



Everyone's Smart University

Introduction to Economics

Chapter 7

MONEY AND BANKS



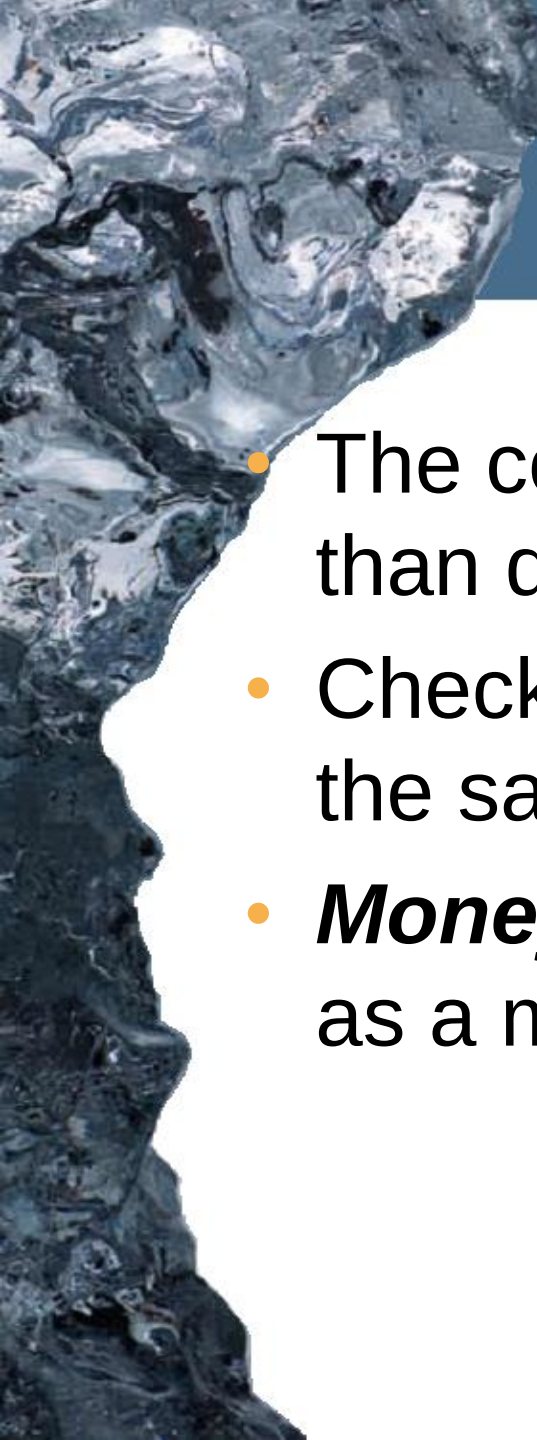
The Uses of Money

Barter is the direct exchange of one good for another, without the use of money.



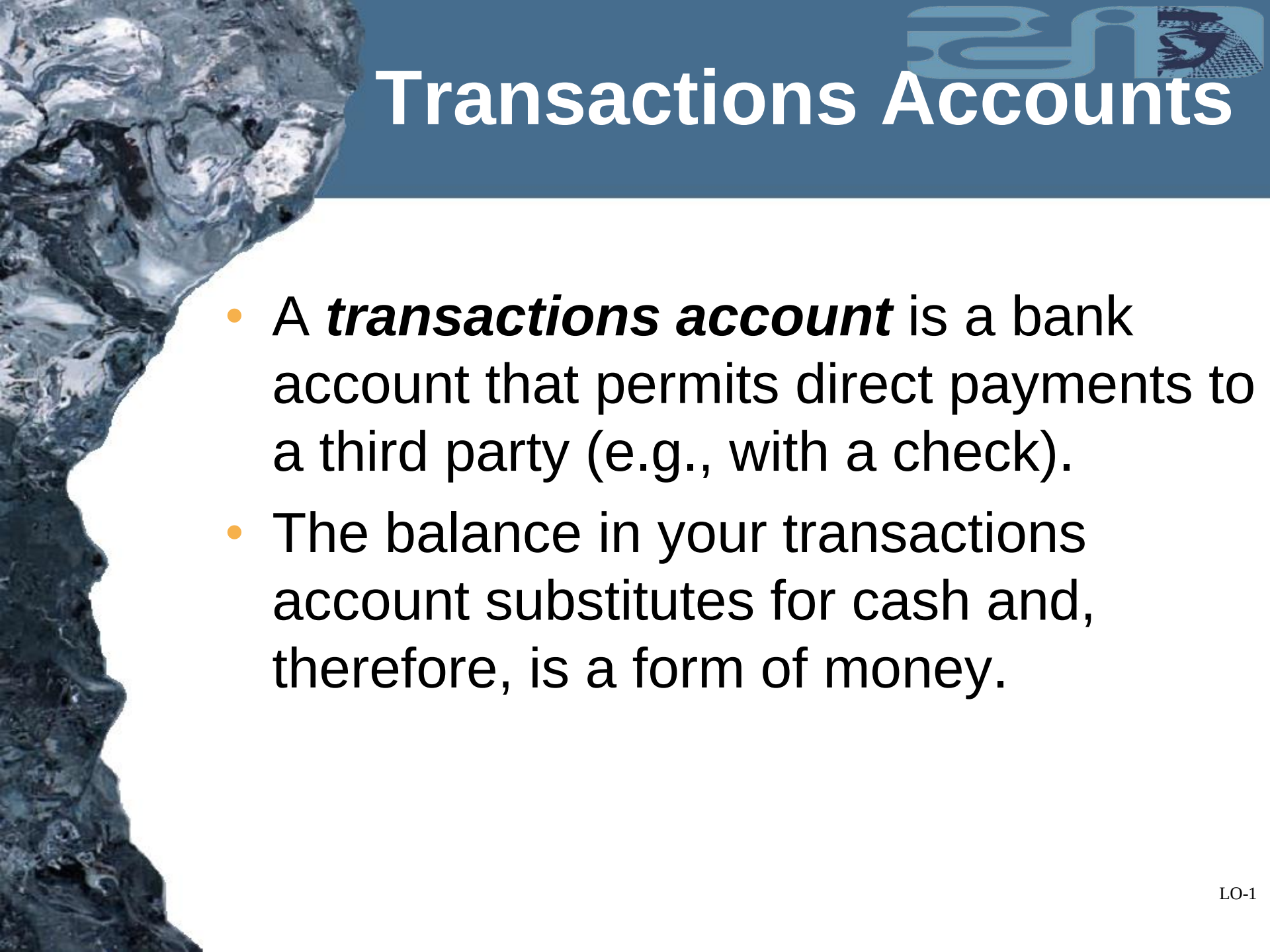
The Uses of Money

- The three functions of money (anything serving these purposes is money):
 - **Medium of exchange**—is accepted as payment for goods and services (and debts).
 - **Store of value**—can be held for future purchases.
 - **Standard of value**—serves as a yardstick for measuring the prices of goods and services.



Cash versus Money

- The concept of money includes more than dollar bills and coins.
- Checking accounts can and do perform the same market function as cash.
- ***Money*** is anything generally accepted as a medium of exchange.



Transactions Accounts

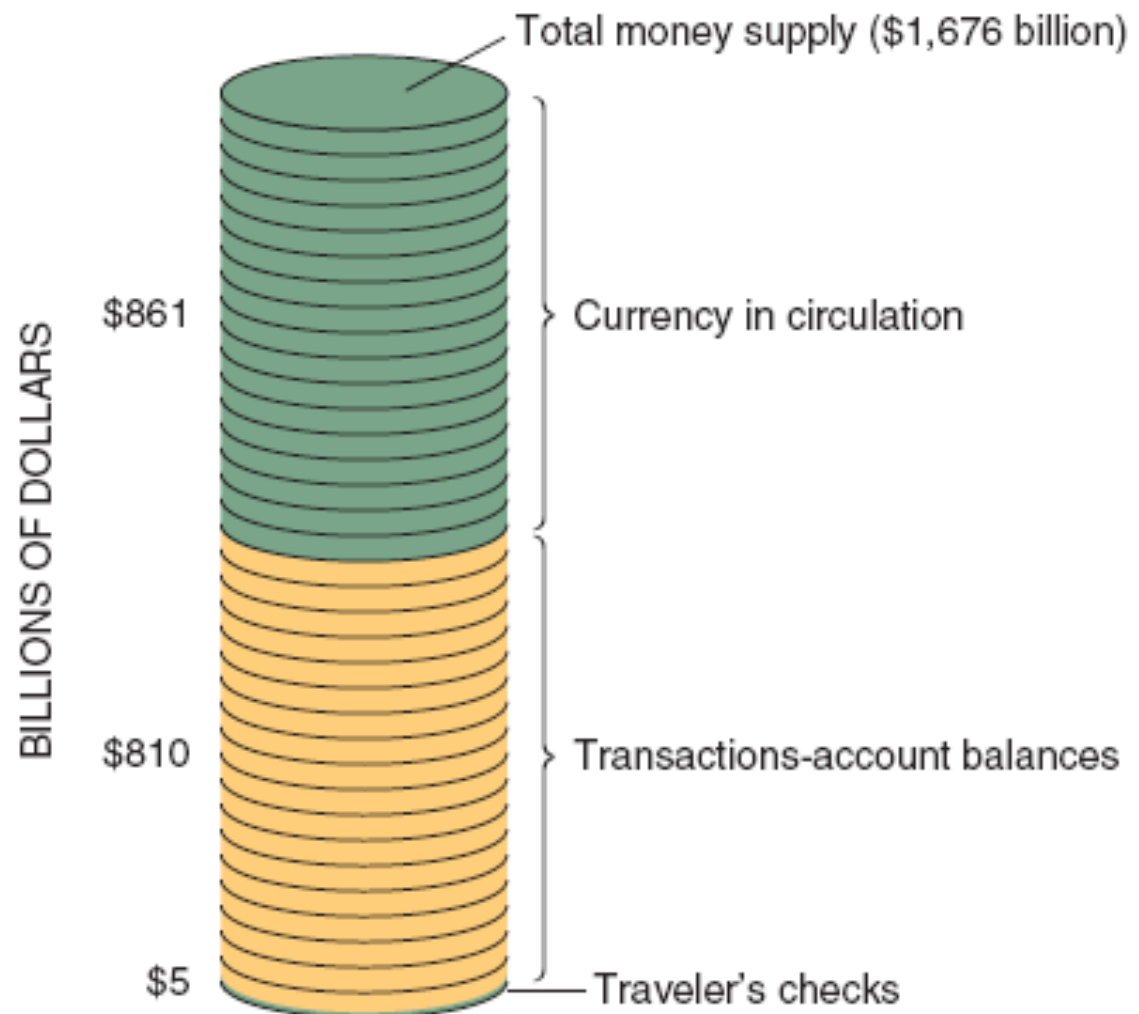
- A ***transactions account*** is a bank account that permits direct payments to a third party (e.g., with a check).
- The balance in your transactions account substitutes for cash and, therefore, is a form of money.

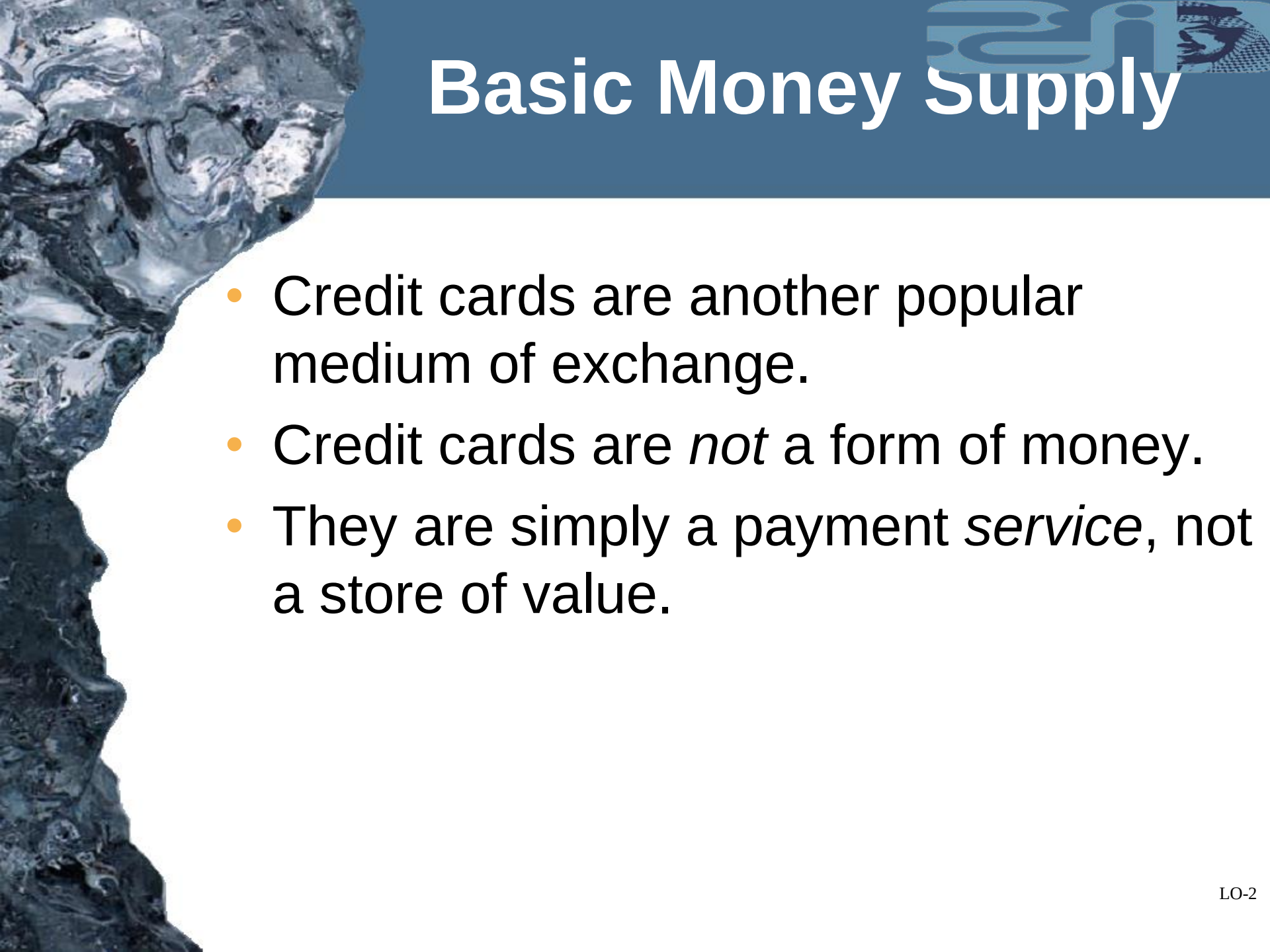


Basic Money Supply

- The basic money supply is typically referred to by the abbreviation M1.
- **M1** is currency held by the public, plus balances in transactions accounts.
- Cash is only part of the money supply; most money consists of balances in transactions accounts.

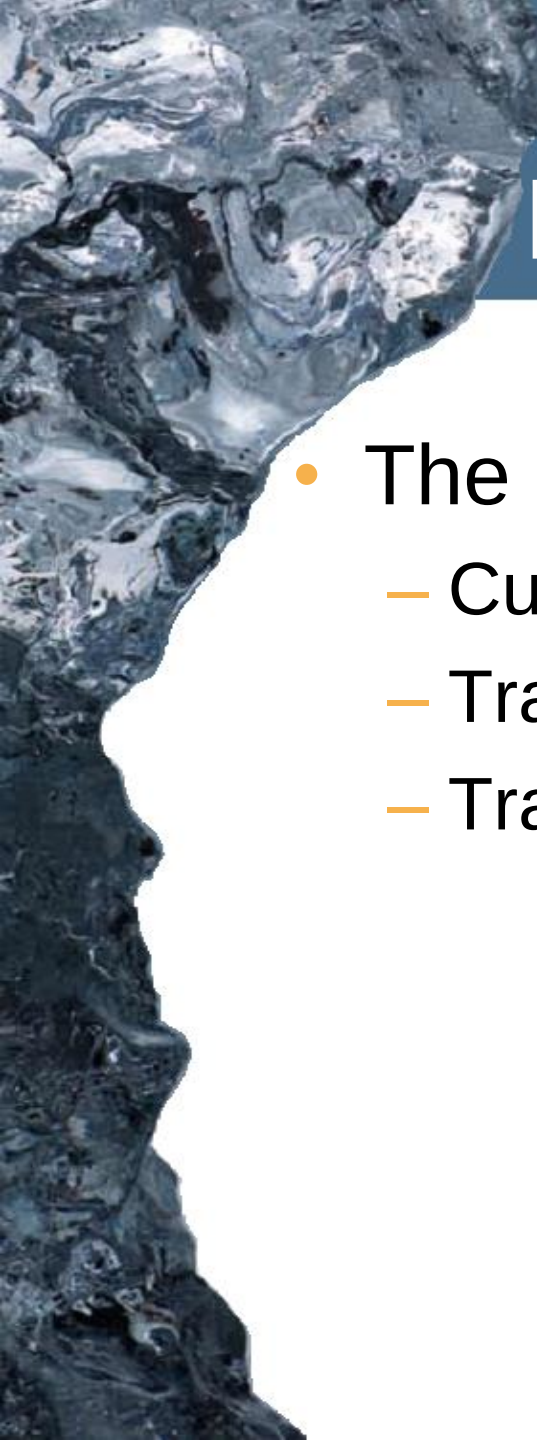
Figure 7.1





Basic Money Supply

- Credit cards are another popular medium of exchange.
- Credit cards are *not* a form of money.
- They are simply a payment *service*, not a store of value.

A decorative image of a marbled rock texture, featuring swirling patterns of grey, white, and black, located on the left side of the slide.

Composition of the Basic Money Supply (M1)

- The money supply (M1) includes:
 - Currency in circulation
 - Transaction-account balances
 - Traveler's checks



Near Money

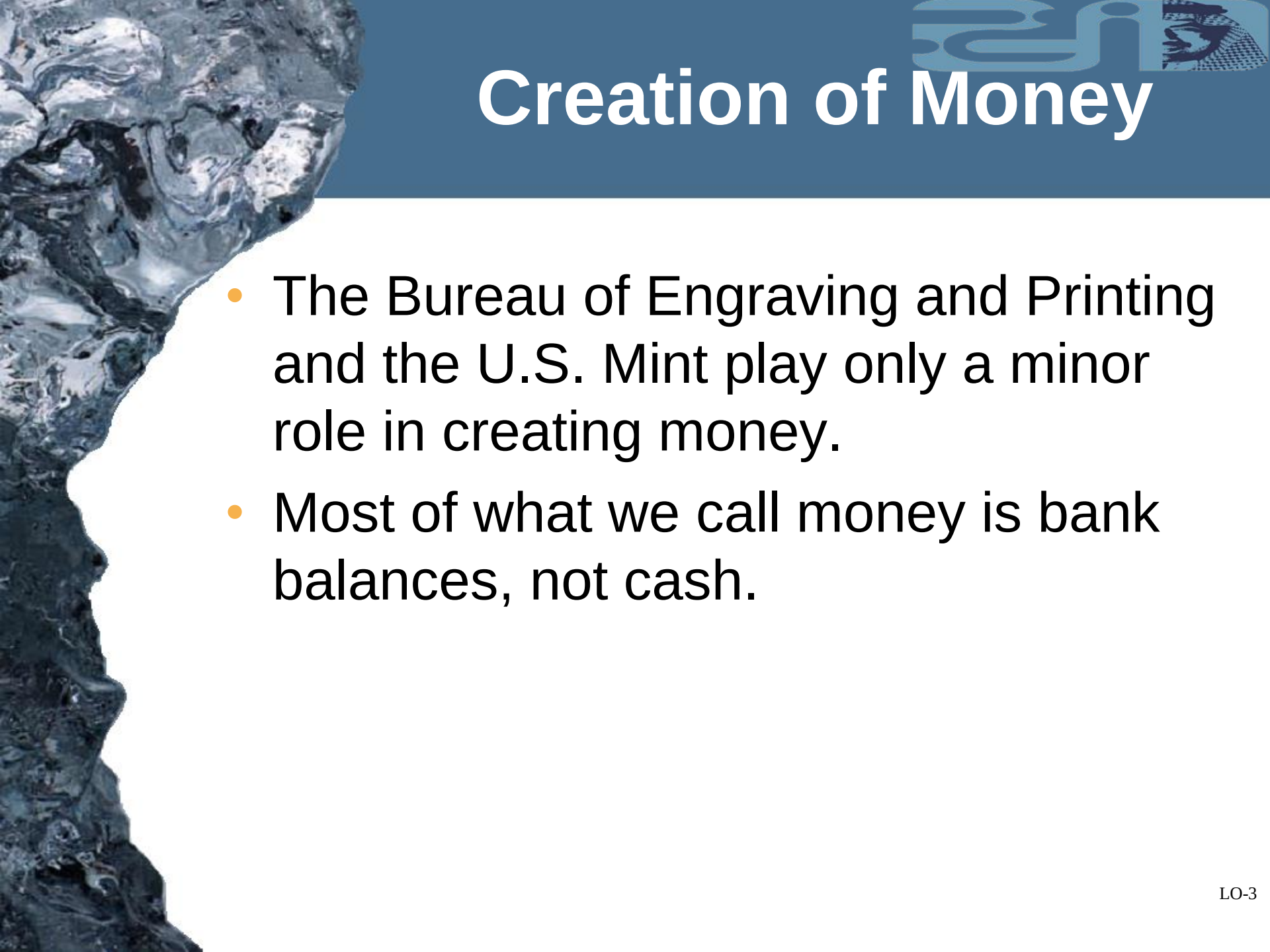
- Savings accounts
- Certificates of deposit (CDs)
- Money-market mutual funds
- These represent additional measures of the money supply (M2, M3, etc.).
- We will limit our discussion to M1, the basic money supply.



Cashless Society?

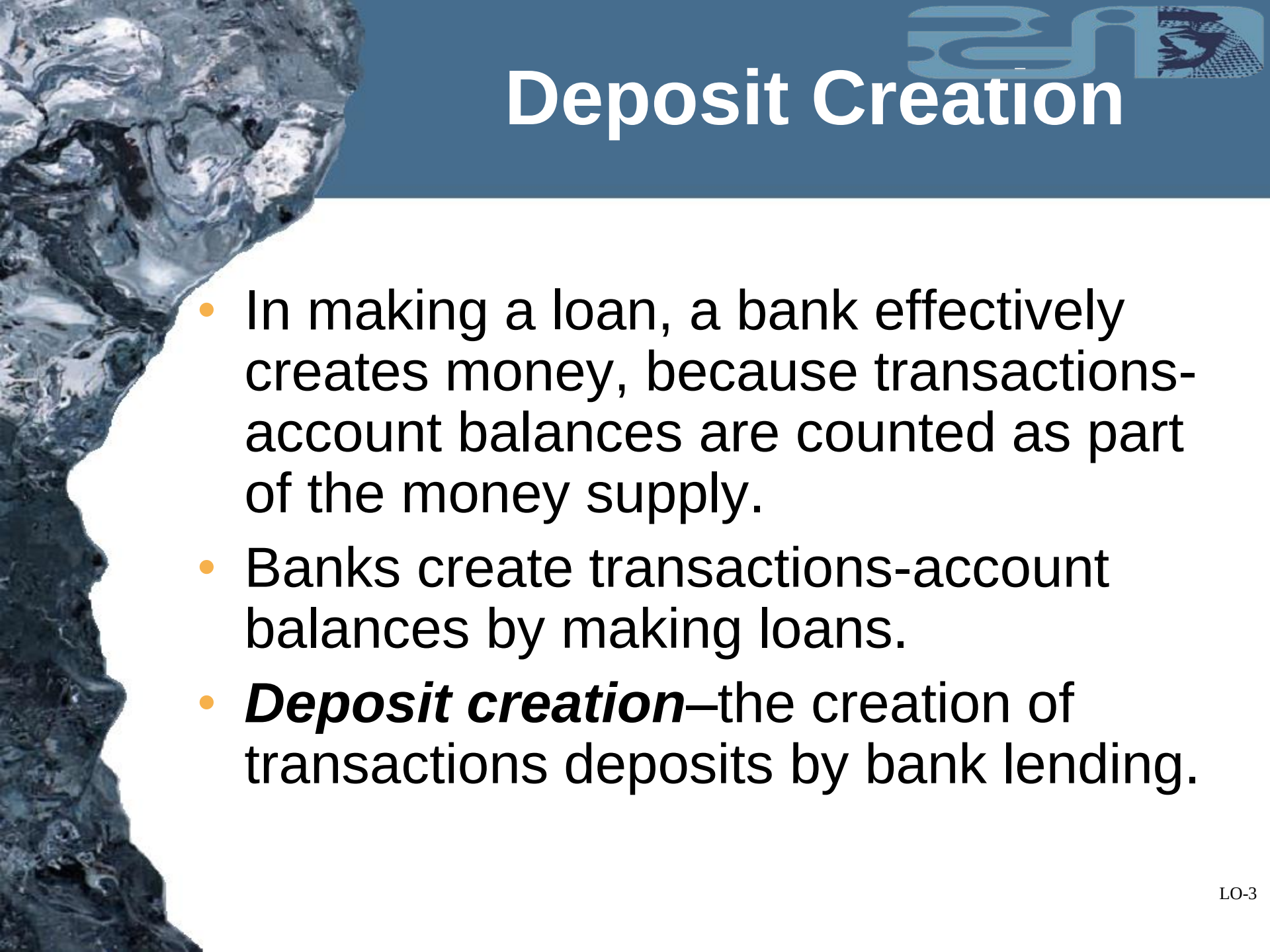
We're keeping a smaller percentage of the money supply as cash as we:

- Rely more on credit cards for purchases.
- Receive direct deposit for paychecks.
- Use more checks instead of cash.
- Rely more on debit cards for transactions.
- Complete many transactions via direct wire transfer of money.



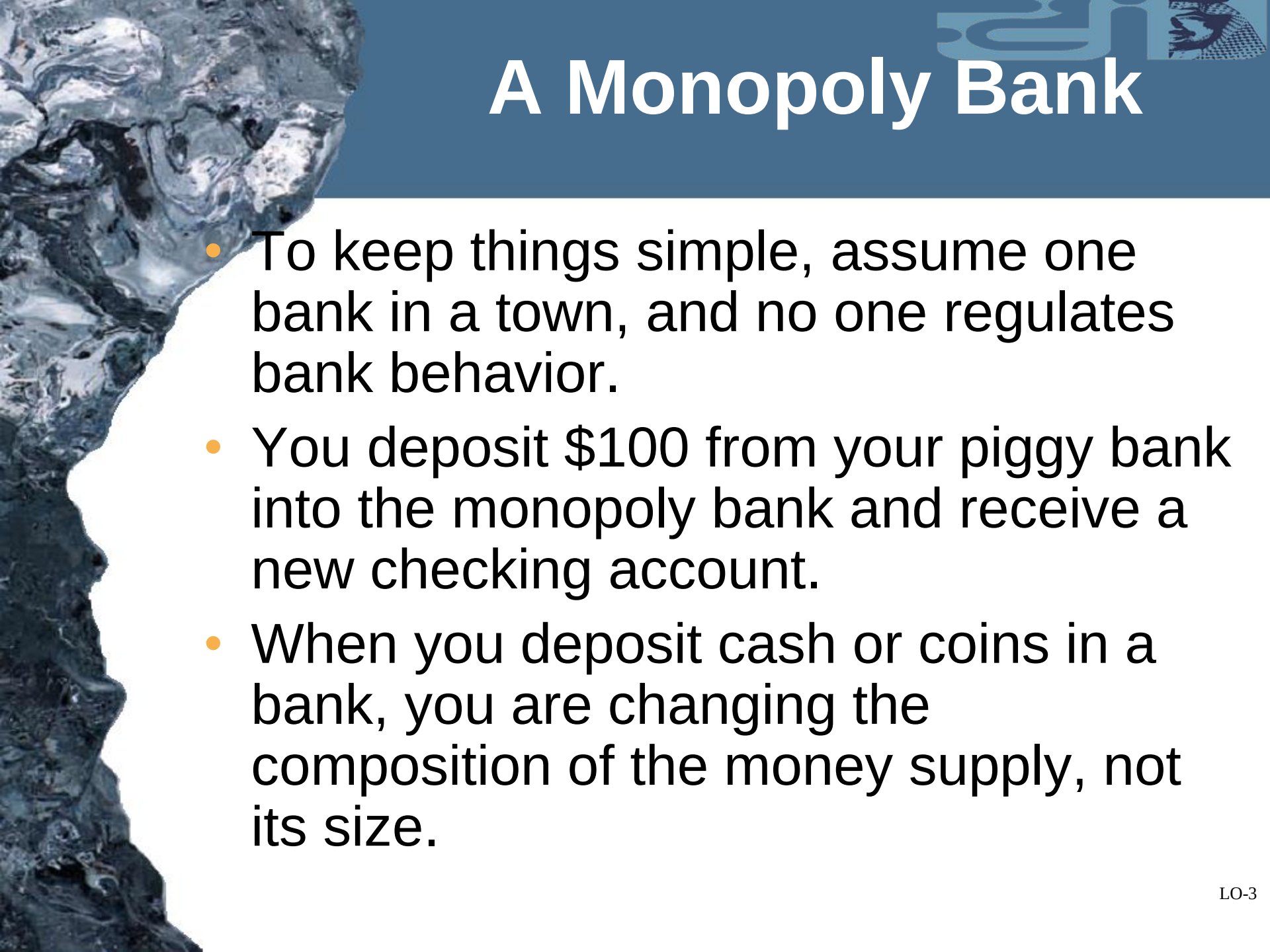
Creation of Money

- The Bureau of Engraving and Printing and the U.S. Mint play only a minor role in creating money.
- Most of what we call money is bank balances, not cash.



Deposit Creation

- In making a loan, a bank effectively creates money, because transactions-account balances are counted as part of the money supply.
- Banks create transactions-account balances by making loans.
- ***Deposit creation***—the creation of transactions deposits by bank lending.



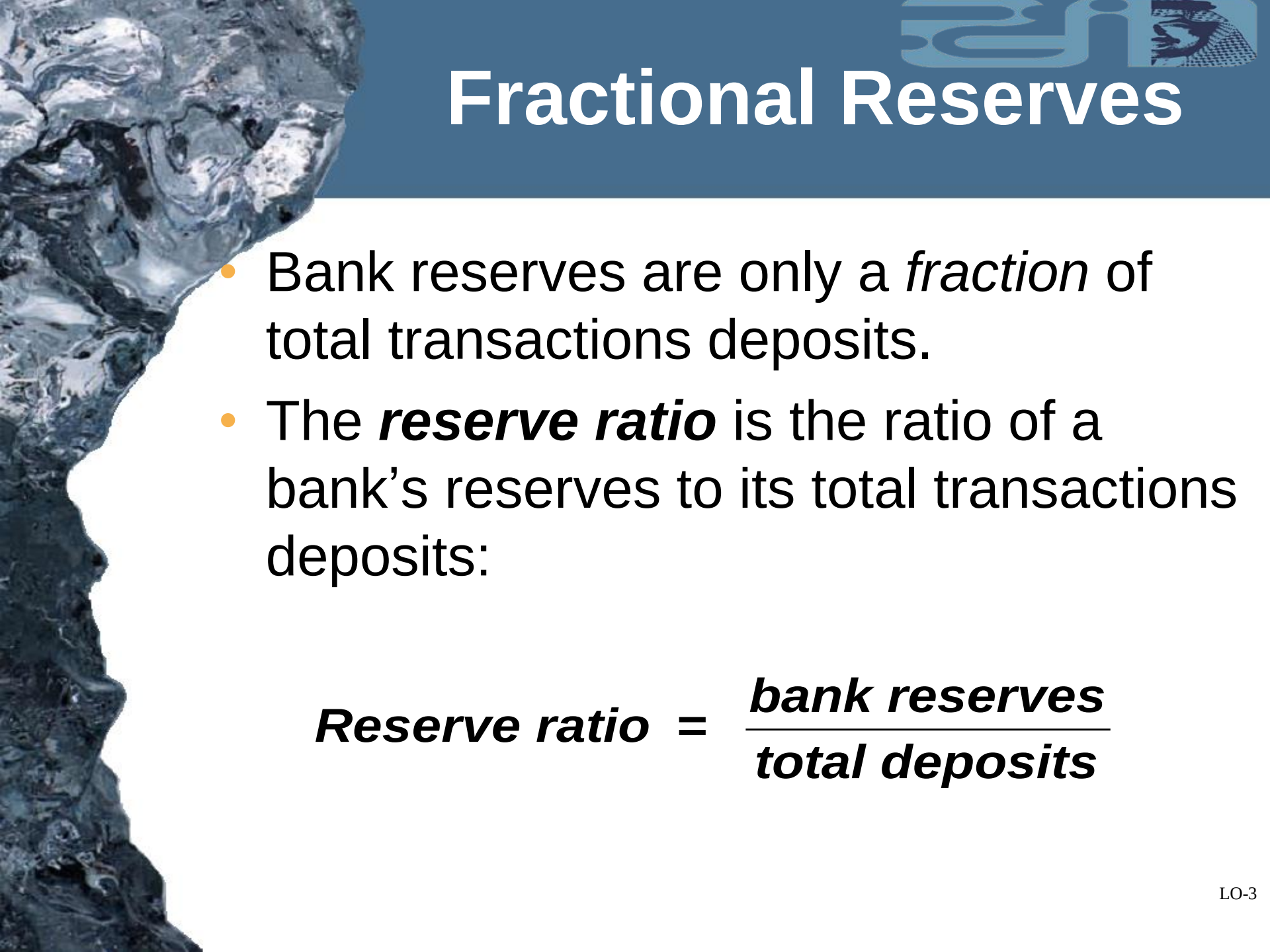
A Monopoly Bank

- To keep things simple, assume one bank in a town, and no one regulates bank behavior.
- You deposit \$100 from your piggy bank into the monopoly bank and receive a new checking account.
- When you deposit cash or coins in a bank, you are changing the composition of the money supply, not its size.



An Initial Loan

- Money has been created because the checking account is considered to be money.
- Total bank reserves have remained unchanged:
 - **Bank reserves** are assets held by a bank to fulfill its deposit obligations.

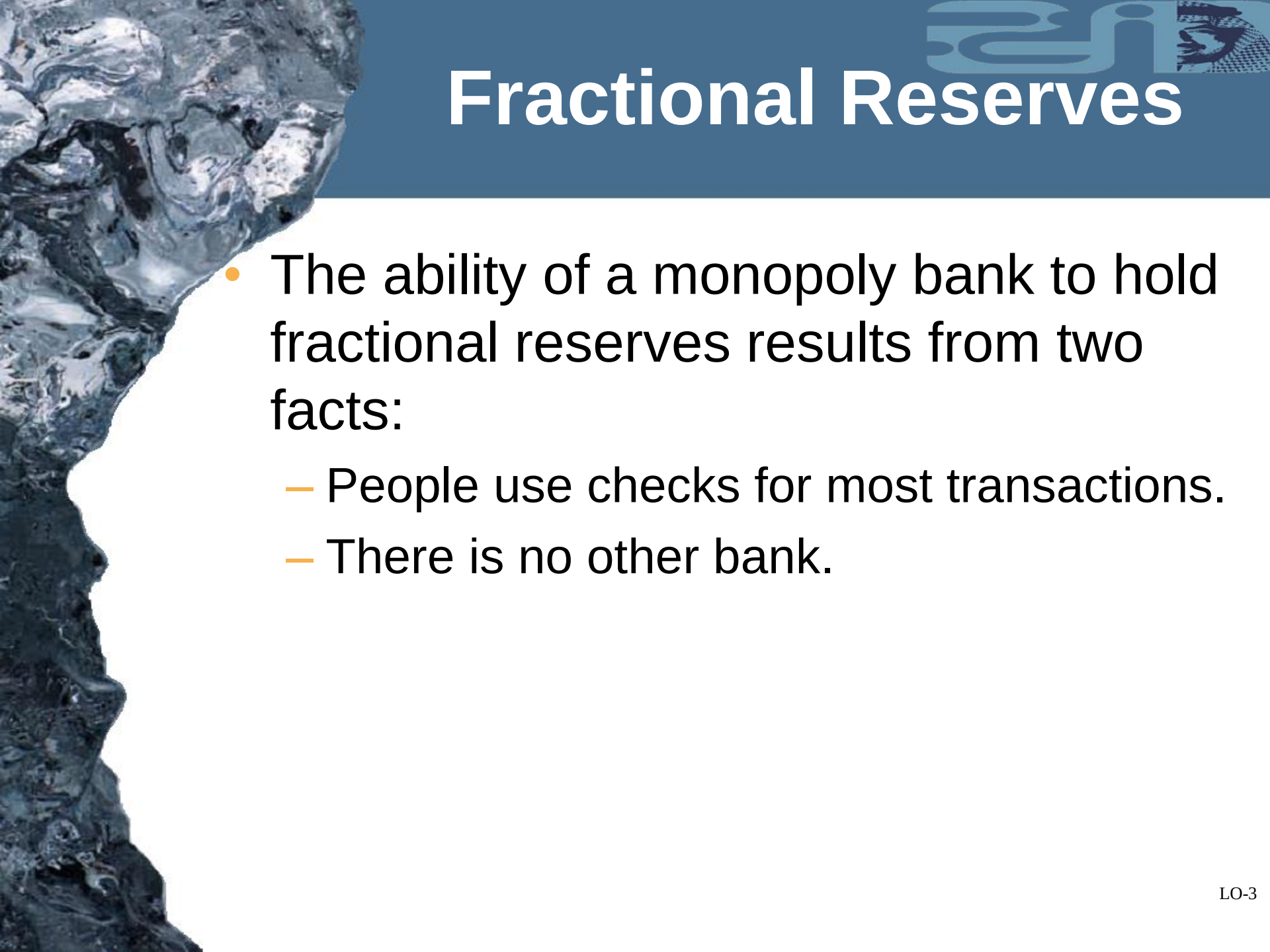


Fractional Reserves

- Bank reserves are only a *fraction* of total transactions deposits.
- The ***reserve ratio*** is the ratio of a bank's reserves to its total transactions deposits:

$$\text{Reserve ratio} = \frac{\text{bank reserves}}{\text{total deposits}}$$

- تلزم مؤسسة النقد المصارف بالاحتفاظ بنسبة من الودائع في صورة نقدية سائلة لدى المؤسسة "البنك المركزي"، وقد حدد المشرع النسبة 7 في المئة للودائع تحت الطلب وكان آخر تعديل عليها في 23 نوفمبر من عام 2008 بعد أن كانت 10 في المئة في منتصف شهر أكتوبر من نفس العام.
- أما الودائع الزمنية والادخارية فتبلغ نسبة الاحتفاظ بجزء منها لدى مؤسسة النقد 4 في المئة وكان هذا آخر تعديل عليها في تاريخ 3 مايو 2008 وقد كانت 2 في المئة في نهاية شهر مارس من نفس العام وذلك بحسب بيانات مؤسسة النقد العربي السعودي.
- وقد أنشئ هذا الإجراء وهو احتفاظ المصارف بجزء من ودائعها لدى البنك المركزي في أميركا خلال إعادة هيكلة المصارف ولم تأخذ بشكل جدي إلا بعد سنة 1935م ثم انتشر بعد ذلك في كل من بريطانيا وألمانيا وبقية دول العالم.
- ويمكن تعريف نسبة الاحتياطي الإلزامي بأنه نسبة تفرض على الودائع من قبل البنك المركزي على المصارف لحماية أصحاب الودائع من إفلاس هذه المصارف في المستقبل من ناحية احترازية، ومن ناحية أخرى تستخدم هذه النسبة التحكم في الاقتصاد وكمية النقد في الأسواق عن طريق زيادة النسبة أو تقليلها.



Fractional Reserves

- The ability of a monopoly bank to hold fractional reserves results from two facts:
 - People use checks for most transactions.
 - There is no other bank.



Required Reserves

- The minimum reserve requirement directly limits deposit-creation possibilities.



Reserve Requirements

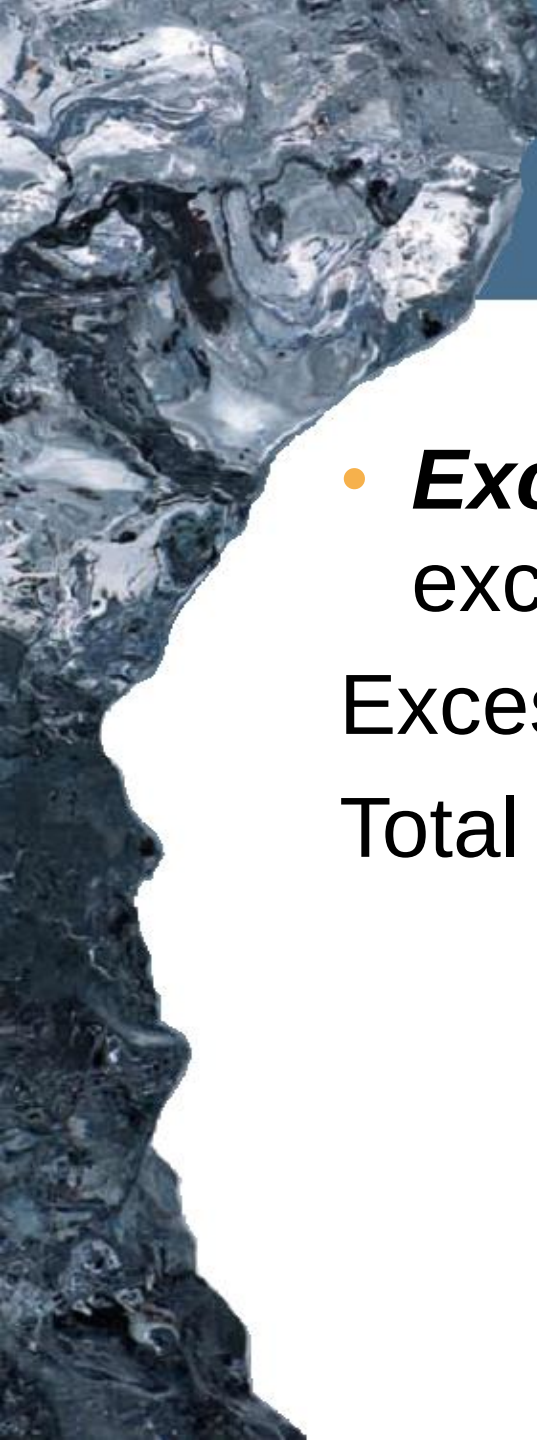
- ***Required reserves*** are equal to the required reserve ratio times transactions deposits:

$$\text{Required reserves} = \text{required reserve ratio} \times \text{total deposits}$$

A decorative image of a marbled rock texture, primarily in shades of blue, grey, and white, located on the left side of the slide.

Reserve Requirements

- The Federal Reserve System requires banks to maintain some minimum reserve ratio.
- ***Required reserves*** are the minimum amount of reserves a bank is required to hold by government regulation.



Excess Reserves

- ***Excess reserves*** are bank reserves in excess of required reserves:

Excess Reserves =

Total Reserves – Required Reserves



Excess Reserves

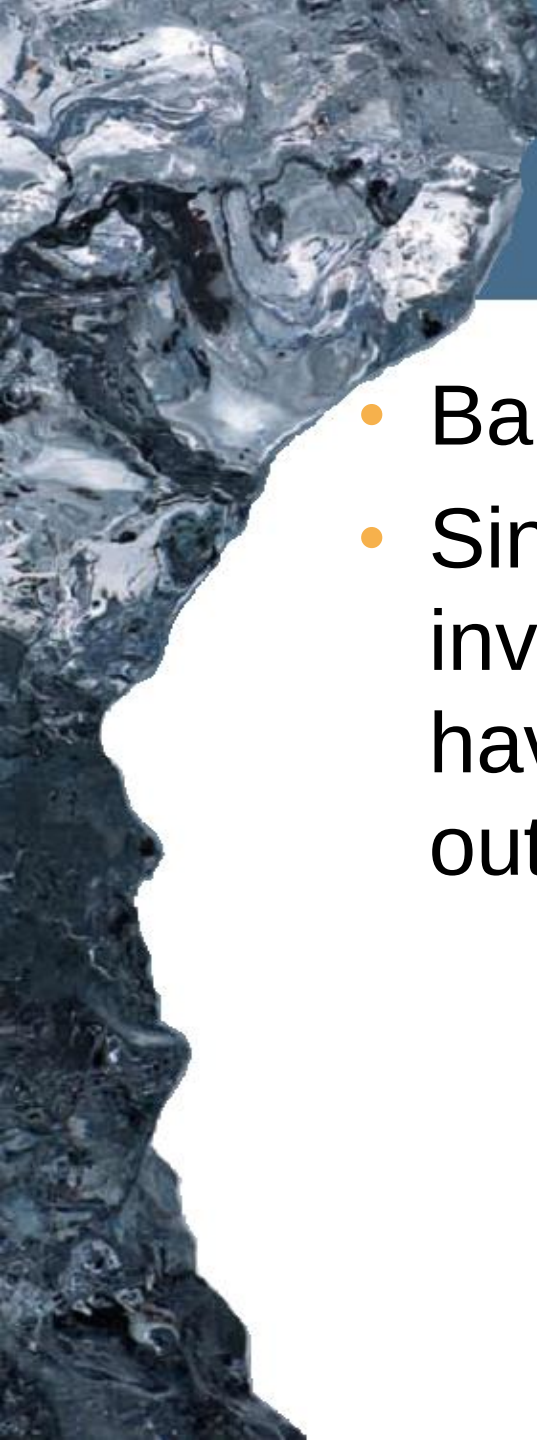
- The ability of banks to make loans depends on access to excess reserves.
- So long as a bank has excess reserves, it can make additional loans.
- If a bank currently has \$100 in reserves and is required to hold \$75, it can lend out the excess \$25.

- **2.731 مليار دينار احتياطات نقدية فائضة للبنوك لدى المركزي الأردني**
- الجزيرة: أعلن البنك المركزي الأردني أن الاحتياطيات النقدية الفائضة للبنوك لديه بلغت اليوم "الأربعاء" 2.731 مليار دينار بما فيها الأموال المودعة لليلة واحدة في نافذة الإيداع. البنك المركزي الأردني وقال البنك في بيان إن الاحتياطيات الإلزامية بلغت 1.118 مليار دينار،...



A Multibank World

- In reality there is more than one bank in town.
- The key issue is not how much excess reserves any specific bank holds but how much excess reserves exist in the *entire* banking system.



The Macro Role of Banks

- Banks can create money.
- Since virtually all market transactions involve the use of money, banks must have some influence on macro outcomes.

Financing Aggregate Demand

- Banks perform two essential functions:
 - Banks transfer money from savers to spenders by lending funds (reserves) held on deposit.
 - The banking system creates additional money by making loans in excess of total reserves.



Constraints on Money Creation

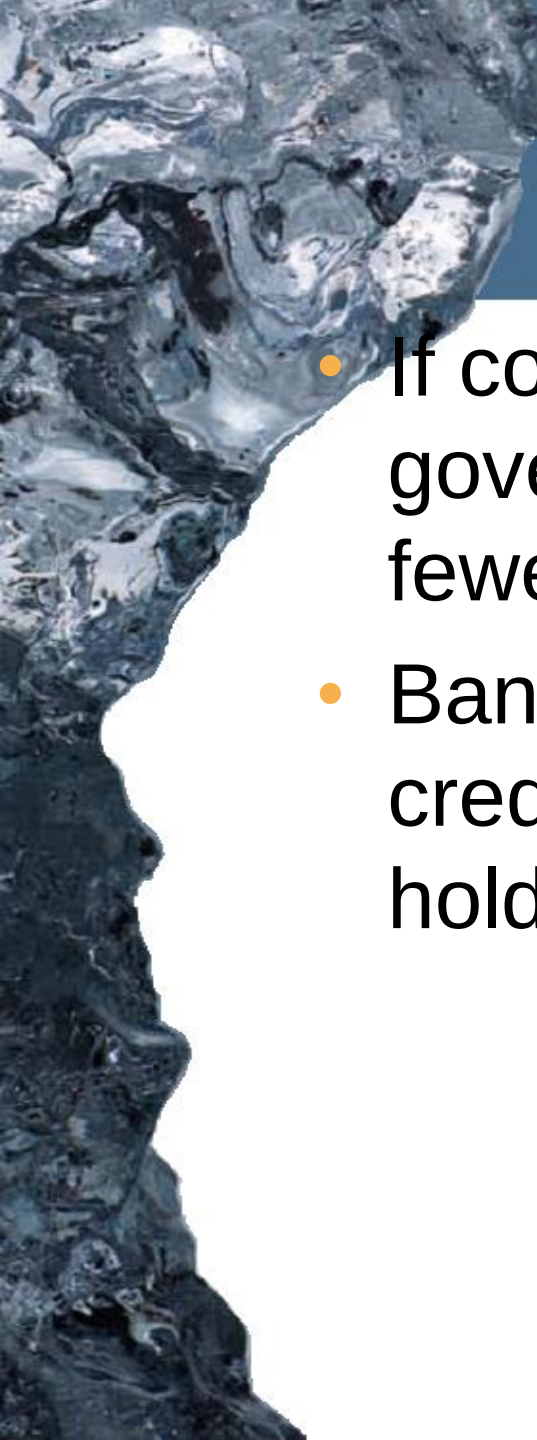
- There are four major constraints on banks' lending ability:
 - Bank Deposits
 - Willing Borrowers
 - Willing Lenders
 - Government Regulation





Bank Deposits

- Bank reserves will be lower if people prefer to hold cash rather than make deposits in their transactions accounts.



Willing Borrowers and Lenders

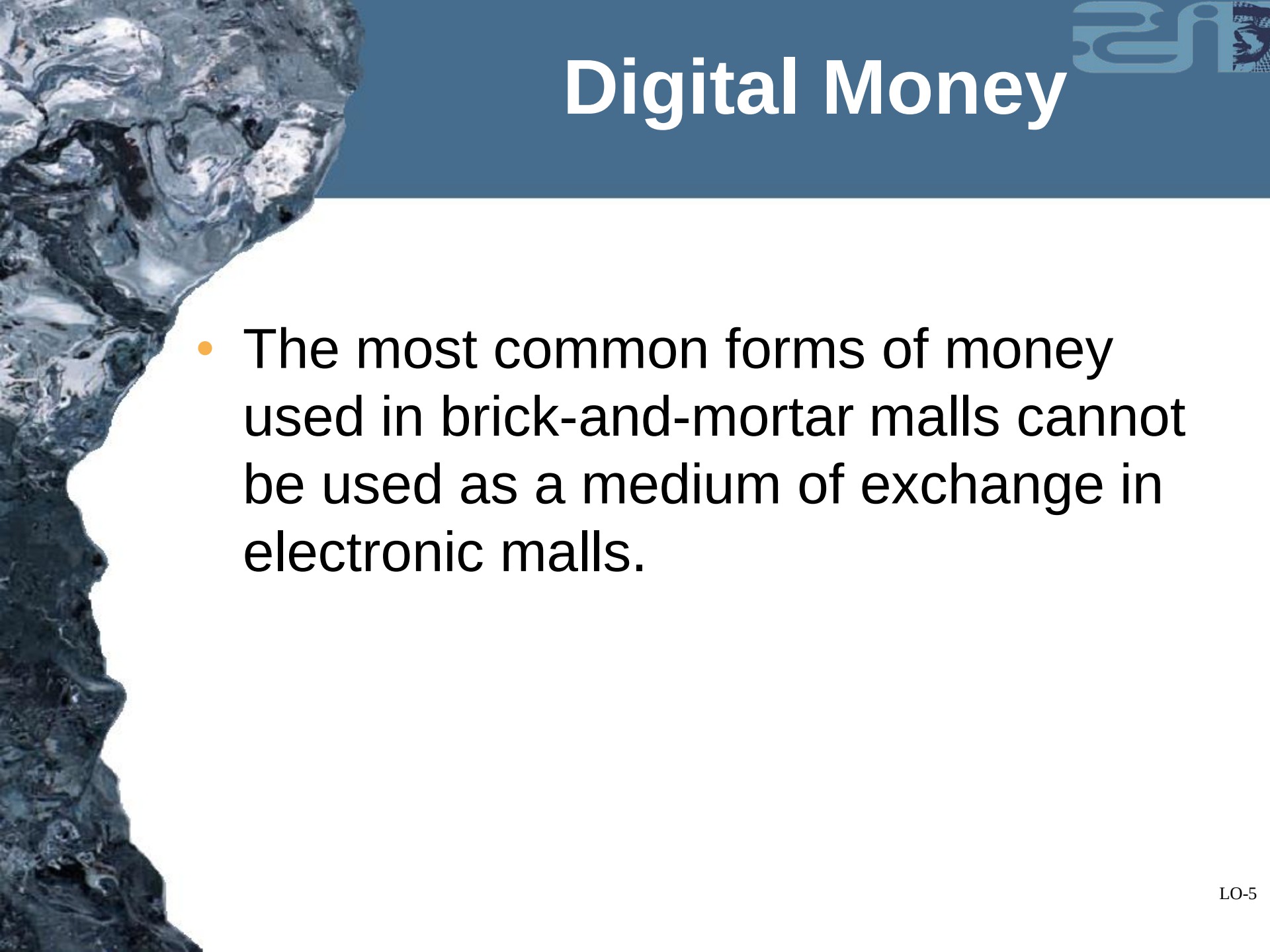


- If consumers, businesses, and governments don't want to borrow, fewer deposits will be created.
- Banks may not be willing to satisfy credit demands, choosing instead to hold excess reserves.



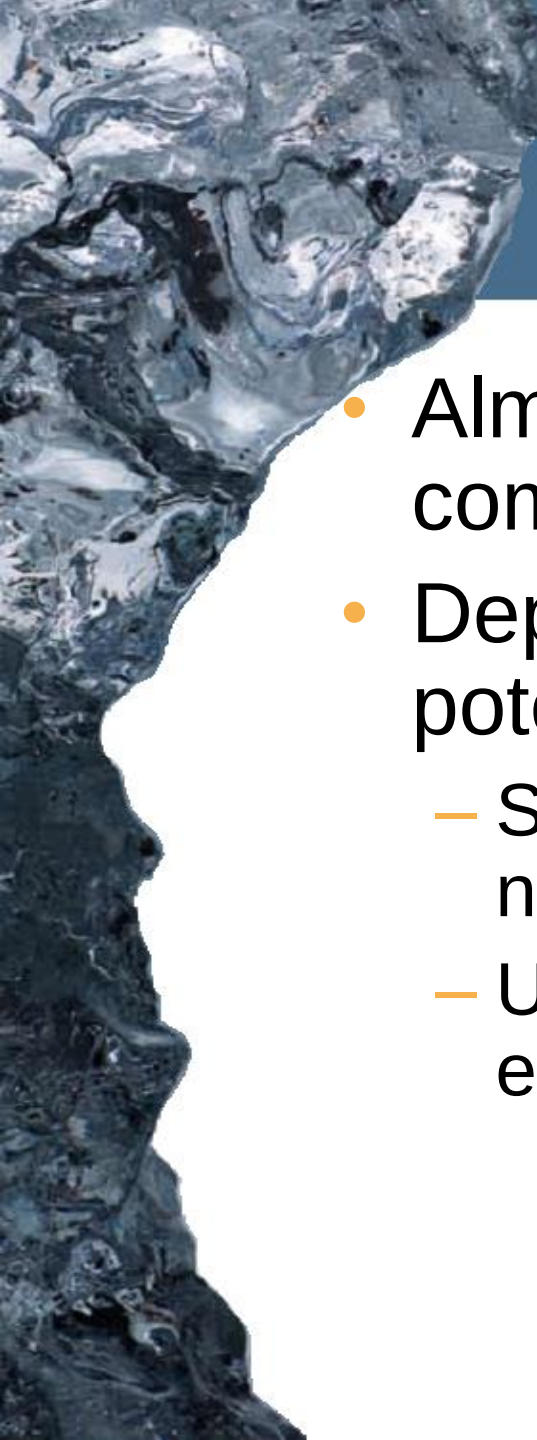
Government Regulation

- The Federal Reserve regulates bank lending practices.



Digital Money

- The most common forms of money used in brick-and-mortar malls cannot be used as a medium of exchange in electronic malls.



Credit Cards

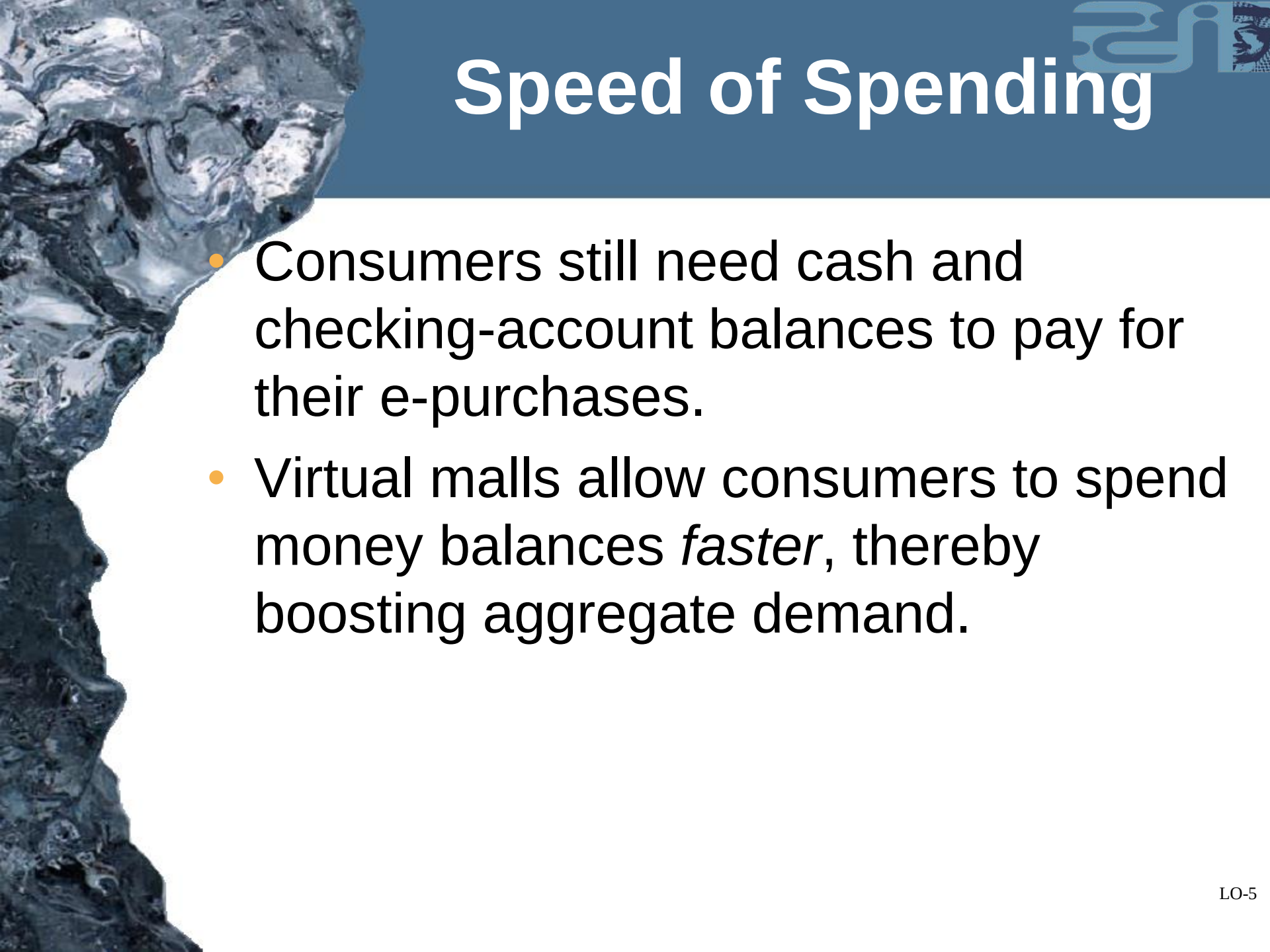


- Almost all Internet purchases are completed with a credit card.
- Dependence on credit cards limits the potential of e-commerce because of:
 - Security issues such as credit card number theft.
 - Use and sale of credit card databases by e-retailers for undisclosed purposes.

E-Payments



- Some companies offer a quasi-banking service by storing purchasing power that consumers and e-retailers can access.
- Consumers must “deposit” e-cash with credit card advances.



Speed of Spending

- Consumers still need cash and checking-account balances to pay for their e-purchases.
- Virtual malls allow consumers to spend money balances *faster*, thereby boosting aggregate demand.



- End chapter 7