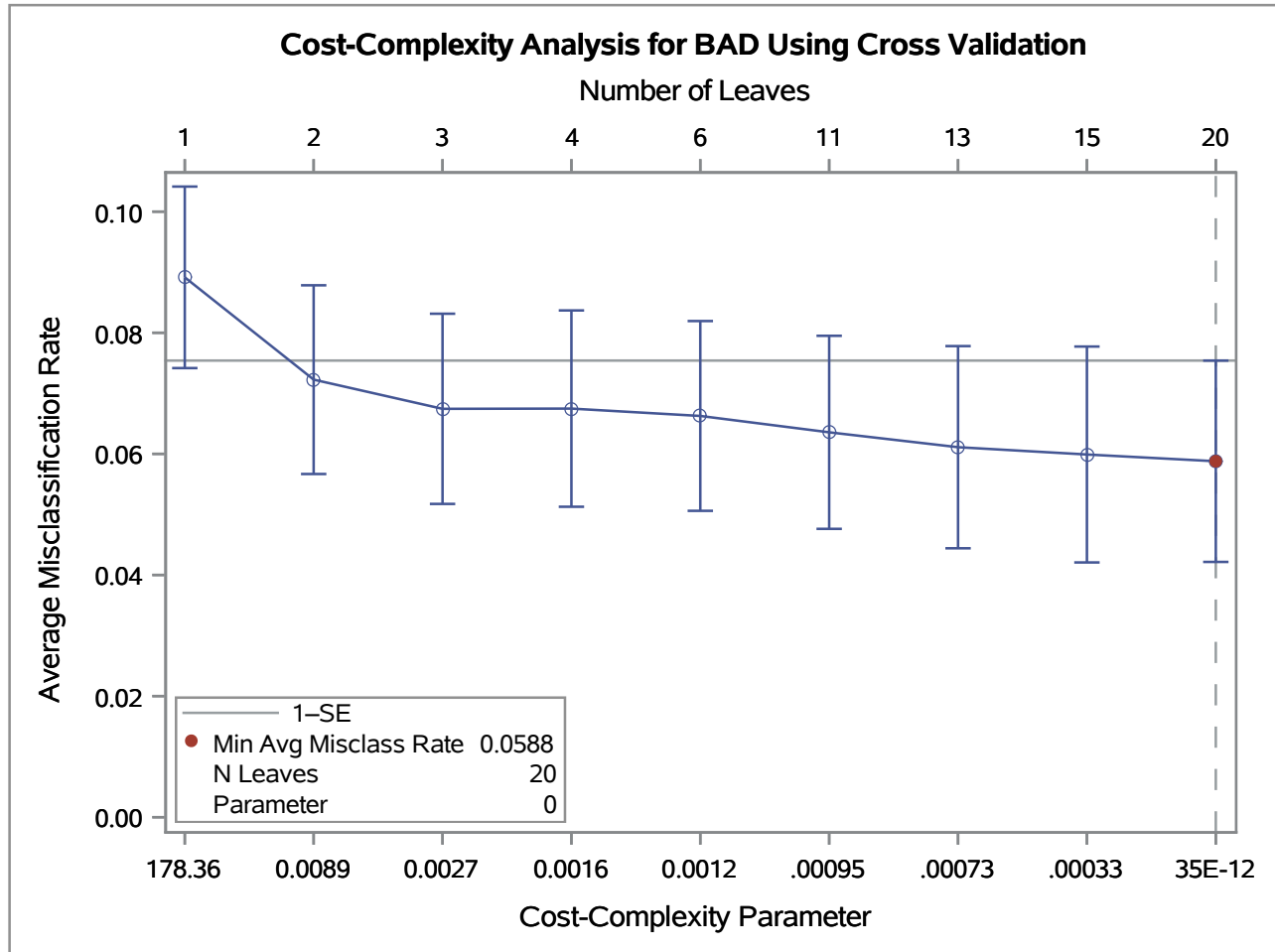
Data Access Information			
Data	Engine	Role	Path
WORK.HMEQ	V9	Input	On Client

Model Information	
Split Criterion Used	Chi-Square
Pruning Method	Cost-Complexity
Subtree Evaluation Criterion	Cost-Complexity
Number of Branches	2
Maximum Tree Depth Requested	7
Maximum Tree Depth Achieved	7
Tree Depth	7
Number of Leaves Before Pruning	23
Number of Leaves After Pruning	22
Model Event Level	1

Number of Observations Read	5960
Number of Observations Used	3364

Decision tree with cross validation on the training sample

The HPSPLIT Procedure



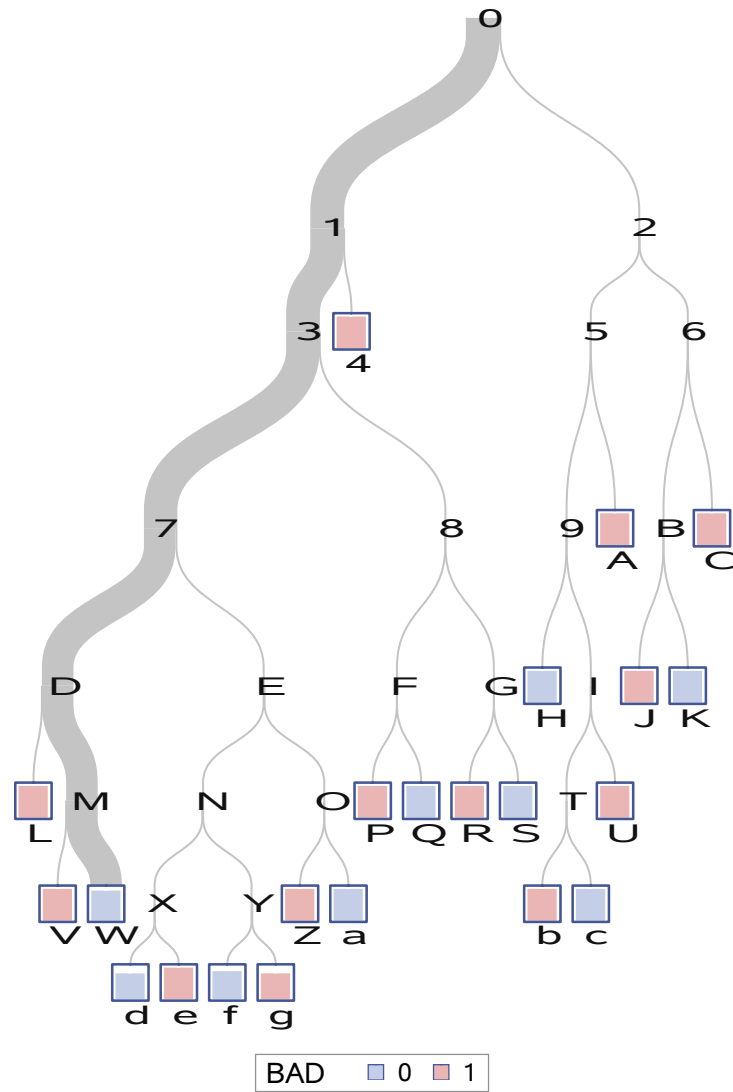
10-Fold Cross Validation Assessment of Model											
N Leaves	Average Square Error				Number of Leaves			Misclassification Rate			
	Min	Avg	Standard Error	Max	Min	Median	Max	Min	Avg	Standard Error	Max
20	0.0385	0.0562	0.0121	0.0787	19	20.0	23	0.0408	0.0600	0.0138	0.0870

10-Fold Cross Validation Confusion Matrix			
Actual	Predicted		Error Rate
	0	1	
0	3056	8	0.0026
1	194	106	0.6467

Decision tree with cross validation on the training sample

The HPSPLIT Procedure

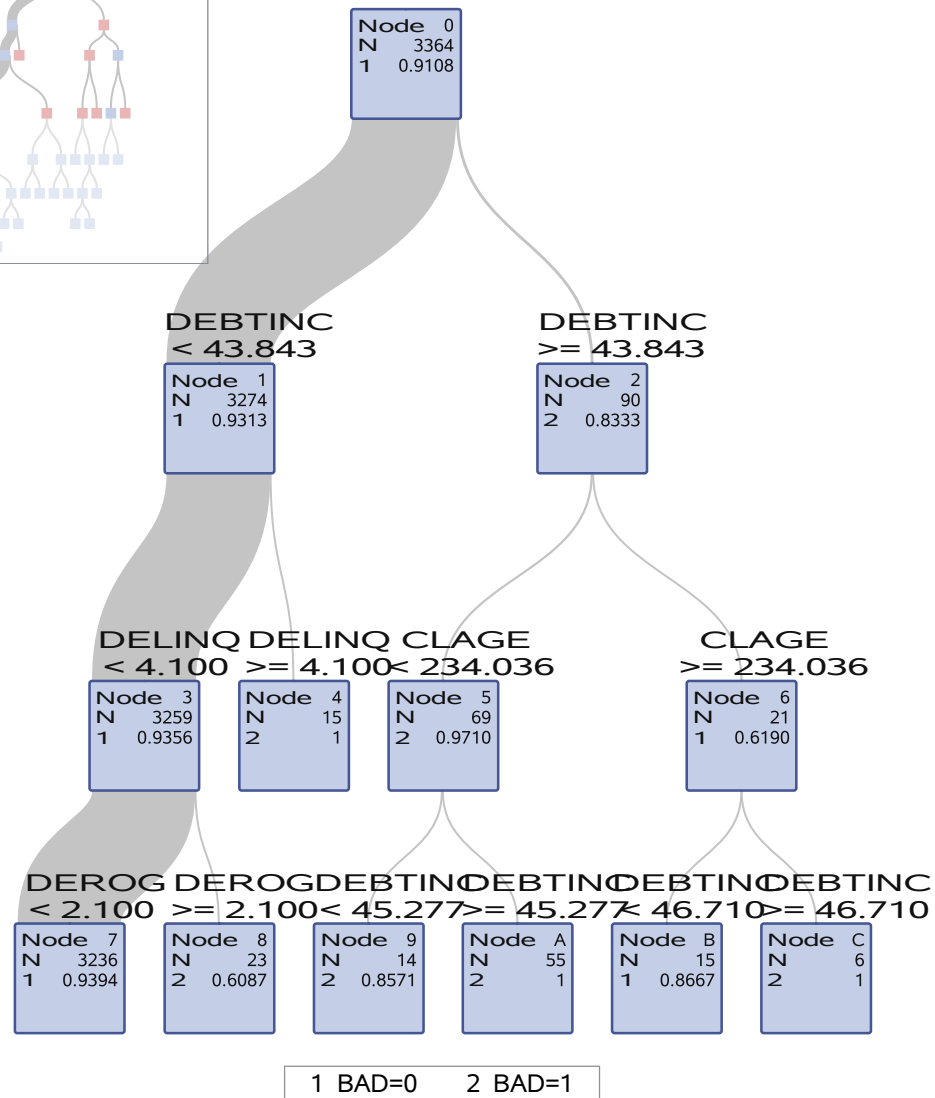
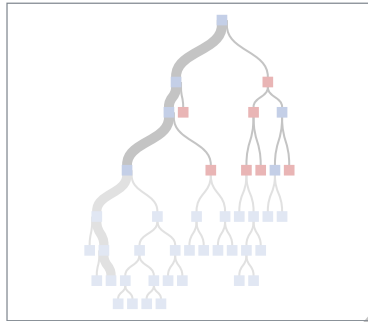
Classification Tree for BAD



Decision tree with cross validation on the training sample

The HPSPLIT Procedure

Subtree Starting at Node=0



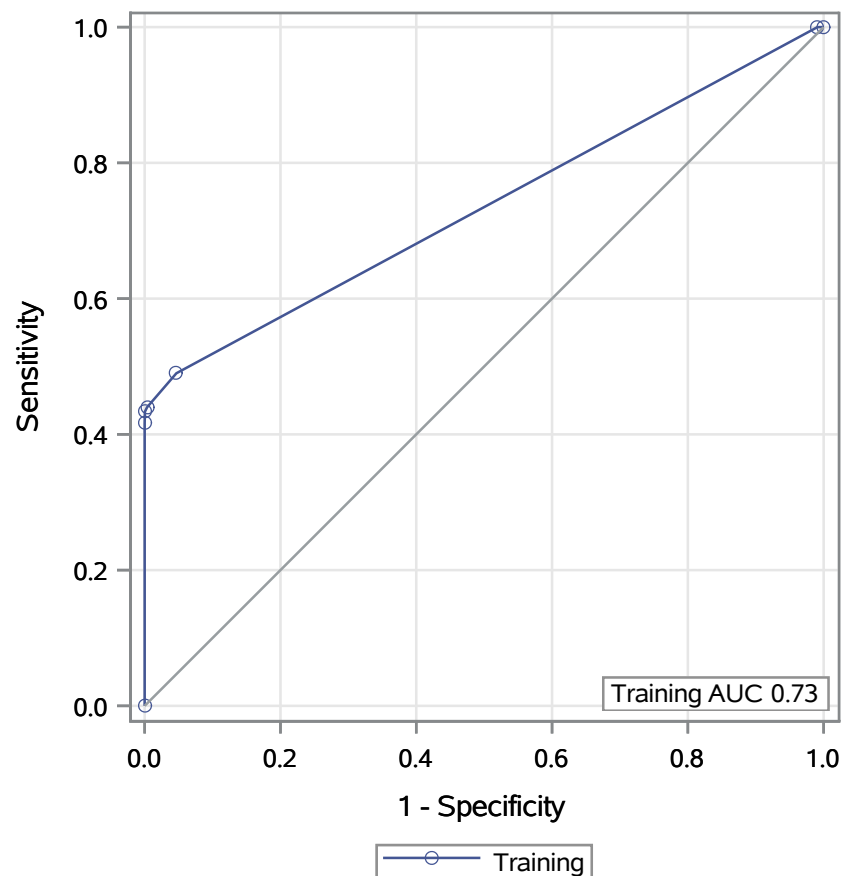
Decision tree with cross validation on the training sample

The HPSPLIT Procedure

Confusion Matrices				
		Predicted		Error Rate
		0	1	
Model Based	0	3063	1	0.0003
	1	170	130	0.5667
Cross Validation	0	3056	8	0.0026
	1	194	106	0.6467

Fit Statistics for Selected Tree									
	N Leaves	ASE	Mis-class	Sensitivity	Specificity	Entropy	Gini	RSS	AUC
Model Based	22	0.0479	0.0508	0.4333	0.9997	0.2845	0.0959	322.6	0.7342
Cross Validation	20	0.0562	0.0600	0.3533	0.9974				

ROC Curve for BAD



Decision tree with cross validation on the training sample

The HPSPLIT Procedure

Node Information					
ID	Path	Training Data			
		Count	0	1	
4	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ >= 4.1	15	0.0000	1.0000	*
A	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE < 234.036 or Missing	69	0.0290	0.9710	
	DEBTINC >= 45.2769 or Missing	55	0.0000	1.0000	*
C	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE >= 234.036	21	0.6190	0.3810	
	DEBTINC >= 46.7104	6	0.0000	1.0000	*
H	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE < 234.036 or Missing	69	0.0290	0.9710	
	DEBTINC < 45.2769	14	0.1429	0.8571	
	LOAN < 6110	1	1.0000	* 0.0000	
J	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE >= 234.036	21	0.6190	0.3810	
	DEBTINC < 46.7104 or Missing	15	0.8667	0.1333	
	JOB = ProfEx	2	0.0000	1.0000	*
K	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE >= 234.036	21	0.6190	0.3810	
	DEBTINC < 46.7104 or Missing	15	0.8667	0.1333	
	JOB = Mgr,Office,Other,Sales,Self or Missing	13	1.0000	* 0.0000	
L	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ < 1.1 or Missing	3053	0.9476	0.0524	
	CLNO < 2.56	4	0.0000	1.0000	*
P	Root Node	3364	0.9108	0.0892	
* Selected target level					

Decision tree with cross validation on the training sample**The HPSPLIT Procedure**

Node Information					
ID	Path	Training Data			
		Count	0	1	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG >= 2.1	23	0.3913	0.6087	
	DEBTINC < 26.6413	7	0.8571	0.1429	
	DEBTINC < 3.70514	1	0.0000	1.0000	*
Q	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG >= 2.1	23	0.3913	0.6087	
	DEBTINC < 26.6413	7	0.8571	0.1429	
	DEBTINC >= 3.70514 or Missing	6	1.0000	* 0.0000	
R	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG >= 2.1	23	0.3913	0.6087	
	DEBTINC >= 26.6413 or Missing	16	0.1875	0.8125	
	CLAGE < 210.681 or Missing	13	0.0000	1.0000	*
S	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG >= 2.1	23	0.3913	0.6087	
	DEBTINC >= 26.6413 or Missing	16	0.1875	0.8125	
	CLAGE >= 210.681	3	1.0000	* 0.0000	
U	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE < 234.036 or Missing	69	0.0290	0.9710	
	DEBTINC < 45.2769	14	0.1429	0.8571	
	LOAN >= 6110 or Missing	13	0.0769	0.9231	
	CLNO >= 15.36 or Missing	10	0.0000	1.0000	*
V	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
* Selected target level					

Decision tree with cross validation on the training sample

The HPSPLIT Procedure

Node Information					
ID	Path	Training Data			
		Count	0	1	
	DELINQ < 1.1 or Missing	3053	0.9476	0.0524	
	CLNO >= 2.56 or Missing	3049	0.9488	0.0512	
	DEBTINC < 3.70514	3	0.0000	1.0000	*
W	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ < 1.1 or Missing	3053	0.9476	0.0524	
	CLNO >= 2.56 or Missing	3049	0.9488	0.0512	
	DEBTINC >= 3.70514 or Missing	3046	0.9498	* 0.0502	
Z	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE >= 129275	13	0.3077	0.6923	
	JOB = Mgr,Other,ProfEx,Sales,Self or Missing	9	0.0000	1.0000	*
a	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE >= 129275	13	0.3077	0.6923	
	JOB = Office	4	1.0000	* 0.0000	
b	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
	CLAGE < 234.036 or Missing	69	0.0290	0.9710	
	DEBTINC < 45.2769	14	0.1429	0.8571	
	LOAN >= 6110 or Missing	13	0.0769	0.9231	
	CLNO < 15.36	3	0.3333	0.6667	
	CLNO < 13.44 or Missing	2	0.0000	1.0000	*
c	Root Node	3364	0.9108	0.0892	
	DEBTINC >= 43.8434	90	0.1667	0.8333	
* Selected target level					

Decision tree with cross validation on the training sample**The HPSPLIT Procedure**

Node Information					
ID	Path	Training Data			
		Count	0	1	
	CLAGE < 234.036 or Missing	69	0.0290	0.9710	
	DEBTINC < 45.2769	14	0.1429	0.8571	
	LOAN >= 6110 or Missing	13	0.0769	0.9231	
	CLNO < 15.36	3	0.3333	0.6667	
	CLNO >= 13.44	1	1.0000	*	0.0000
d	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE < 129275 or Missing	170	0.8412	0.1588	
	MORTDUE < 40566.2	17	0.5882	0.4118	
	NINQ < 1.04 or Missing	12	0.8333	*	0.1667
e	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE < 129275 or Missing	170	0.8412	0.1588	
	MORTDUE < 40566.2	17	0.5882	0.4118	
	NINQ >= 1.04	5	0.0000	1.0000	*
f	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE < 129275 or Missing	170	0.8412	0.1588	
	MORTDUE >= 40566.2 or Missing	153	0.8693	0.1307	
	CLAGE < 292.423 or Missing	147	0.8980	*	0.1020
g	Root Node	3364	0.9108	0.0892	
	DEBTINC < 43.8434 or Missing	3274	0.9313	0.0687	
	DELINQ < 4.1 or Missing	3259	0.9356	0.0644	
	DEROG < 2.1 or Missing	3236	0.9394	0.0606	

* Selected target level

Decision tree with cross validation on the training sample**The HPSPLIT Procedure**

Node Information					
ID	Path	Training Data			
		Count	0	1	
	DELINQ >= 1.1	183	0.8033	0.1967	
	VALUE < 129275 or Missing	170	0.8412	0.1588	
	MORTDUE >= 40566.2 or Missing	153	0.8693	0.1307	
	CLAGE >= 292.423	6	0.1667	0.8333	*
* Selected target level					

Variable Importance			
Variable	Training		Count
	Relative	Importance	
DEBTINC	1.0000	10.9909	6
DELINQ	0.5253	5.7732	2
CLAGE	0.4292	4.7172	3
DEROG	0.3370	3.7044	1
CLNO	0.2735	3.0065	3
JOB	0.2730	3.0009	2
VALUE	0.2385	2.6218	1
NINQ	0.2014	2.2140	1
MORTDUE	0.1415	1.5547	1
LOAN	0.1145	1.2579	1