

13

CHAPTER

How Banks and Thrifts Create Money



BALANCE SHEET OF A COMMERCIAL BANK

ASSETS = LIABILITIES + NET WORTH

FORMATION OF A COMMERCIAL BANK

ASSETS (OWN)

LIABILITIES (OWE)



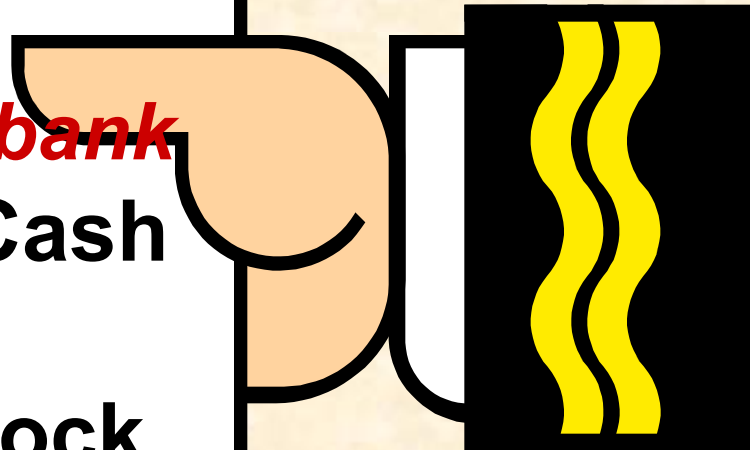
FORMATION OF A COMMERCIAL BANK

LIABILITIES AND
NET WORTH

ASSETS


TRANSACTION 1

Creating a bank
\$250,000 Cash
for
Capital Stock



FORMATION OF A COMMERCIAL BANK

ASSETS		LIABILITIES AND NET WORTH	
Cash	\$250,000	Capital Stock	\$250,000



Deposit Added to Vault Cash

FORMATION OF A COMMERCIAL BANK

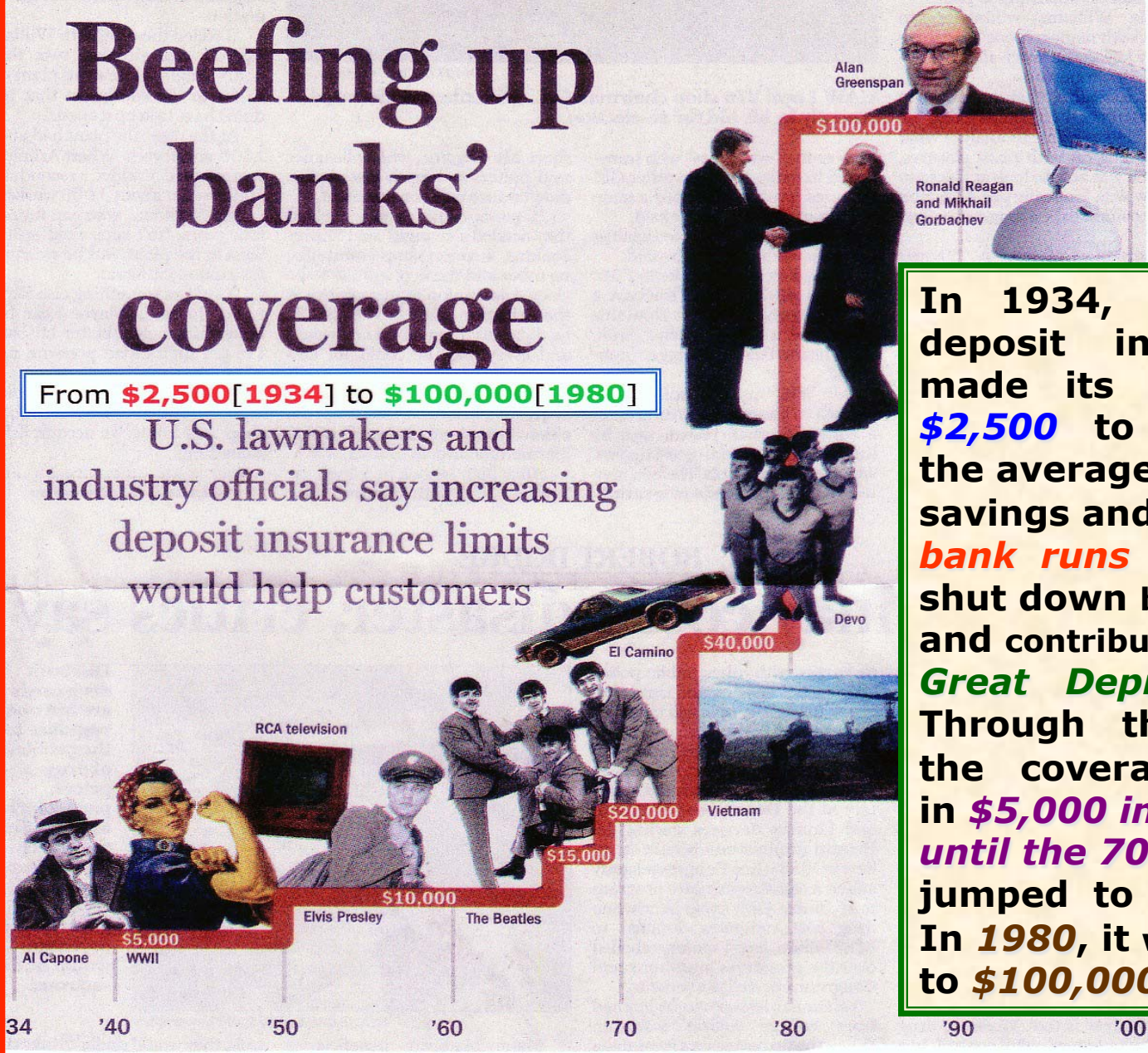
<u>ASSETS</u>		<u>LIABILITIES AND NET WORTH</u>	
Property	250,000	Capital Stock	\$250,000

History of Deposit Insurance

Beefing up banks' coverage

From **\$2,500** [1934] to **\$100,000** [1980]

U.S. lawmakers and industry officials say increasing deposit insurance limits would help customers



In 1934, federal deposit insurance made its debut at **\$2,500** to protect the average family's savings and end the **bank runs** that had shut down businesses and contributed to the **Great Depression**. Through the years the coverage rose in **\$5,000 increments until the 70s** when it jumped to **\$40,000**. In **1980**, it was raised to **\$100,000**.

FORMATION OF A COMMERCIAL BANK

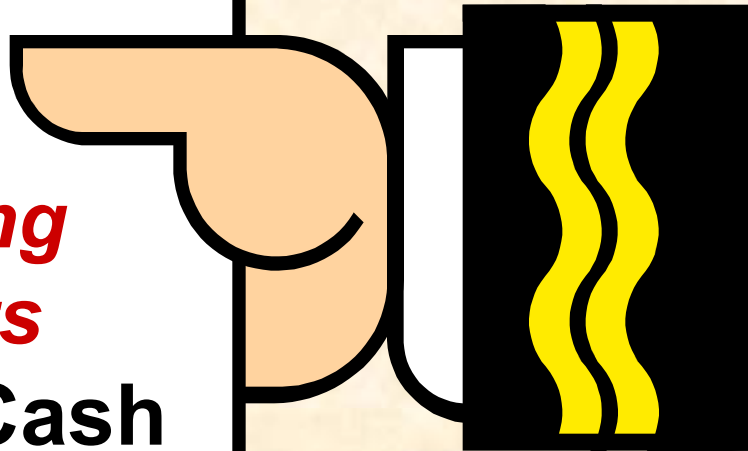
<u>ASSETS</u>		<u>LIABILITIES AND NET WORTH</u>	
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Property	250,000	Capital Stock	\$250,000
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TRANSACTION 2

*Accepting
Deposits*

\$100,000 Cash



FORMATION OF A COMMERCIAL BANK

LIABILITIES AND NET WORTH

ASSETS

Cash	\$100,000
Property	250,000

Checkable Deposits	\$100,000
Capital Stock	250,000

FORMATION OF A COMMERCIAL BANK

ASSETS

Cash
Property

LIABILITIES AND
NET WORTH

\$100,000
250,000

NOTES:

Bank deposits are
subject to a *reserve
requirement.*

Reserve
ratio

FORMATION OF A COMMERCIAL BANK

LIABILITIES AND NET WORTH

ASSETS

Cash **\$100,000**
Property 250,000

Checkable
Deposits **\$100,000**
Capital Stock 250,000

- Actual Reserves \$ 100,000
- Required Reserves - \$ 20,000
- Excess Reserves \$ 80,000

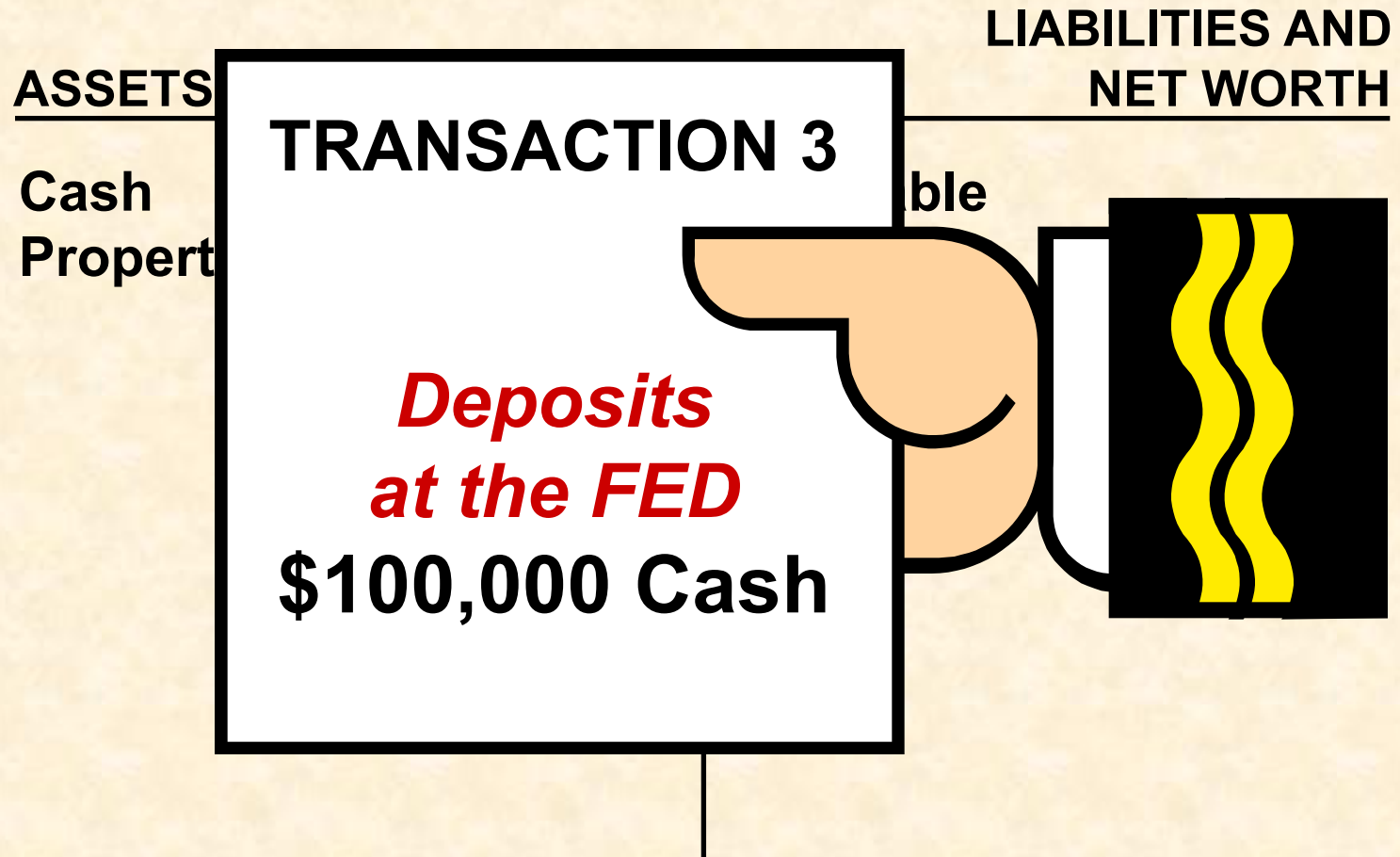
FORMATION OF A COMMERCIAL BANK

ASSETS		LIABILITIES AND NET WORTH	
Cash	\$100,000	Checkable	
Property	250,000	Deposits	\$100,000
		Capital Stock	250,000

Important Issue...

**1 - Excess Reserves =
Actual Reserves –
Required Reserves
(assume 20% reserve requirement)
\$100,000 - 20,000 = \$80,000**

FORMATION OF A COMMERCIAL BANK



FORMATION OF A COMMERCIAL BANK

ASSETS		LIABILITIES AND NET WORTH	
Cash	\$ 0	Checkable	
Reserves	100,000	Deposits	\$100,000
Property	250,000	Capital Stock	250,000

FORMATION OF A COMMERCIAL BANK

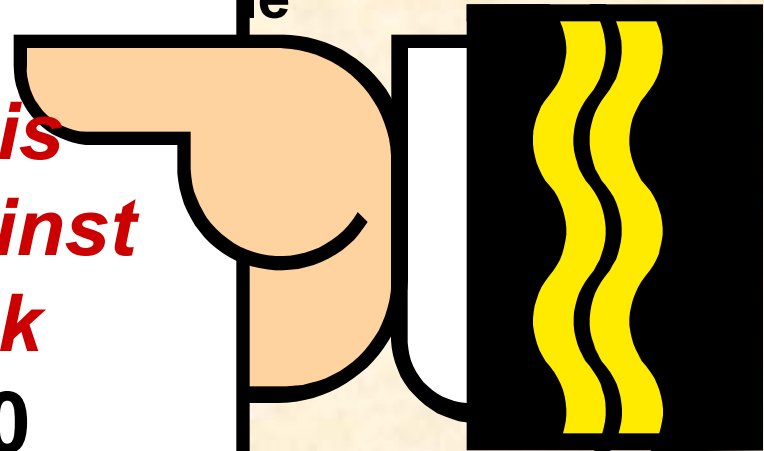
ASSETS

Cash
Reserves
Property

TRANSACTION 4

*A check is
drawn against
the bank*
\$50,000

LIABILITIES AND
NET WORTH



FORMATION OF A COMMERCIAL BANK

LIABILITIES AND NET WORTH

ASSETS

Cash	\$	0
Reserves		50,000
Property		250,000

Checkable		
Deposits		\$ 50,000
Capital Stock		250,000

And What Happens If A Turtle Doesn't Keep Up with His Mortgage Payments



"Whatever you do, keep up with your mortgage payments."



FORMATION OF A COMMERCIAL BANK

ASSETS

Cash
Reserves
Property

NOTES:

Banks create money by lending excess reserves and destroy it by loan repayment. Purchasing bonds from the public also creates money.

LIABILITIES AND NET WORTH

\$ 50,000
250,000

FORMATION OF A COMMERCIAL BANK

ASSETS

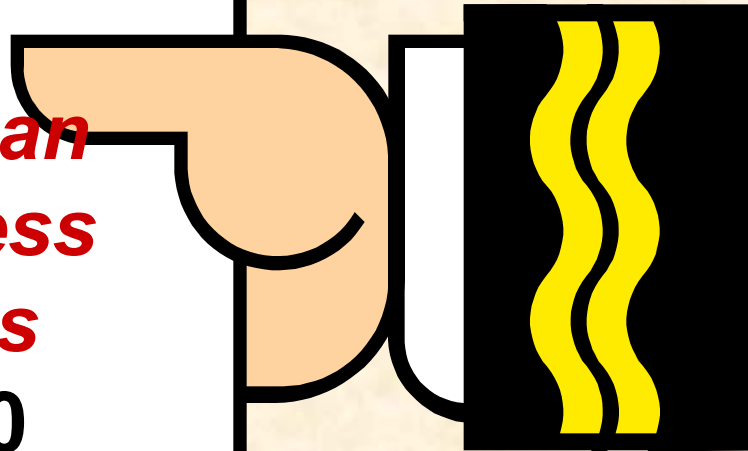
Reserves	\$ 50,000
Property	250,000

LIABILITIES AND NET WORTH

Checkable Deposits	\$ 50,000
Capital Stock	250,000

TRANSACTION 5

*Make a loan
from excess
reserves*
\$40,000



FORMATION OF A COMMERCIAL BANK

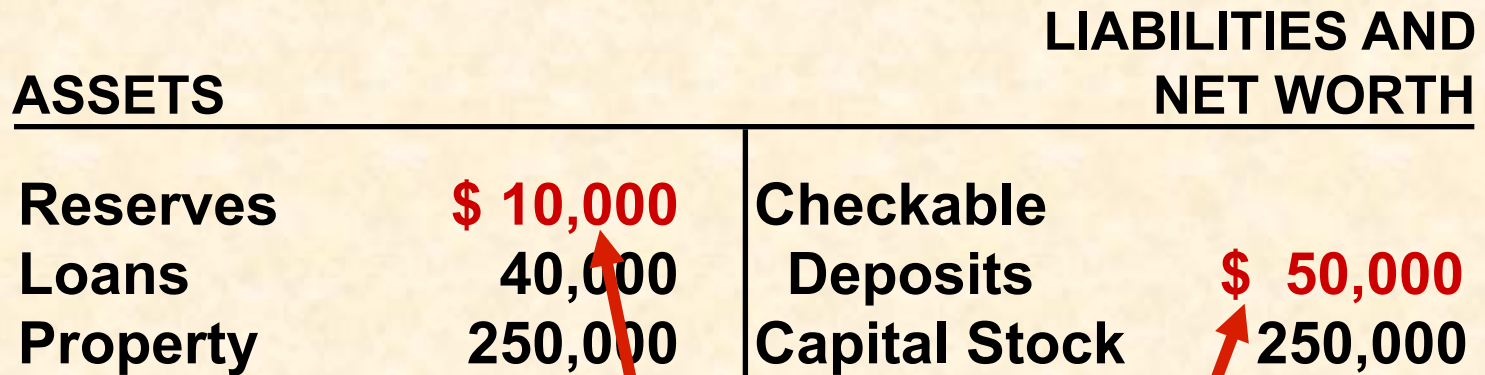
ASSETS		LIABILITIES AND NET WORTH	
Reserves	\$ 50,000	Checkable Deposits	\$90,000
Loans	40,000	Capital Stock	250,000
Property	250,000		

***Making the loan
created money!***



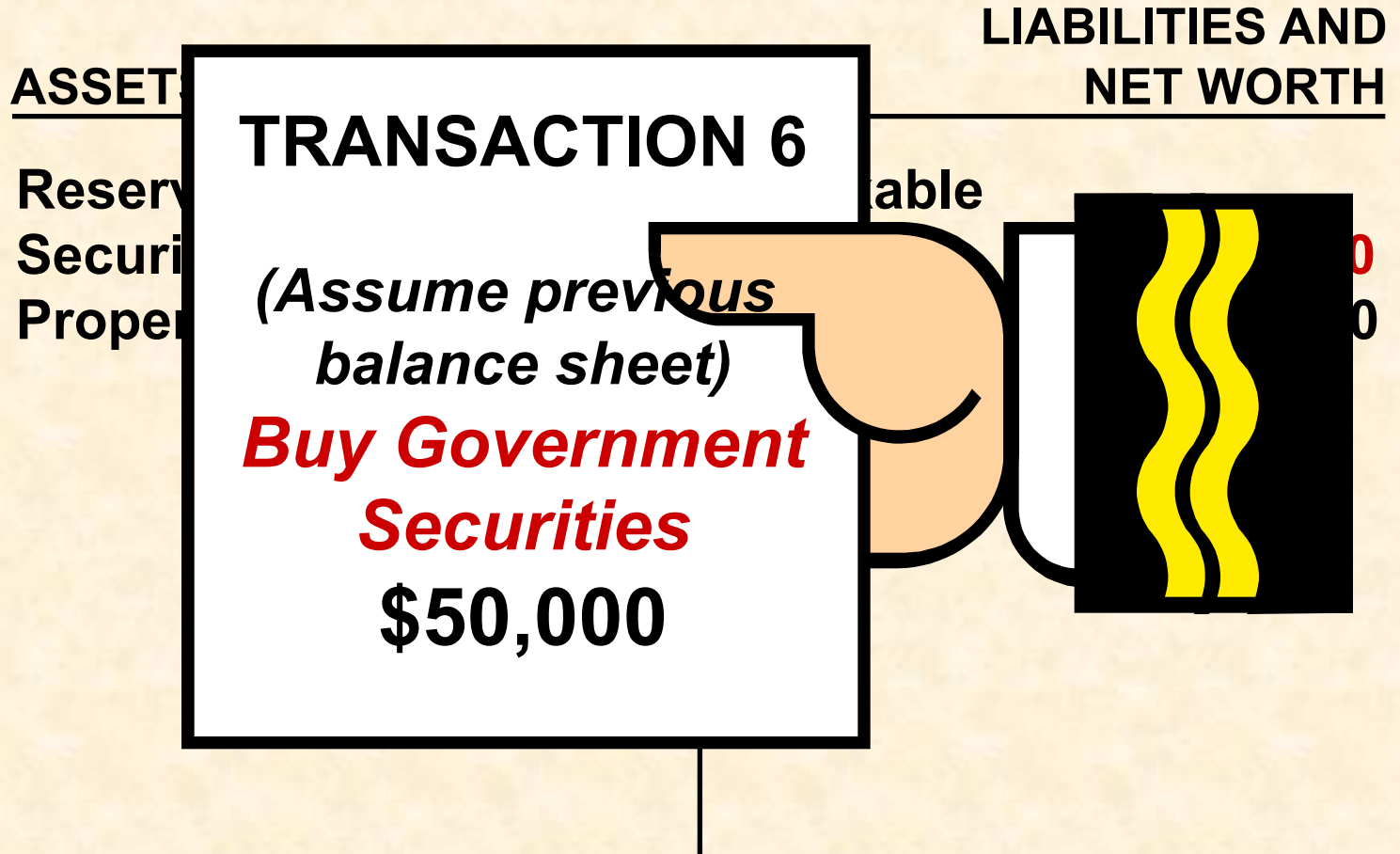
FORMATION OF A COMMERCIAL BANK

ASSETS		LIABILITIES AND NET WORTH	
Reserves	\$ 10,000	Checkable Deposits	\$ 50,000
Loans	40,000	Capital Stock	250,000
Property	250,000		



**After a check for the \$40,000
is drawn against the bank**

FORMATION OF A COMMERCIAL BANK



FORMATION OF A COMMERCIAL BANK

ASSETS		LIABILITIES AND NET WORTH	
Reserves	\$ 50,000	Checkable	
Securities	50,000	Deposits	\$100,000
Property	250,000	Capital Stock	250,000

MULTIPLE DEPOSIT EXPANSION PROCESS

Bank	Acquired reserves and deposits	Required reserves	Excess reserves	Amount bank can lend - New money created
A	\$100.00	\$20.00	\$80.00	\$80.00
B	80.00	16.00	64.00	64.00
C	64.00	12.80	51.20	51.20
D	51.20	10.24	40.96	40.96
E	40.96	8.19	32.77	32.77
F	32.77	6.55	26.21	26.21
G	26.21	5.24	20.97	20.97
H	20.97	4.20	16.78	16.78
I	16.78	3.36	13.42	13.42
J	13.42	2.68	10.74	10.74
K	10.74	2.15	8.59	8.59
L	8.59	1.72	6.87	6.87
M	6.87	1.37	5.50	5.50
N	5.50	1.10	4.40	4.40
Other banks	21.99	4.40	17.59	17.59

Total amount of money created by the banking system \$400.00

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M	6.87	1.37	5.50	5.50
N	5.50	1.10	4.40	4.40
Other banks	21.99	4.40	17.59	17.59

**Money
destruction works
in exactly the same
multiple way!**

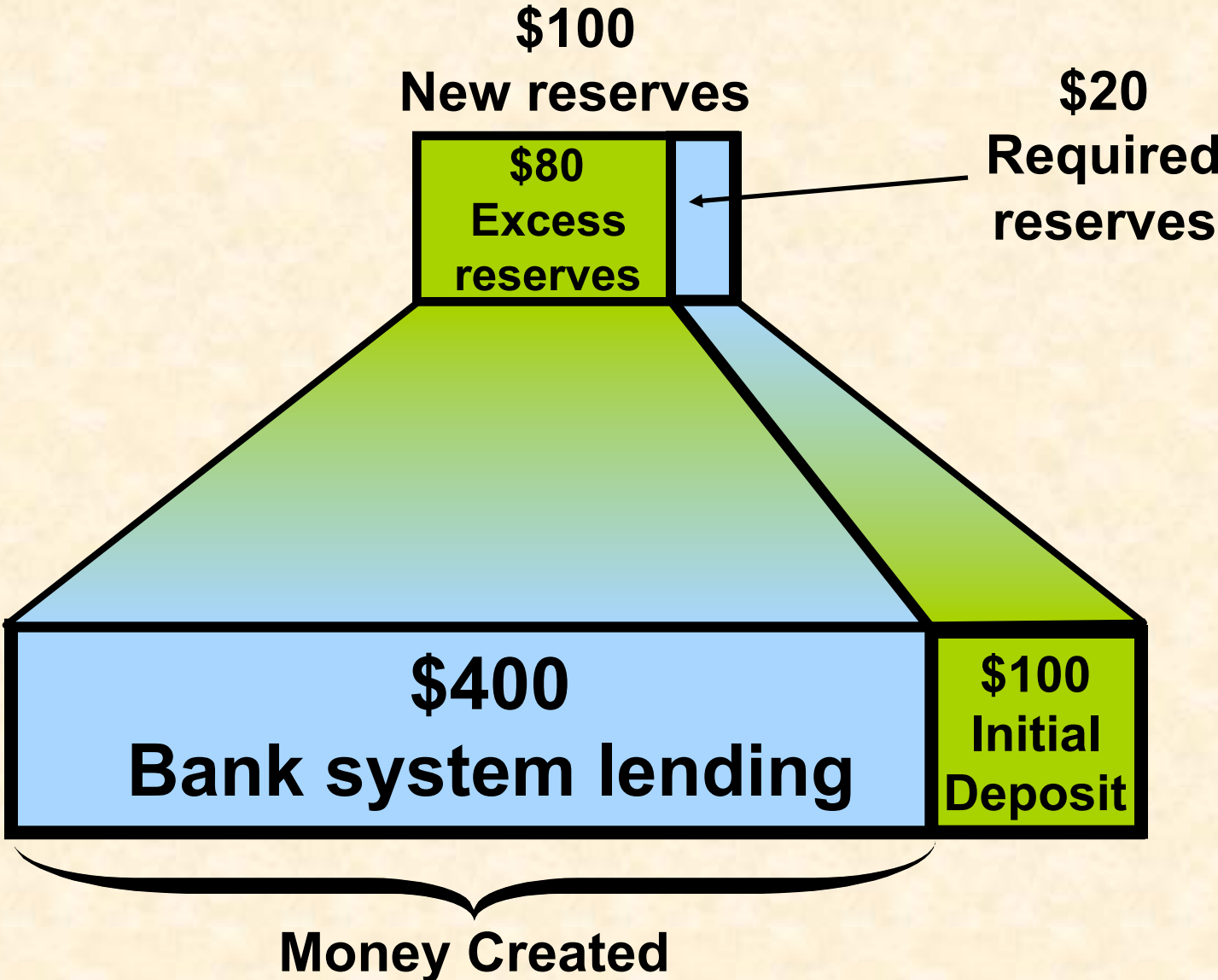
Total amount of money created by the banking system \$400.00

THE MONETARY MULTIPLIER

$$\text{Monetary Multiplier} = \frac{1}{\text{Required reserve ratio}}$$

$$\text{Maximum checkable-deposit creation} = \text{Excess reserves} \times \text{Monetary Multiplier}$$


OUTCOME OF MONEY EXPANSION



OUTCOME OF MONEY EXPANSION

\$100

\$20
Required
Reserves

Leakages exist...

Currency Drains

Excess Reserves

Bank

Initial
Deposit

Money Created