The Money Multiplier

Start with Gold (Coins) only = $100. Then assume:

1. Public wants to deposit all coins and hold only banknotes
2. Banks want to keep only 20% reserves

Step	Transaction	Banks have			Public has			M1
	(D=Deposit)	Assets		Liab.	Assets		Liab.	
	(L=Loan)	Gold	Loans	Notes	Gold	Notes	Loans	
0.					100			100
1.	D $100	100		-100		100		100
2a	L 80%=$80	20	80		80	100	-80	180
2b	D $80	100	80	-180		180	-80	180
3a	L 80%=$64	36	144	-180	64	180	-144	244
3b	D $64	100	144	-244		244	-144	244
4a	L 80%=$51	49	193	-244	51	244	-193	295
4b	D $51	100	193	-295		295	-193	295
5a	L 80%=$41	59	234	-295	41	295	-234	336
5b	D $41	100	234	-336		336	-234	336
6a	L 80%=$33	67	301	-336	33	336	-301	369
6b	D $33	100	301	-369		369	-301	369
•••								
∞		100	400	500		500	400	500