Lecture 3

The Roles of Central Banks

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Topics included in today's lecture

- Origin of central banks
- Roles of central banks
- Federal Reserve System in the US
- the European Central Banks
- Central Banks in
  - Canada
  - UK
  - Japan
  - China
- Should central banks be independent from the government?

Origin of Central Banks

- King William of Orange created the central bank to finance wars.
- Napoleon Bonaparte did it in an effort to stabilize his country's economic and financial system.
- These examples are more an exception because central banking is largely a 20th century phenomenon.
- In 1900, only 18 countries had a central bank.
- The U.S. Federal Reserve began operation in 1914.
- As the importance of a government and the financial system grew, the need for a central bank grew along with it.

Central Banks in a Timeline

- The oldest is Sweden's Riksbank – 1668
- Bank of England – 1694
- Bank of France – 1800
- Bank of Japan -1882
- Federal Reserve System was founded by Congress in 1913
- Bank of Canada in 1934
- People’s Bank of China in 1948
- ECB (European Central Bank) – 1999

Roles of Central banks

- Money Supply
- Maintain a low, stable inflation
- Maintain a high, stable real growth rate
- Financial system stability
- Stable interest rate
  - Why is interest-rate volatility a problem?
- Stable exchange rate
  - Stable exchange rates are particuarlly important for emerging economies

Money Supply

Money Supply The stock of the medium of exchange supplied by the central bank.

	Types of Financial Assets
M1	Currency in Circulation [C] + Demand Deposits [D]
M2	M1 + Savings Deposits + "Small" Time Deposits + [Liquid Money Market Instruments inc/ "Small" NCD's]
M3	M2 + LTD ["Large" Time Deposits and NCD's]

Anchoring the Money Supply

Popular in 1970s and 80s, Used by ECB till 2003

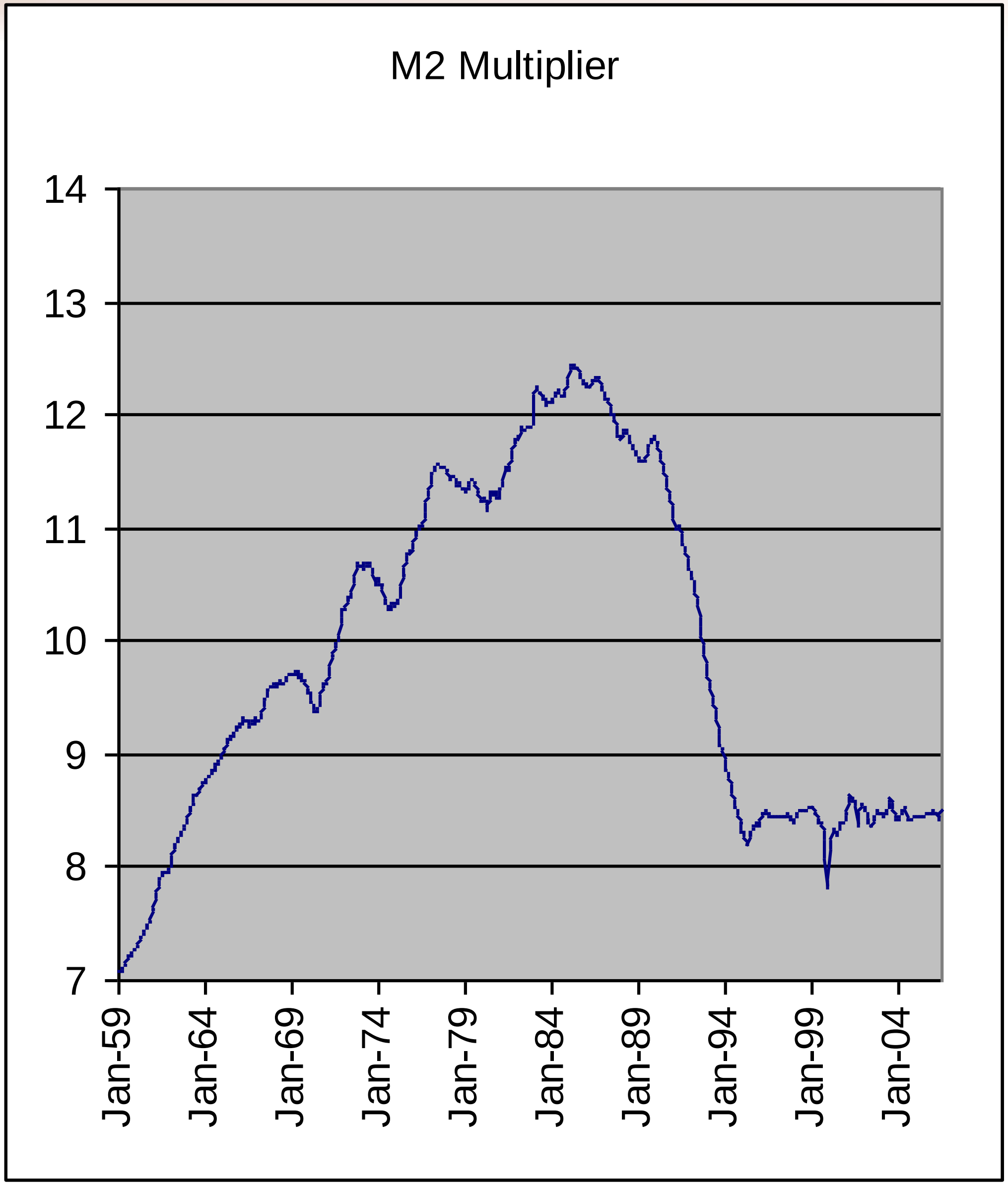
Monetary Base (M1)	*	Money Multiplier M2	=	Money Supply M3

Banknotes & Reserve Accounts under the control of central bank

Fractional reserve banking

US M2 Money Multiplier

- The history of volatility of the M2 multiplier has convinced the Fed that it is impossible to control the money supply through their control of the monetary base.



Link between Money Supply and Economy

Money Supply * Velocity = Nominal Spending Power

Speed of circulation of money supply

Functions of Central Banks

Country	Monetary Policy	Bank Supervision	Note Issue
US	✓	**Part**	
UK	✓		✓
France		✓	
Germany		**Small Part**	
Italy		✓	
Japan	✓	**Small Part**	✓
Canada	✓		✓
China	✓		✓
[ECB	✓		✓ **]**

Structure of the Federal Reserve System

- Design was intended to diffuse power along the following dimensions:
  - Regions of the U.S.
  - Government and private sector interests
  - Needs of bankers, businesses, and the public
- The system as it exists now includes:
  - 12 Federal Reserve Banks
  - Board of Governors (BOG) of the Federal Reserve System
  - Federal Open Market Committee (FOMC)
  - Federal Advisory Council
  - Member Banks (around 2,800)

Structure of the Federal Reserve System

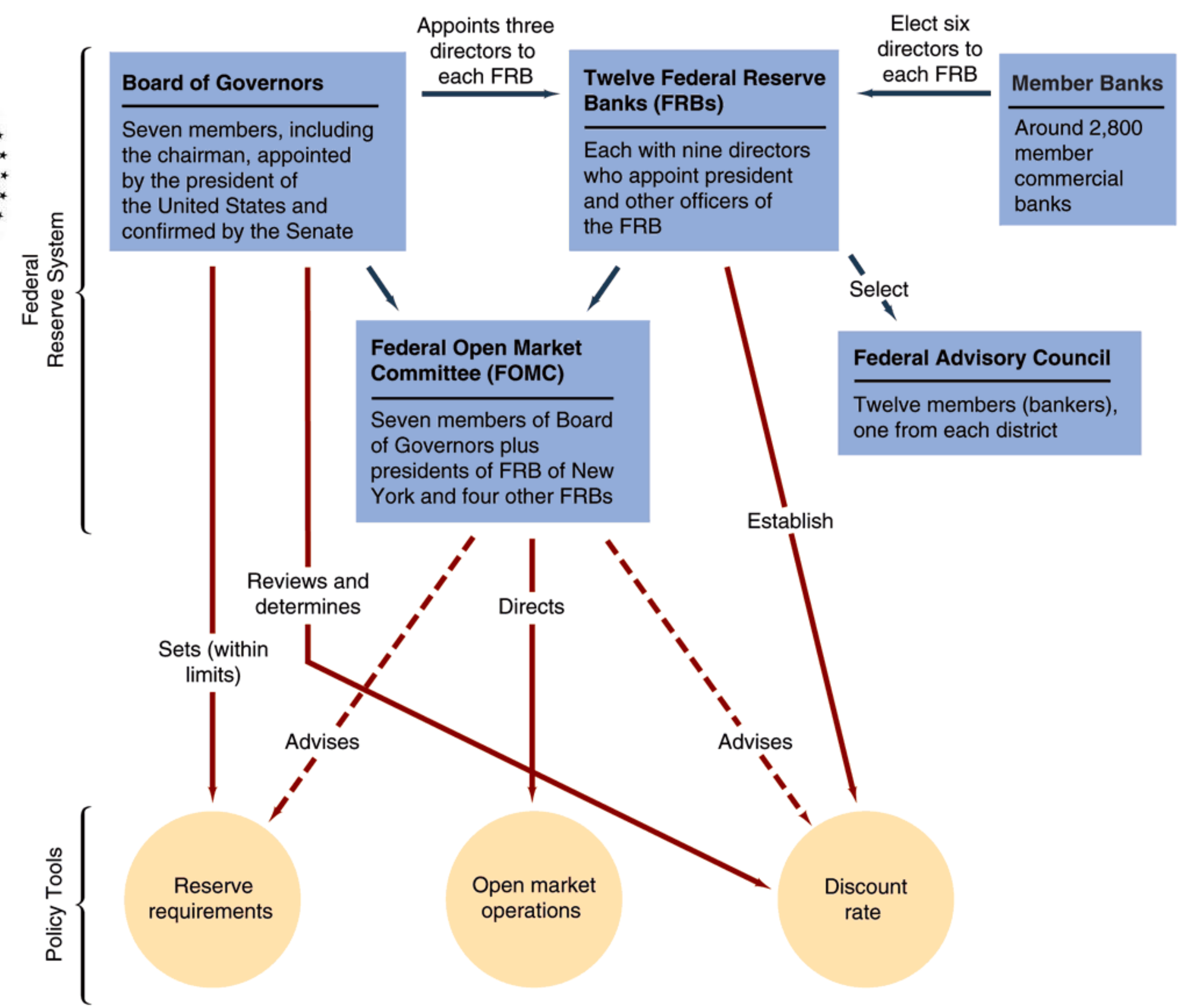


Figure 7.1 Structure and Responsibility for Policy Tools in the Federal Reserve System

Dashed lines indicate that the FOMC "advises" on the setting of reserve requirements and the discount rate.

Federal Reserve Bank Functions: General

- Clear checks
- Issue new currency and remove damaged currency
- Evaluate bank mergers and expansions
- Lender to member banks
- Liaison between local community and the Federal Reserve System
- Perform bank examinations
- Collect and examine data on local business conditions

Federal Reserve Bank Functions: Monetary Policy

- “Establish” the discount rate at which member banks may borrow from the Federal Reserve Bank (subject to BOG review)
- Determine which bank receive loans
- Elect one member to the Federal Advisory Council
- Five of the 12 bank presidents vote in the Federal Open Market Committee

How Independent is the Fed?

- A broad question of policy for the Federal Reserve Systems is how free the Fed is from presidential and congressional pressure in pursuing its goals.
- *Instrument Independence:* the ability of the central bank to set monetary policy instruments.
- *Goal Independence:* the ability of the central bank to set the goals of monetary policy.
- Evidence suggests that the Fed is free along both dimensions. Further, the 14-year terms (non-renewable) limit incentives to curry favor with either the President or Congress.

How Independent is the Fed? Other Evidence

- The Fed usually generates revenue in excess of its expenses, so it is not typically under appropriations pressure.
- However, Congress can enact legislation to gain control of the Fed, a threat wielded as needed. For example, the House Concurrent Resolution 133 requires the Fed to announce its objective growth rate for the money supply.
- Presidential appointment clearly sets the direction of the Fed.

The European Central Bank

- Founded in 1999 by the Maastricht Treaty between the European Central Bank (ECB) and the European System of Central Banks (ESCB).
- Executive board consists of the president, vice president, and four members, all serving eight-year terms.
- The policy group consists of the executive board and governors from the 11 member countries central banks.

The European Central Bank

- The ECB is the most instrument and goal independent central bank in the world. It was given independence in the Maastricht Treaty, and that policy can only be changed by amending the treaty.

- The treaty set the ECB's long-term goal as price stability, so it's not entirely free to pursue its own goals.

Difference between the Fed and the ECB

1. Budgets of the Fed are controlled by the BOG, while the National banks that make up the ECB control their own budgets (and the ECBs).
2. Monetary operations are conducted at the national level, not directly by the ECB.
3. The ECB is not involved in bank regulation or supervision.
4. Only the 18 members attend the monthly meetings of the ECB, with no staff.

Difference between the Fed and the ECB

5. No voting! All decisions are made by consensus.

6. The ECB holds a press conference following the monthly meeting, while the Fed typically doesn't.

7. The ECB may actually expand in the future, while the Fed obviously won't. Other countries which may eventually join include, Sweden, Denmark, and many others.

Structure and Independence of Other Foreign Central Banks

Central banks of other industrial countries consist of one central bank that is owned by the government.

Here, we examine the structure and independence of four important foreign central banks in Canada, UK, Japan and China.

Bank of Canada

- Directors are appointed by the government for three-year terms, and they appoint a governor for a seven-year term.
- A governing council is the policy-making group comparable to the FOMC.
- In 1967, ultimate monetary authority was given to the government. However, this authority has never been exercised to date.

Bank of England

- The "Court" (like board of governors) consists of the governor, two deputy governors (five-year terms), and 16 nonexecutive directors (three-year terms).
- The Monetary Policy committee compares with the U.S. FOMC, consisting of the governor, deputy governors, two other central bank officials, plus four outside economic experts.
- The Bank was the least independent of the central banks, until 1997, when it was granted authority to set interest rates.
- The government can step in under "extreme" circumstances, but has never done so yet.

Bank of Japan (Nippon Ginko)

- The Policy Board sets monetary policy, and consists of the governor, two vice governors, and six outside members. All serve five-year terms.
- The Bank of Japan Law (1998) gave the Bank considerable instrument and goal independence.
- Japan's Ministry of Japan can exert authority through its budgetary approval of the Bank's non-monetary spending.

People's Bank of China

- Between 1950 and 1978, the PBoC serves the entire Chinese financial system as a central bank as well as commercial banks.
- After the economic reform in China, the PBoC departed from the Ministry of Finance and its duty as a commercial bank were divided among 4 state-owned banks.
- In 1983, the State Council confirmed the status of PBoC as the central bank.

People's Bank of China (Cont')

- In 2003, the China Banking Regulatory Commission was established to take over from the PBoC the role of supervising the financial industry. Since then, the main role of PBoC is to formulate and implement monetary policies
- The PBoC has a monetary policy committee, which consists of 13 members including the governor.
- The PBoC is under the leadership of the State Council.

Trend toward Independence

In recent years, we have seen a remarkable trend toward increasing independence.

The Fed used to be substantially more independent than other central banks, but this has changed with the formation of the ECB and changes at other central banks.

This trend should continue.

Arguments for Independence

- The strongest argument for independence is the view that political pressure will tend to add an inflationary bias to monetary policy. This stems from short-sighted goals of politicians. For example, in the short-run, high money growth does lead to lower interest rates. In the long-run, however, this also leads to higher inflation.

Arguments for Independence

- The notion of the *political business cycle* stems from the previous argument.
  - Expansionary monetary policy leads to lower unemployment and lower interest rates—a good idea just before elections.
  - Post-election, this policy leads to higher inflation, and therefore, higher interest rates—effects that hopefully disappear (or are forgotten) by the next election.

Arguments for Independence

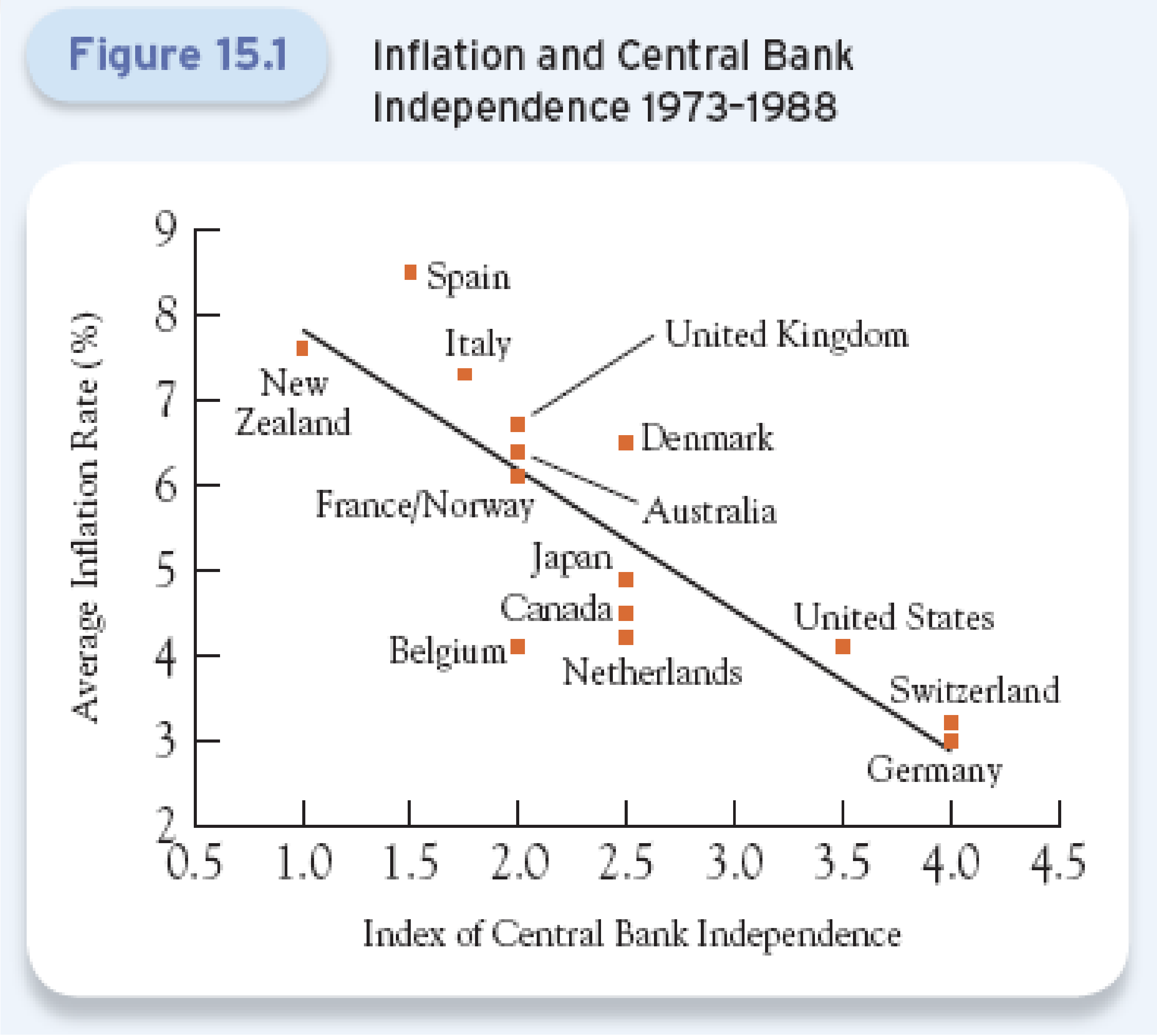
- Other arguments include:
  - The government may seek finance through bonds purchased by the central bank. This may lead to an inflationary bias.
  - Politicians have repeatedly shown an inability to make hard choices for the good of the economy that may adversely affect their own well-being.
  - Its independence allows the central bank to pursue policies that are politically unpopular, yet in the best interest of the public.

Empirical Support for Independence

- Empirical work suggests that countries with the most independent central banks do the best job controlling inflation.

- This is achieved without negative impacts on the real economy.

Inflation and Central Bank Independence



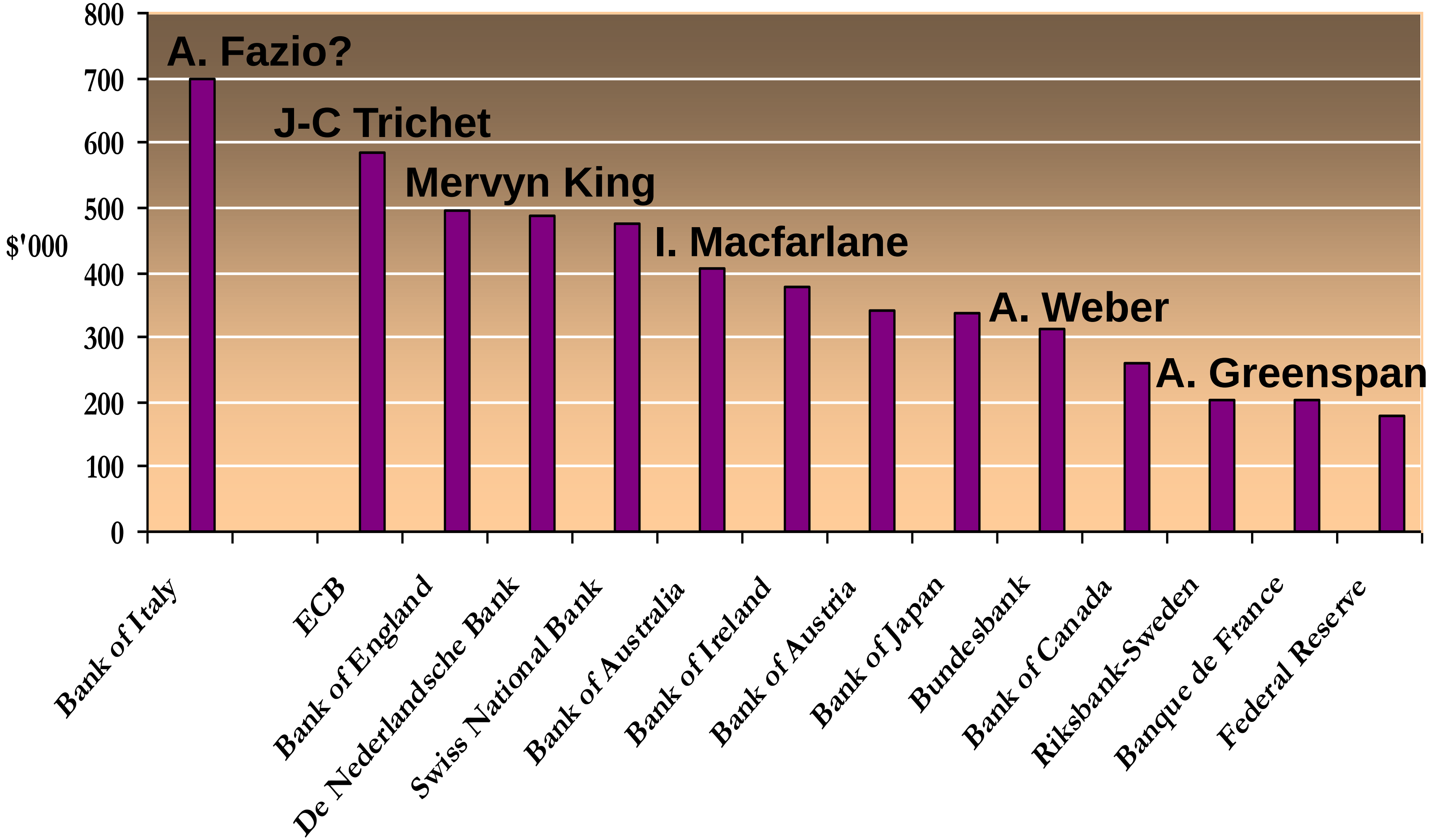
Arguments Against Independence

- Some view central banks' independence as "undemocratic"—an elite group controlling an important aspect of the economy but accountable in few ways.
- If this argument seems unfounded, then ask why we don't let the other aspects of the country be controlled by an elite few. Are military issues, for example, any less complex?
- Indeed, we hold the President and Congress accountable for the state of the economy, yet they have little control over one of the most important tools to direct the economy.

Argument Against Independence

- Further, central banks may not always be successful in the past. For example, the Fed has made mistakes during the Great Depression and inflationary periods in the 1960s and 1970s.
- Lastly, central banks can succumb to political pressure regardless of any state of independence. This pressure may be worse with few checks and balances in place.

Central Bankers' Salaries ($'000)



Source: FT, 28/10/2005 (CentralBankNet.com for Fazio's unconfirmed 2003 salary)