The Levy Economics Institute of Bard College

The Macroeconomy: finance, monetary policy and production in historical perspective

THE INTERNATIONAL WORKING GROUP ON GENDER, MACROECONOMICS AND INTERNATIONAL ECONOMICS

(GEM- IWG)

5th International Intensive Course

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MACROECONOMY

- Production
- Labor
- Finance – Capital markets

VOLCKER'S FEDERAL RESERVE (1979-1987)

- The Federal Reserve's experiment of *practical monetarism* showed there was no empirical correlation of M1 and inflation (and nominal income)

- It brought record interest rates which led to

    - high unemployment rates up to 9.7%

    - the Savings and Loan crisis

    - rising debt ratios of domestic firms and foreign countries

GREENSPAN'S FEDERAL RESERVE OF MOVING TARGETS AND SOFT LANDINGS (1987-2006)

- Continues tight monetary policy leading to
  - capital losses in bond markets
  - stock market crashes of 1987 and 1989
  - unraveling of the junk bond market
  - forced to pump liquidity to avert financial crises
- Returns to tight policy once crises are abated
- Announces goal of "soft landings" to be achieved through tight policy
  - raises discount rate 11 times to 7% through 1990

- **Reduces short-term rates after recession (1991-2)**
- **Announces (1993) a change in target variables: long-term real interest rates**
    - **admits that real interest rates are not observable**
    - **expected inflation becomes a guide**
- **Fears future inflation, raises federal funds rate (1994)**
- **Debate on rules vs. discretion (Taylor Rule)**
- **Uses “intuitive” policy making to avert future inflation**
    - **accommodates the Clinton expansion**
    - **tightens money policy 1999**
    - **reverses policy in 2001-2002**
    - **tightens money policy 2004-2005**
    - **lowers interest rates and establishes the “New Monetary consensus”**
    - **agents and financial markets accept the notion of the “Greenspan Put”**

MONETARY- POLICY RULE

$$R_t = RR^* + d_1 Y^g_t + d_2 (p_t - p^*)$$

where: R is nominal rate of interest

RR* is the equilibrium real rate of interest consistent with zero output gap

Y^g is the output gap

p_t is the rate of actual inflation

p* is the desired inflation

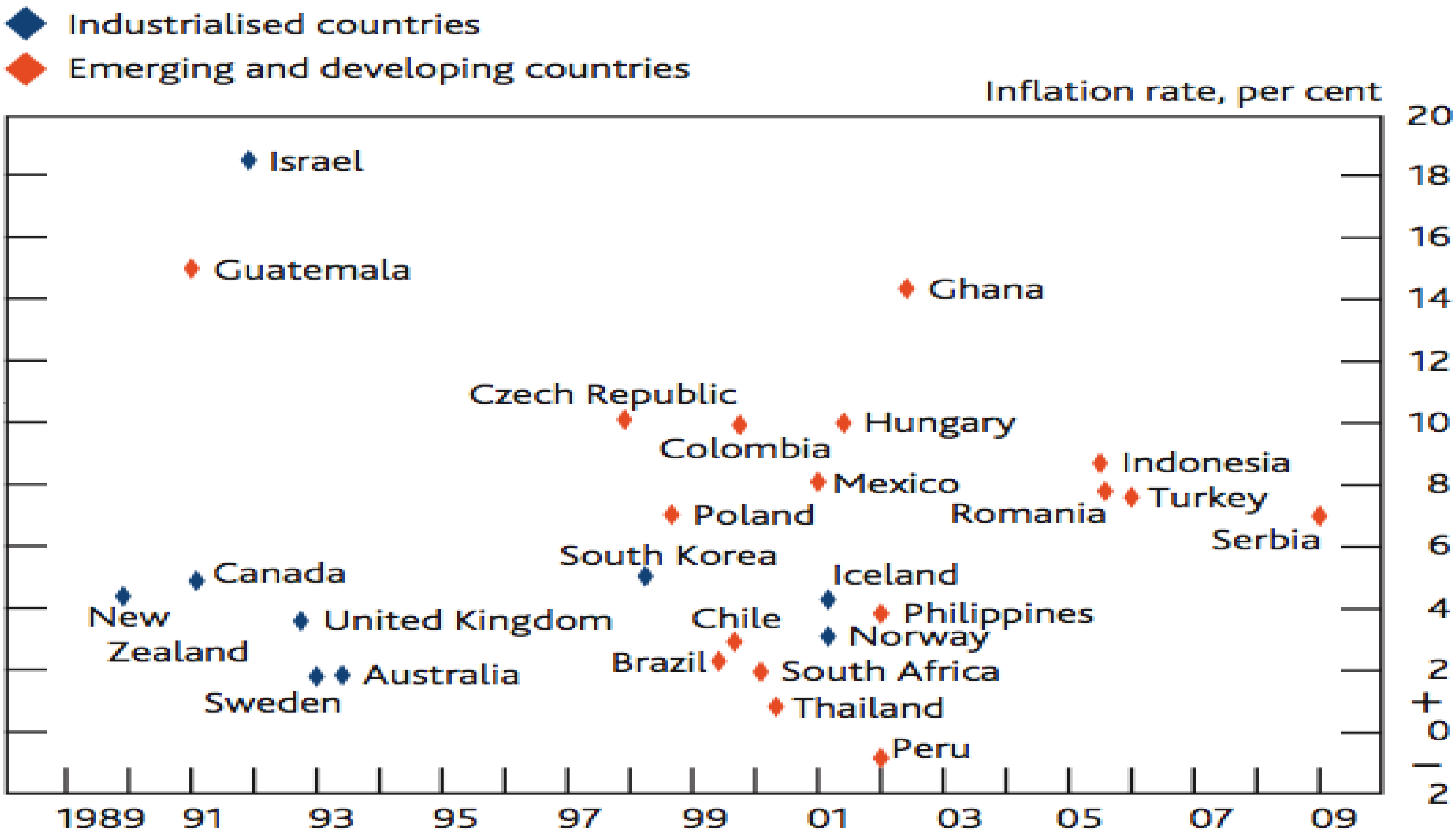
$d_1 = 0.5$ and $d_2 = 1.5$ (normally)

INFLATION TARGETING

Basic tenets

- the setting by government of a numerical target range for inflation
- the use of monetary policy to achieve the target with interest rate adjustments
- operation of monetary policy by an “independent” Central Bank
- monetary policy cannot affect real variables in the long-run; it can only affect inflation

26 Countries operating a fully fledged inflation-targeting regime



Sources: Bank of England and other central bank websites.

EMPIRICAL RESULTS

- **Failure to produce *convincing* evidence that inflation targeting improves inflation performance and policy credibility**

- **In a number of countries (New Zealand, Canada, U.K.) inflation had been "tamed" well before adoption of inflation targeting**

- **In a study of 20 OECD countries, seven of which adopted inflation targeting no evidence was found of improvement in economic performance as measured by inflation, output and interest rates**

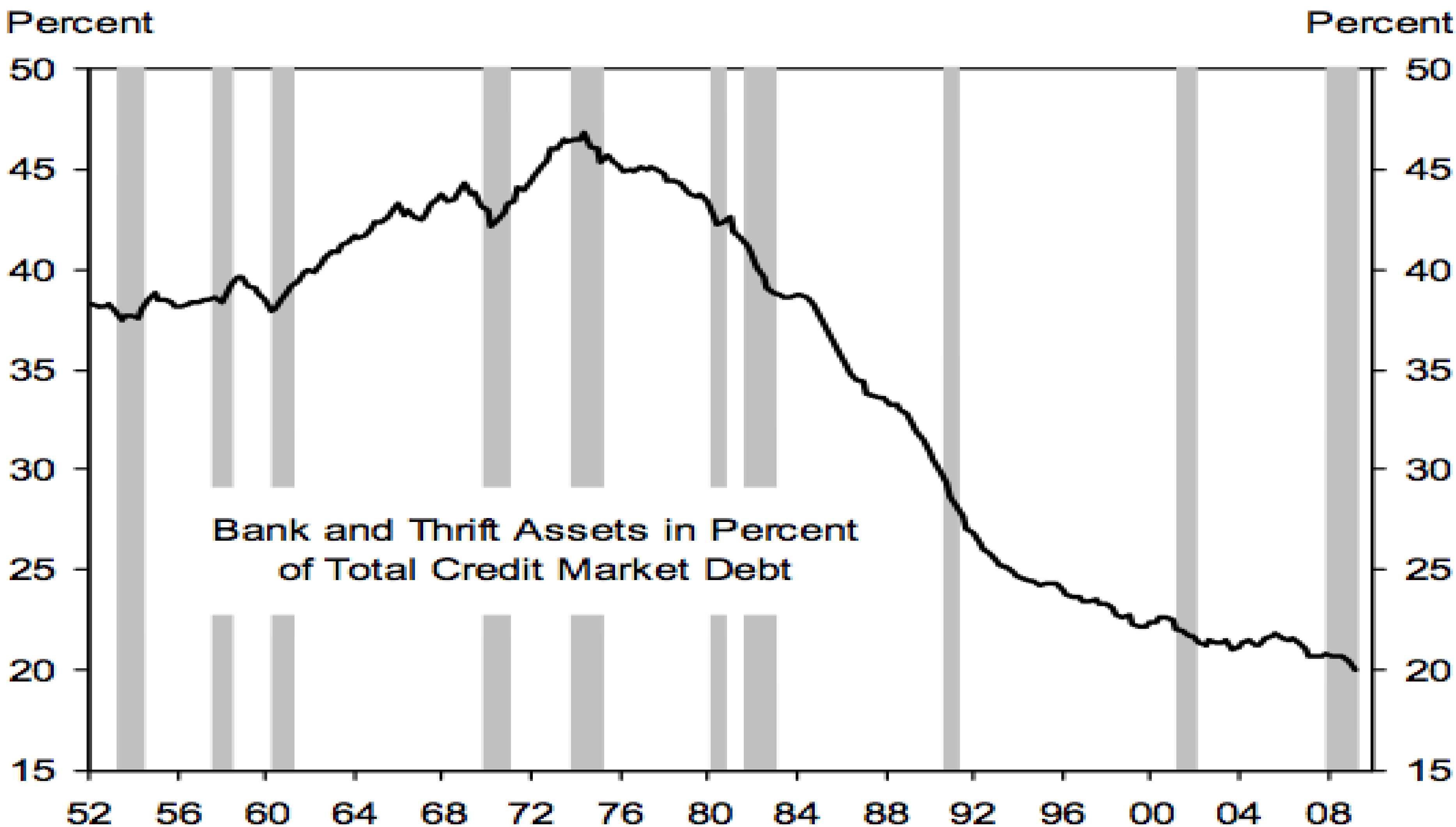
CONCLUSION

- The apparent success of inflation targeting countries is merely due to their high initial inflation…but the decrease for an initial level looks similar for targeters and non-targeters

- The recent "low inflation" era is not different for targeters and non-targeters and non-inflation targeting countries. Consequently, inflation targeting has been a great deal of fuss about very little

EVOLUTION OF FINANCIAL MARKETS

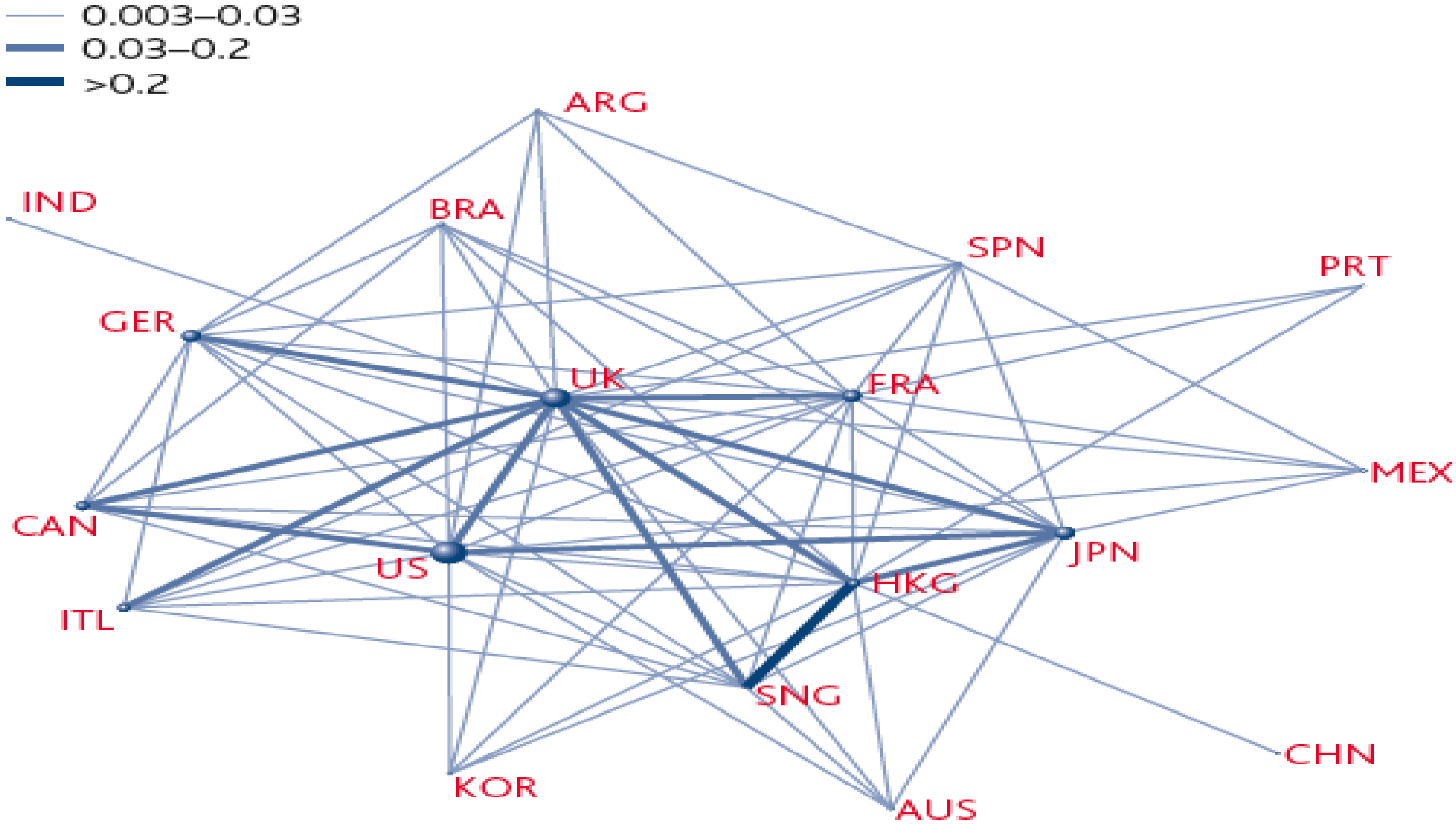
Banks Have Become Less Important for Credit Intermediation



Source: Federal Reserve Board.

FINANCIAL GLOBALIZATION

Global financial network, 1985

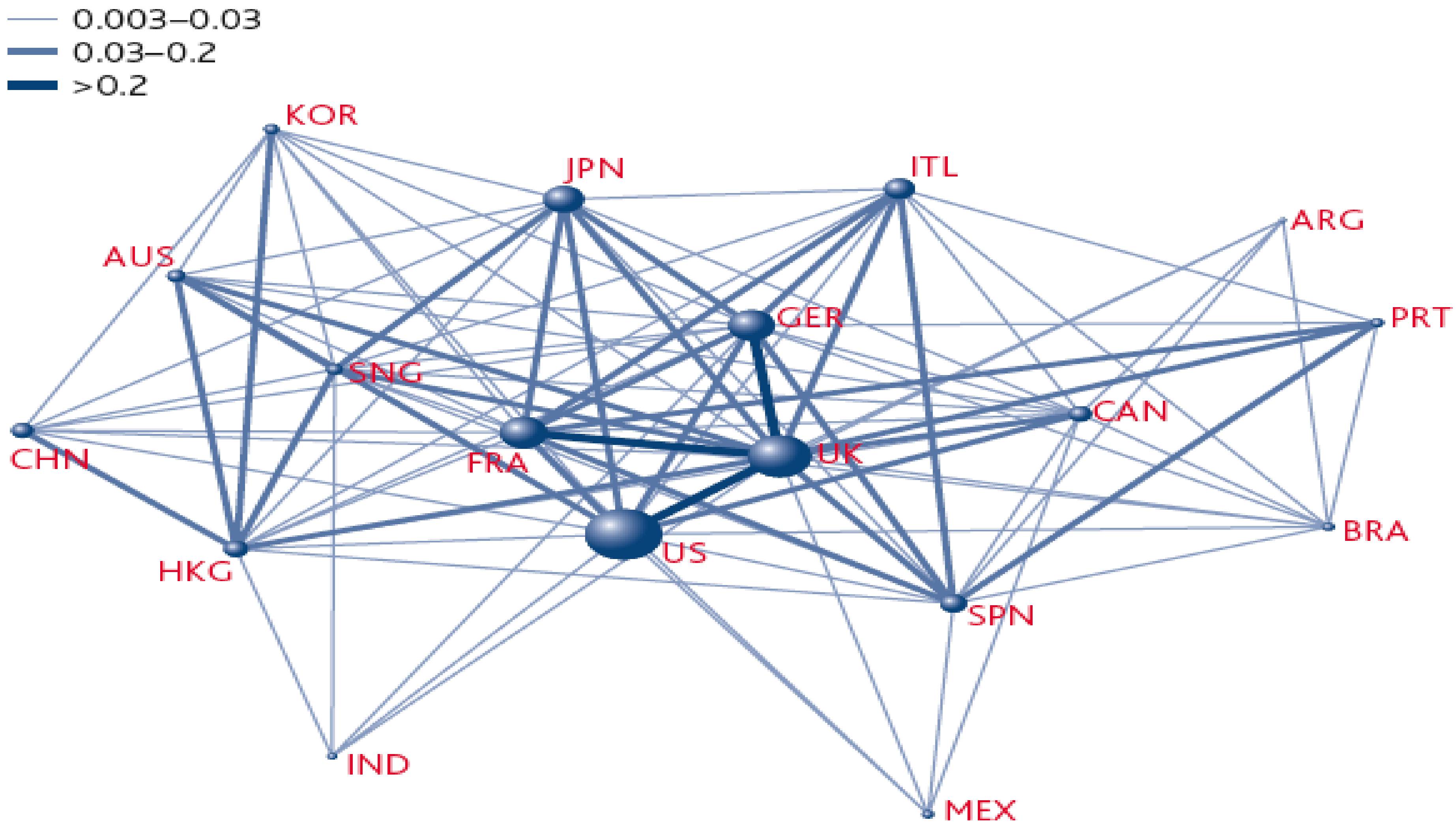


Sources: BIS, IMF, OECD, UNCTAD and Kubelec and Sa (2009).

NOTE: Nodes represent countries and are scaled in proportion to a country's gross external financial stocks (Total External Assets + Total External Liabilities). The thickness of the lines between the nodes is proportional to the bilateral external financial stocks, relative to the nodes' combined GDP, ie (Total External Assets$_{ij}$ + Total External Liabilities$_{ij}$)/(GDP$_i$ + GDP$_j$).

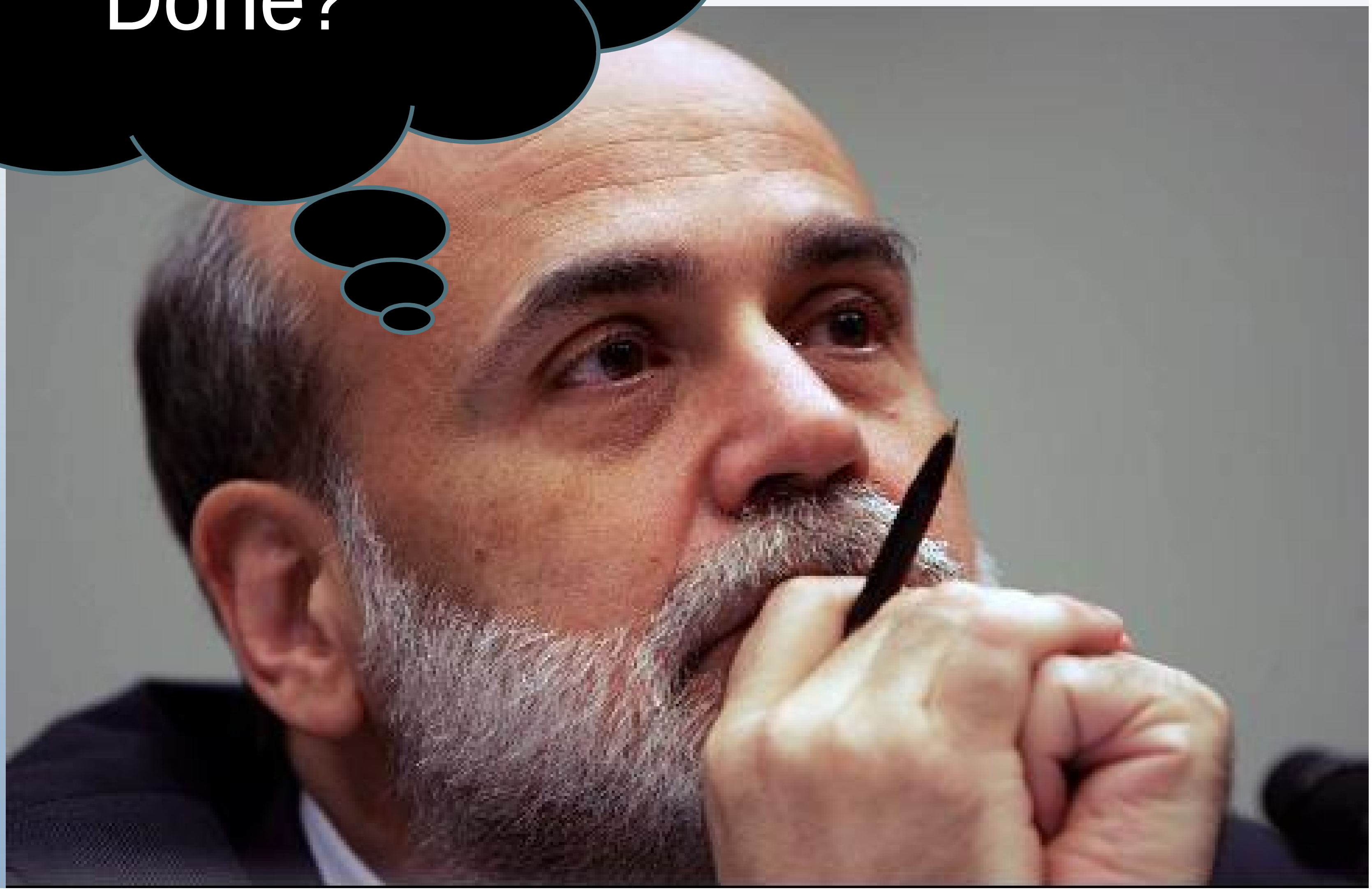
FINANCIAL GLOBALIZATION

Global financial network, 2005



Sources: BIS, IMF, OECD, UNCTAD and Kubelec and Sa (2009).

What Can Be Done?



MINSKY'S ANALYSIS

- Inherent and fundamental instability in the economy that tends toward a speculative boom
- Concern with agents' behavior during euphoric times
- Processes generating financial fragility are "natural" or endogenous to the system
- Rejection of equilibrium methodology in favor of "periods of tranquility" characterized by a robust financial system and few innovations
- But, "stability is destabilizing"
- Financing investment is important source of instability

MINSKY'S TREATMENT OF INVESTMENT FINANCE

- Internal Funds
- External (Borrowed) Funds
  - Lender's risk
  - Borrower's risk
- Financing profiles of firms
  - Hedge
  - Speculative
  - Ponzi
- Transitioning from Hedge to Speculative to Ponzi

Conclusion:

Investment-led growth would transform the financial system to an increasingly fragile one

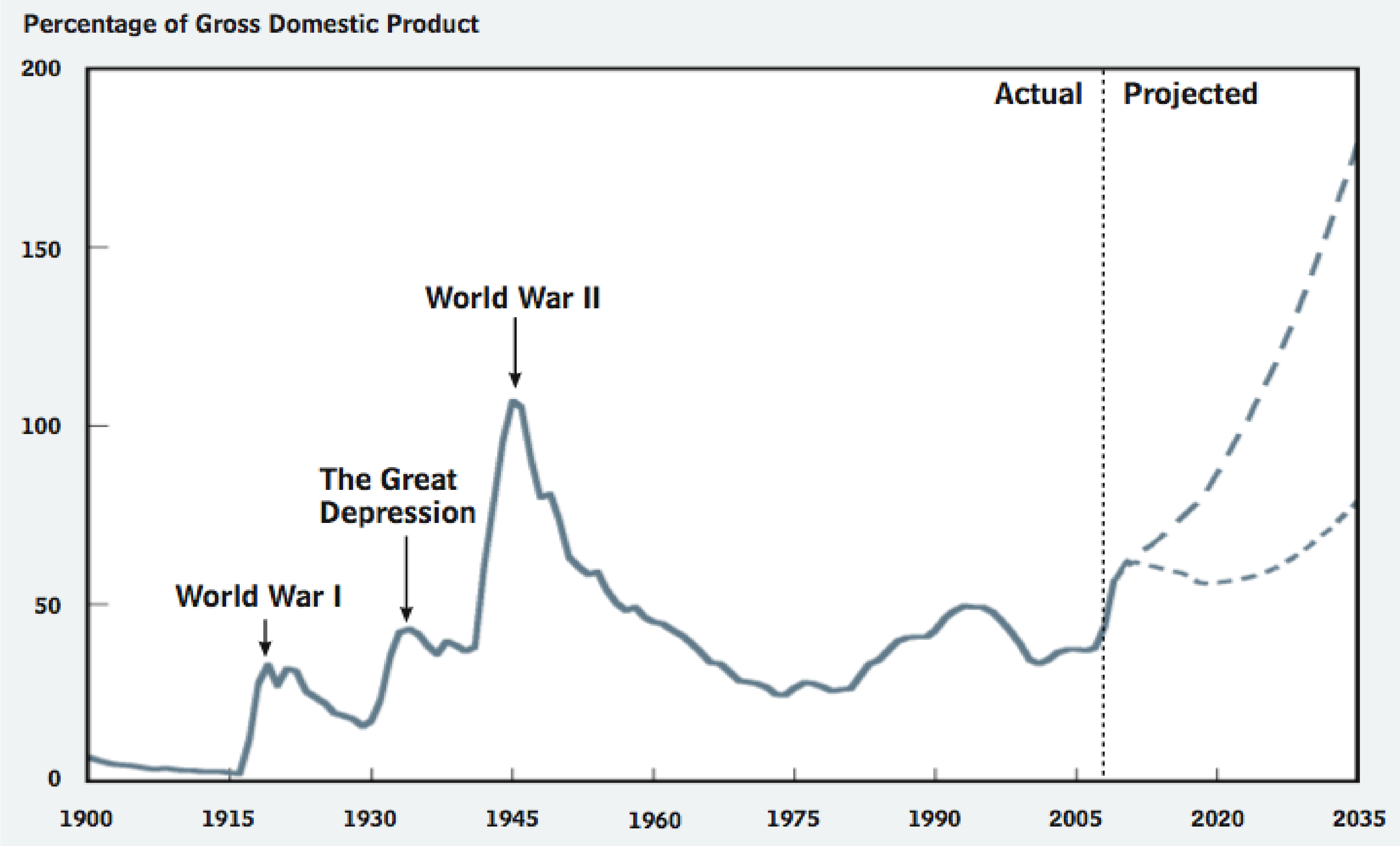
CAN “It” HAPPEN AGAIN?

- **Big Government**
- **Big Bank**
- **Institutional constraints must adapt to changing circumstances**
- **Anti-Laissez-Faire intervention to prevent invisible hand from operating**

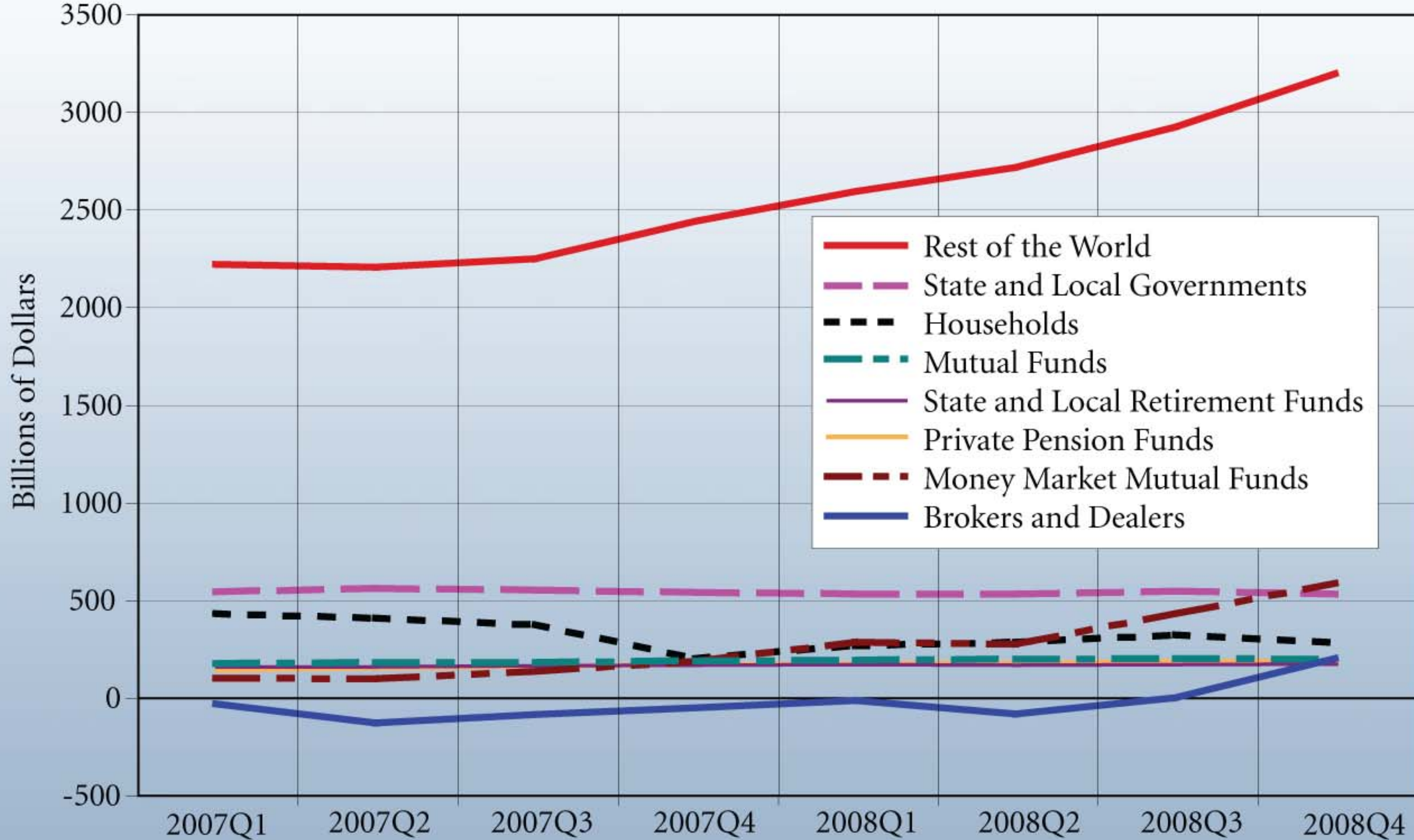
“The aptness of institutions and interventions will largely determine the extent to which the path of the economy through time is tranquil or turbulent: progressive, stagnant or deteriorating” (1994)

BIG GOVERNMENT

Federal Debt Held by the Public Under CBO's Two Budget Scenarios



Treasury Securities Holdings by Sector

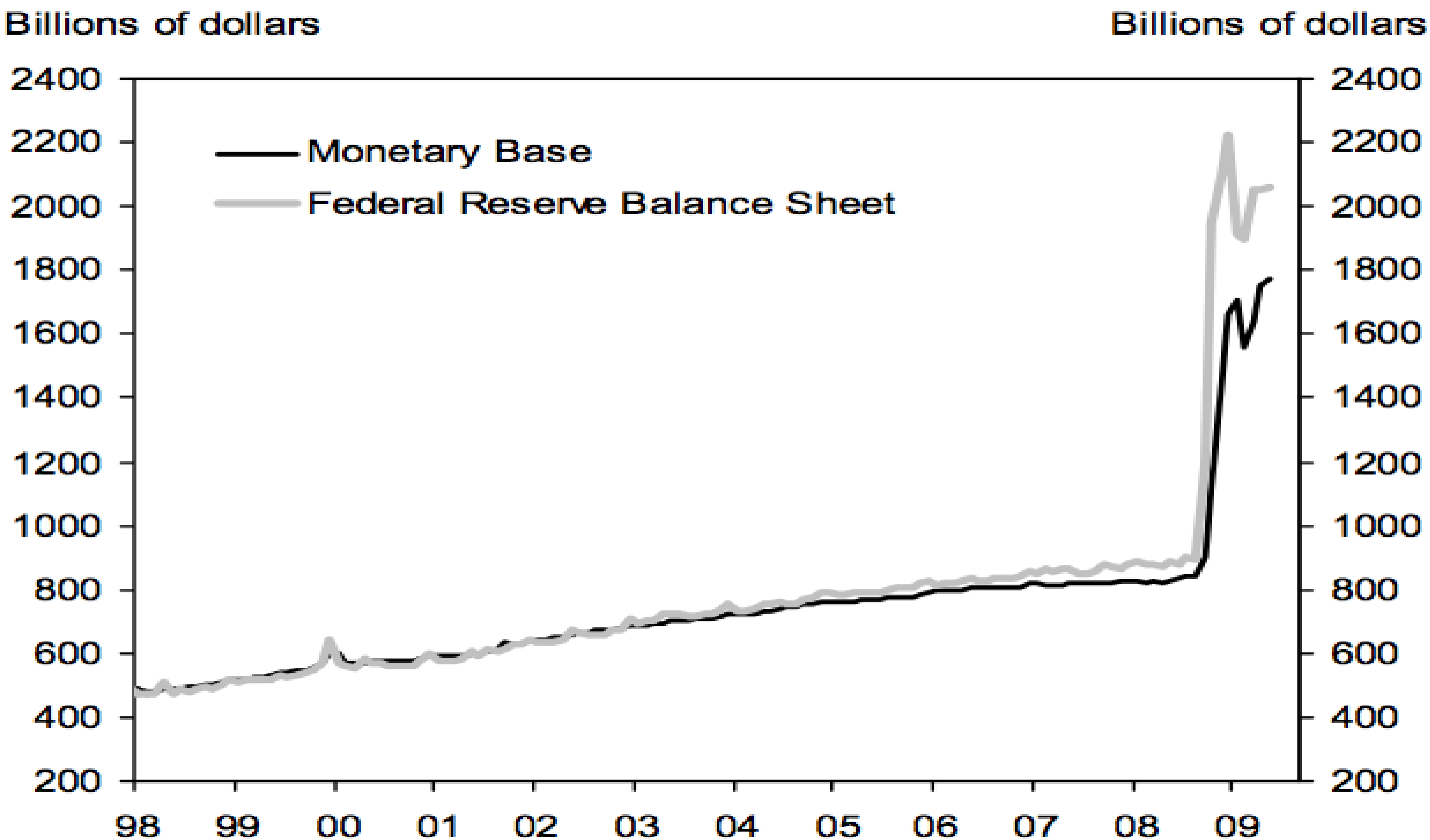


Note: Chart shows all sectors that held more than $100 billion in Treasury securities as of the fourth quarter in 2008. Data not seasonally adjusted.

Source: Federal Reserve

BIG BANK

An Explosion in the Monetary Base and the Fed's Balance Sheet



Source: Federal Reserve Board.

BIG BANKS

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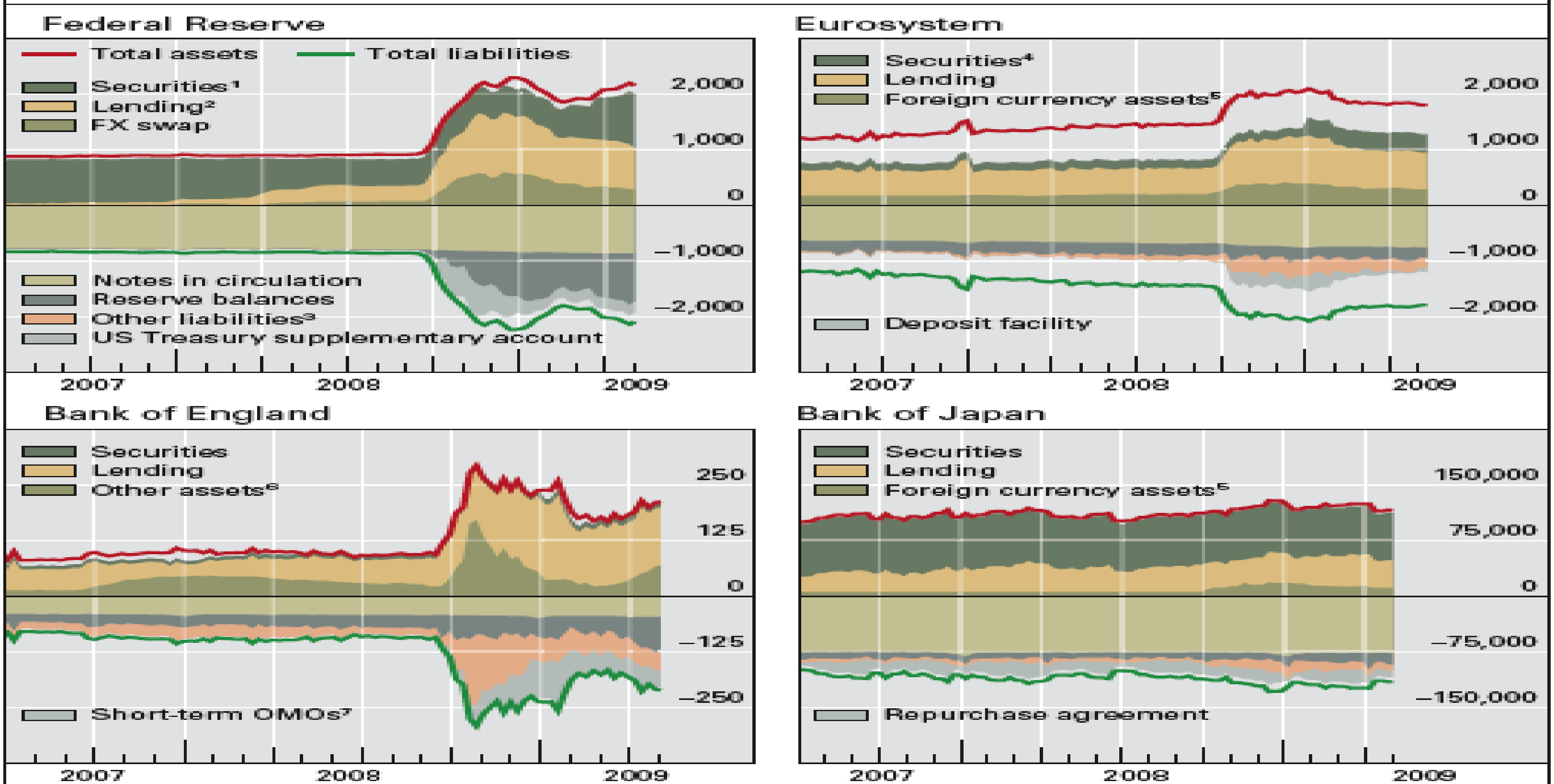
Central bank assets and liabilities

In billions of respective currency units



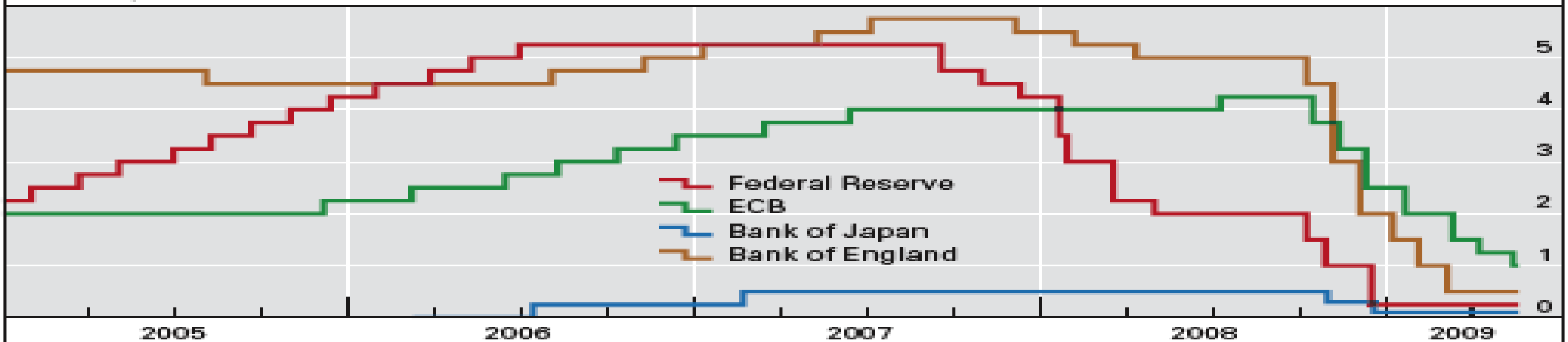
[1] Securities held outright (including TSLF). [2] Repurchase agreements, term auction credit, other loans and CPFF. [3] Including to central banks. [4] Issued by euro area residents and general government debt in euros. [5] Including US dollar liquidity auctions. [6] Including US dollar liquidity auctions and asset purchase facility. [7] Open market operations, including issuance of Bank of England sterling bills.

Sources: Datastream; national data.

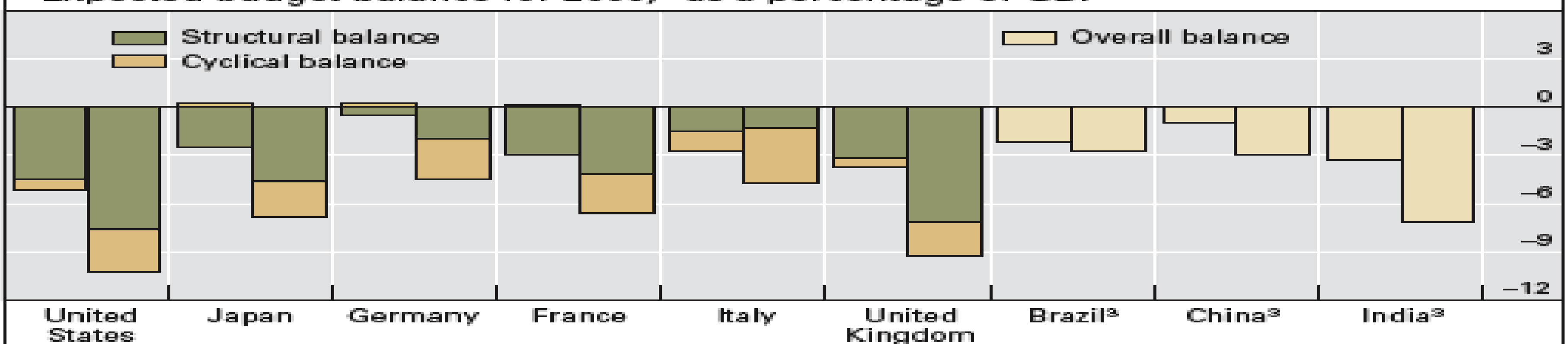
BIG BANK & BIG GOVERNMENT

Monetary and fiscal policy

Policy rates,[1] in per cent



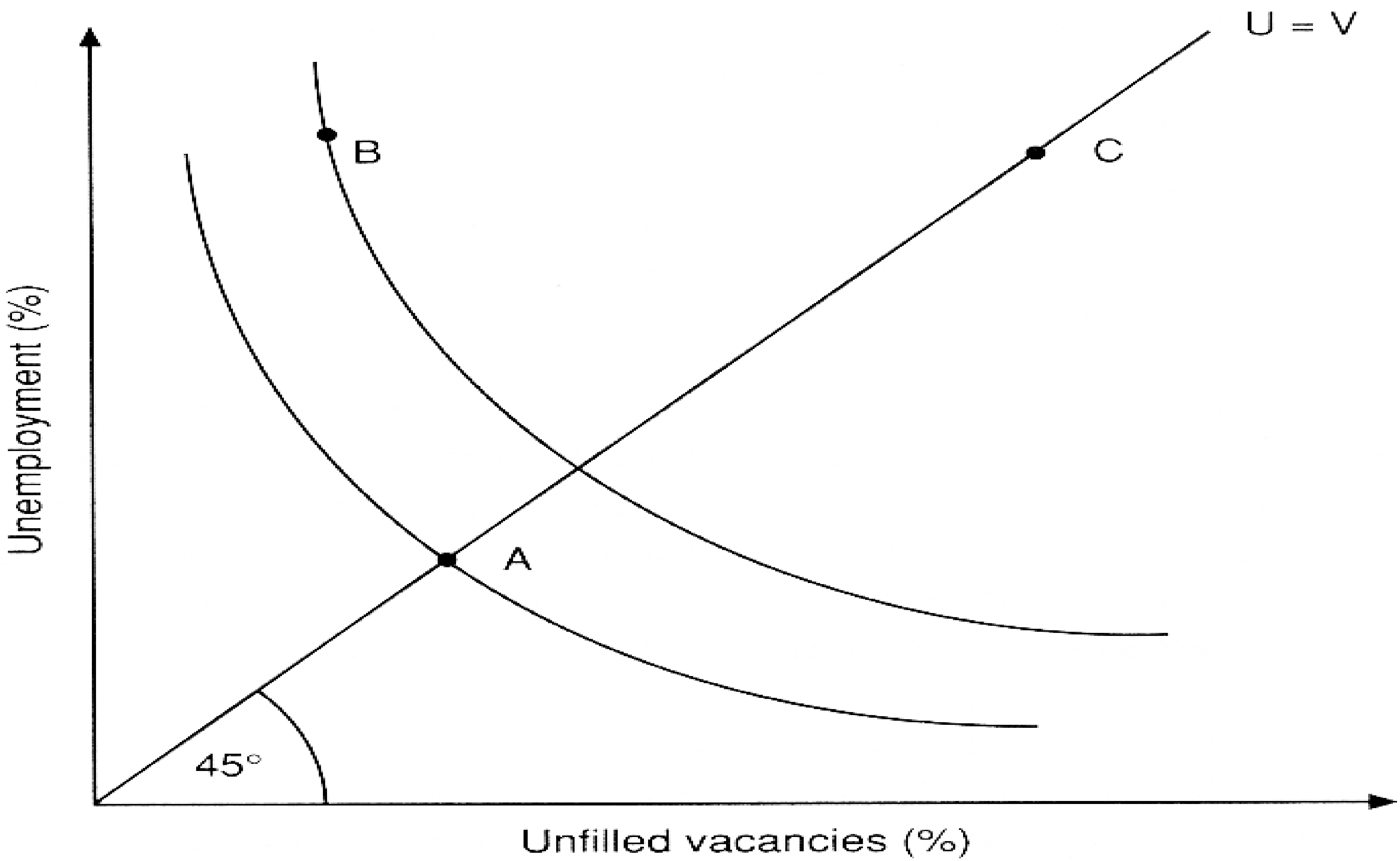
Expected budget balance for 2009,[2] as a percentage of GDP



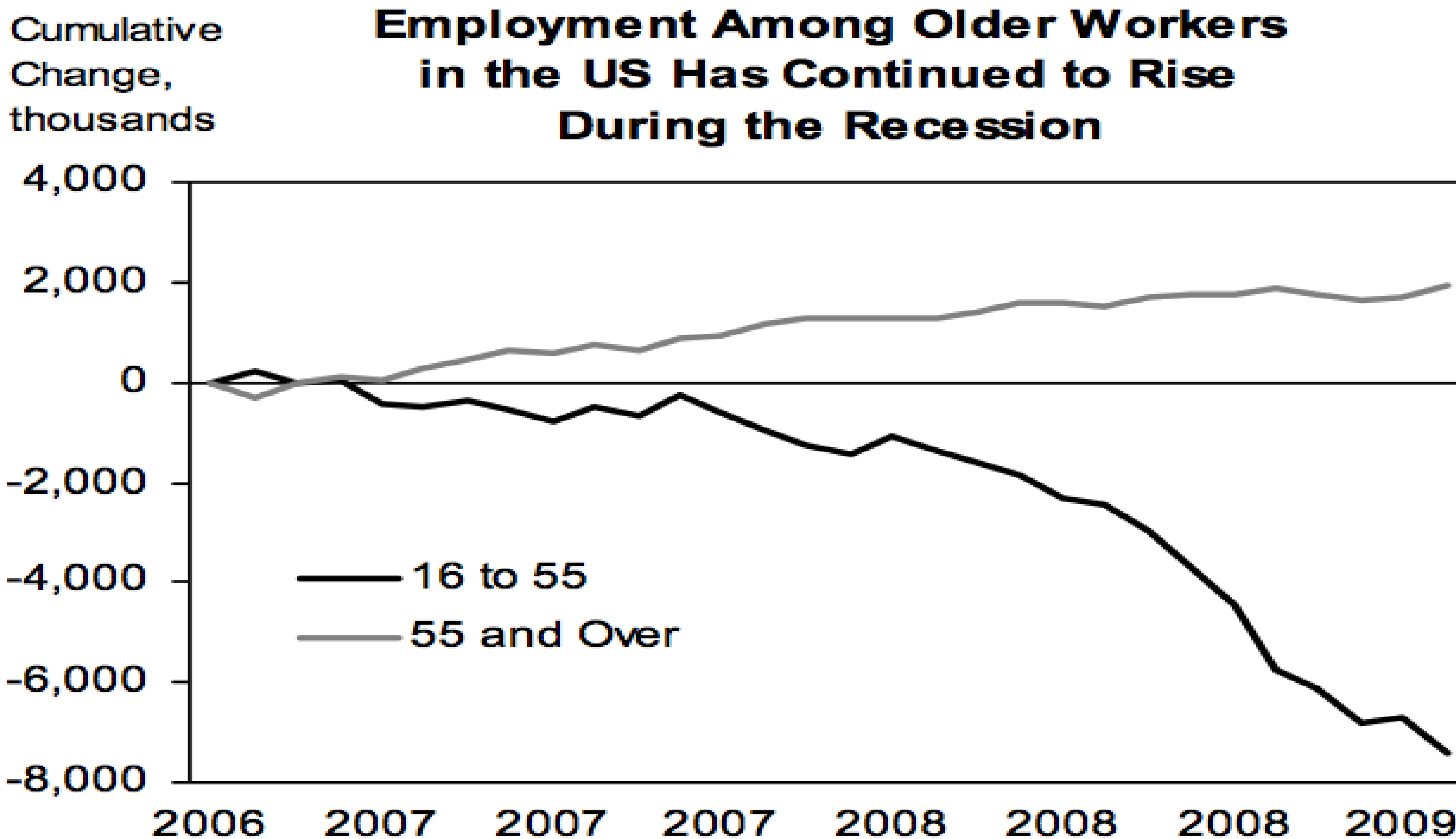
[1] For the Federal Reserve, target federal funds rate; for the ECB, interest rate on the main refinancing operations; for the Bank of Japan, target for the uncollateralised overnight call rate; for the Bank of England, Bank rate. [2] Projections before September 2008 (first column) and latest (second column). [3] Breakdown not available.

Sources: OECD, *Economic Outlook*; Bloomberg; JPMorgan Chase; national data.

Beveridge Curves for Labor

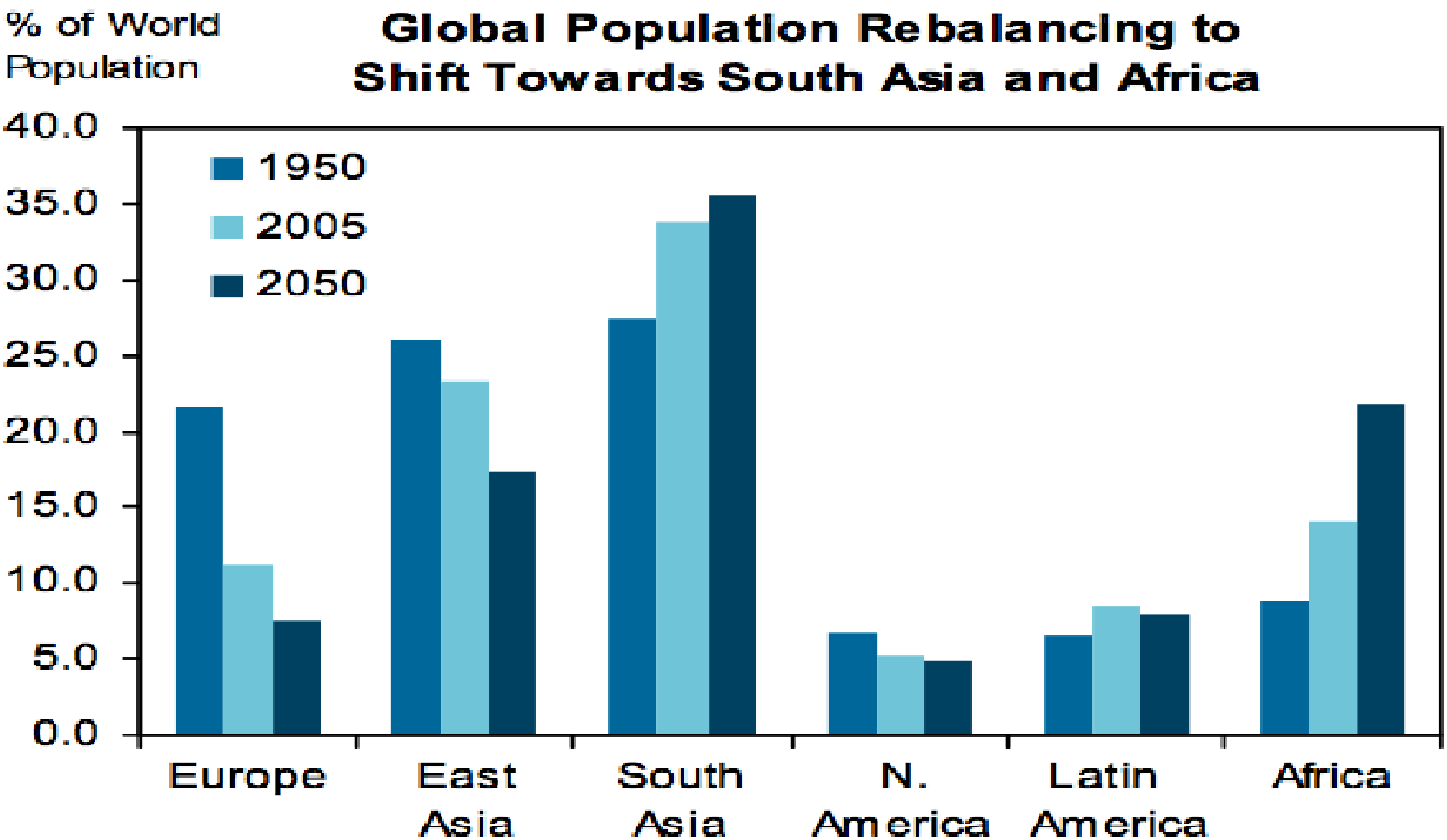


CHANGING PATTERN OF EMPLOYMENT



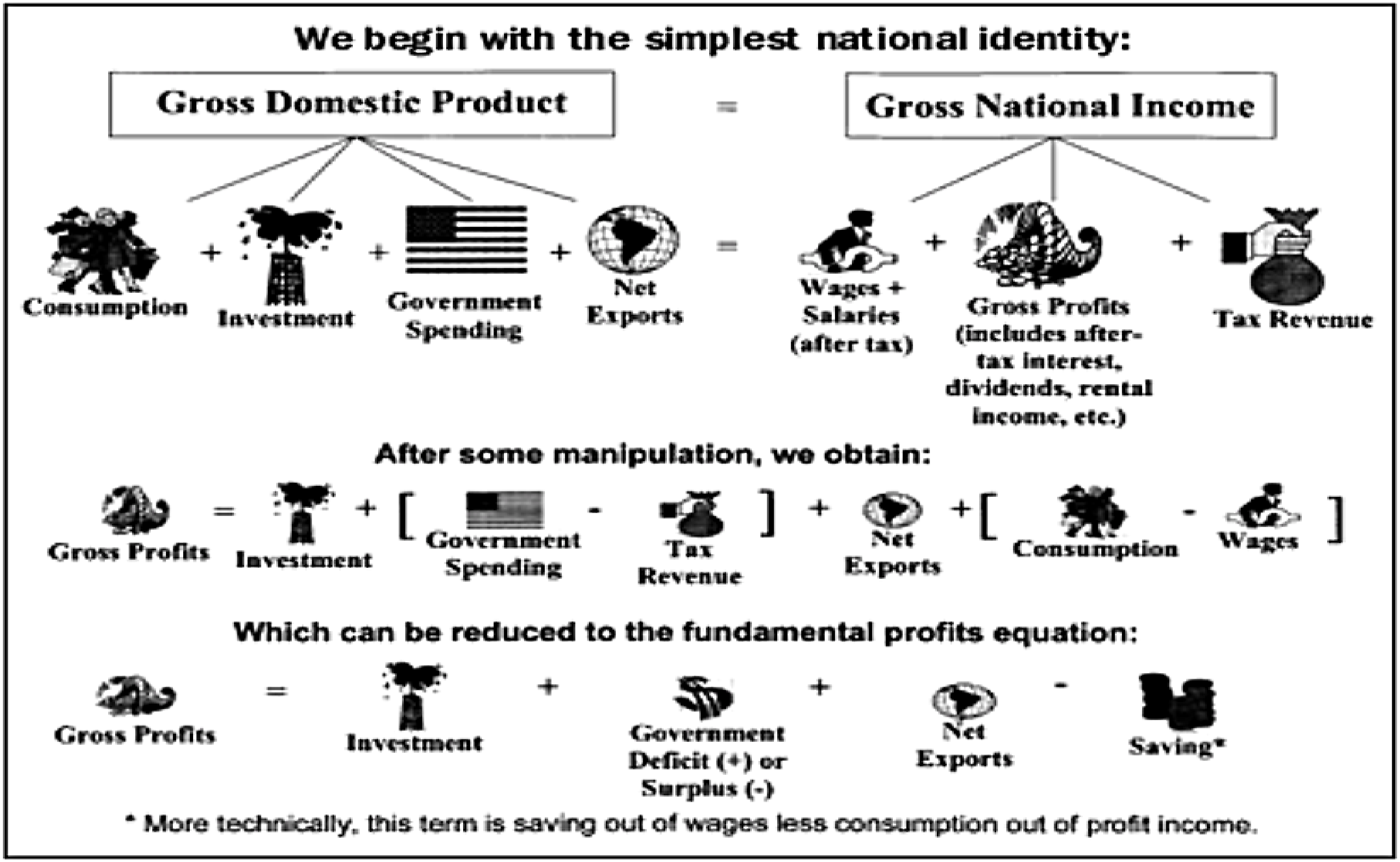
Source: BLS

CHANGING PATTERNS OF GLOBAL LABOR FORCE



Source: UN Population Database (2008 Revision)

STRUCTURE OF AN OPEN ECONOMY



Accounting Identity of Financial Balances

(S – I)		(G – T)		(BP)
Private Sector Balance	+	Government Balance	=	Current Account Balance

Internal Financial Balance

External Financial Balance

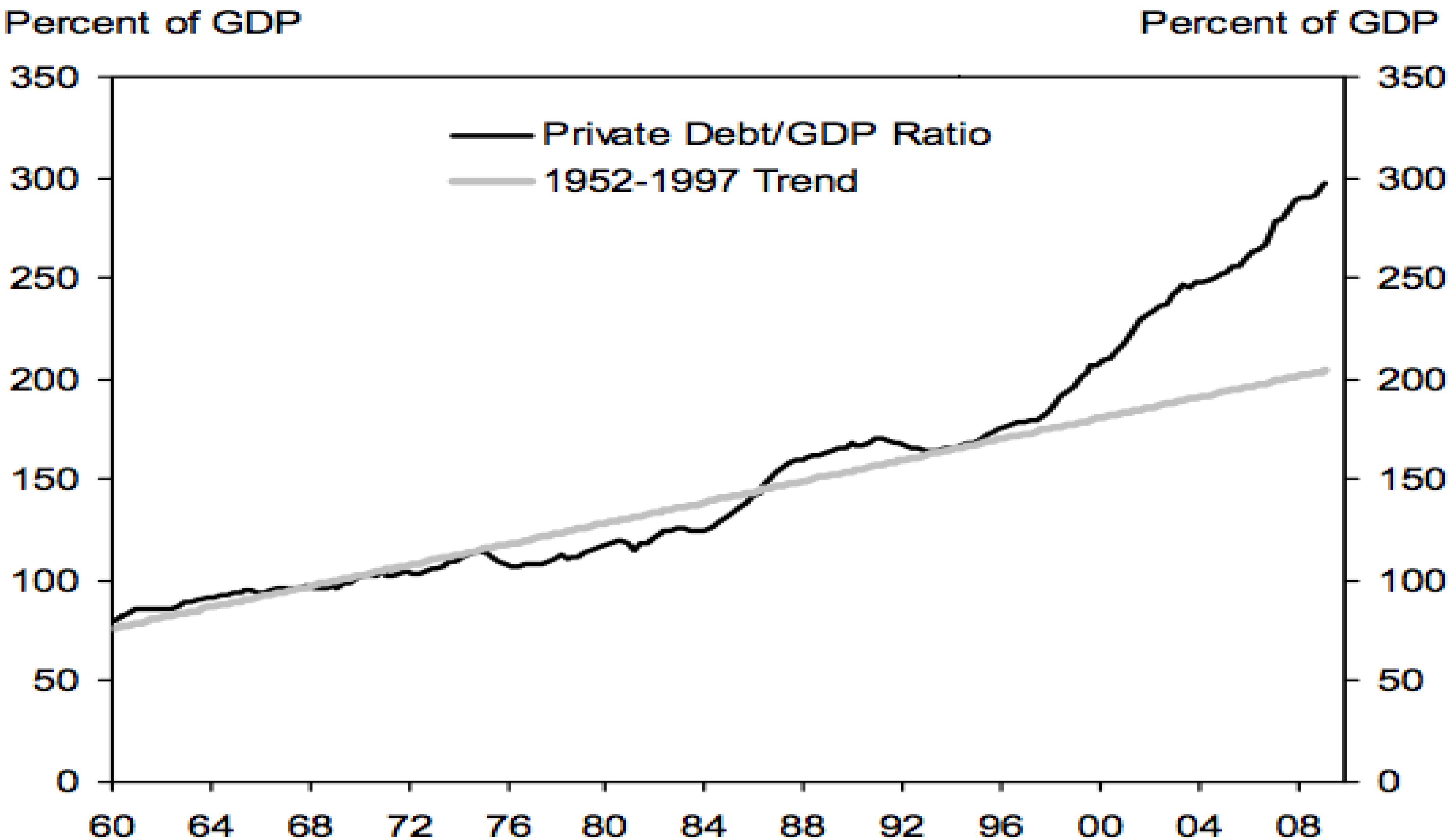
In 2008 the identity was roughly like this:

1.1% of GDP -4.6% of GDP = -3.5% of GDP

First quarter 2009 the identity was roughly like this:

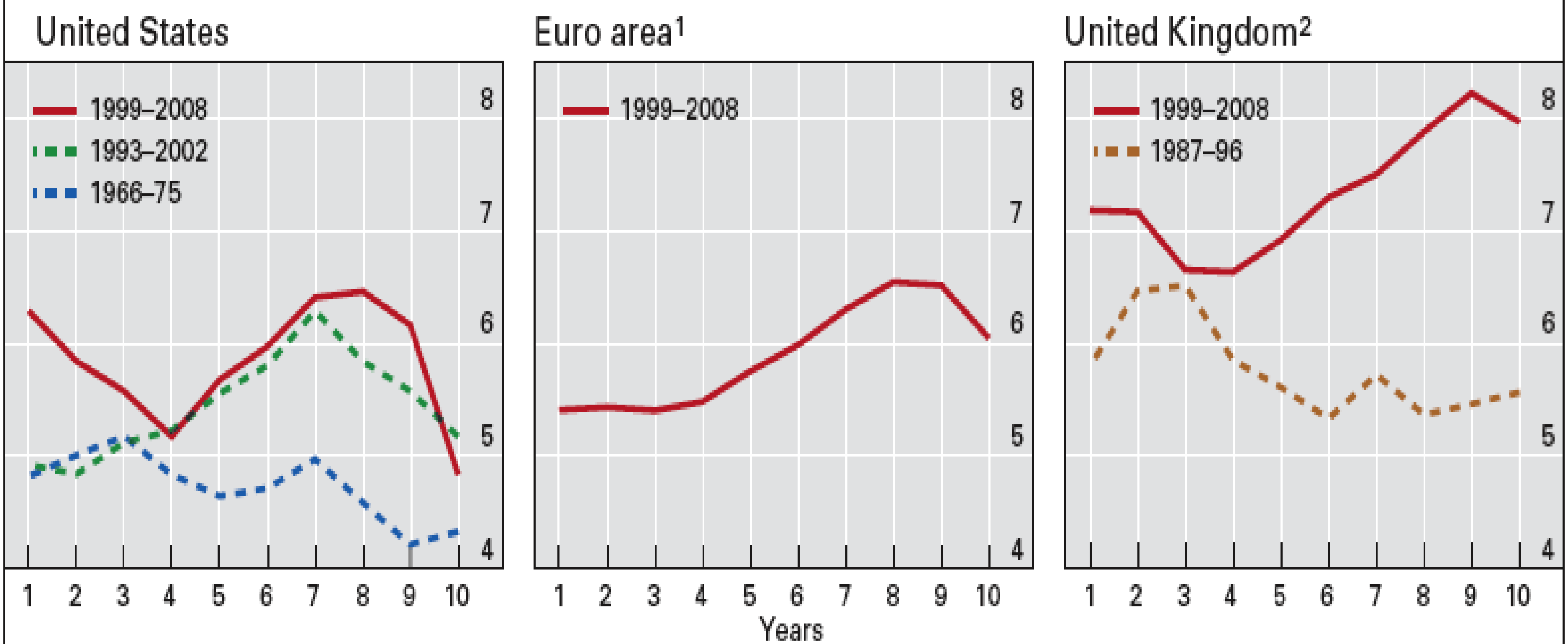
5.6% of GDP -7.6% of GDP = -2.1% of GDP

Private Sector (Household and Corporate) Debt Is Sky-High



Source: Federal Reserve Board. Department of Commerce.

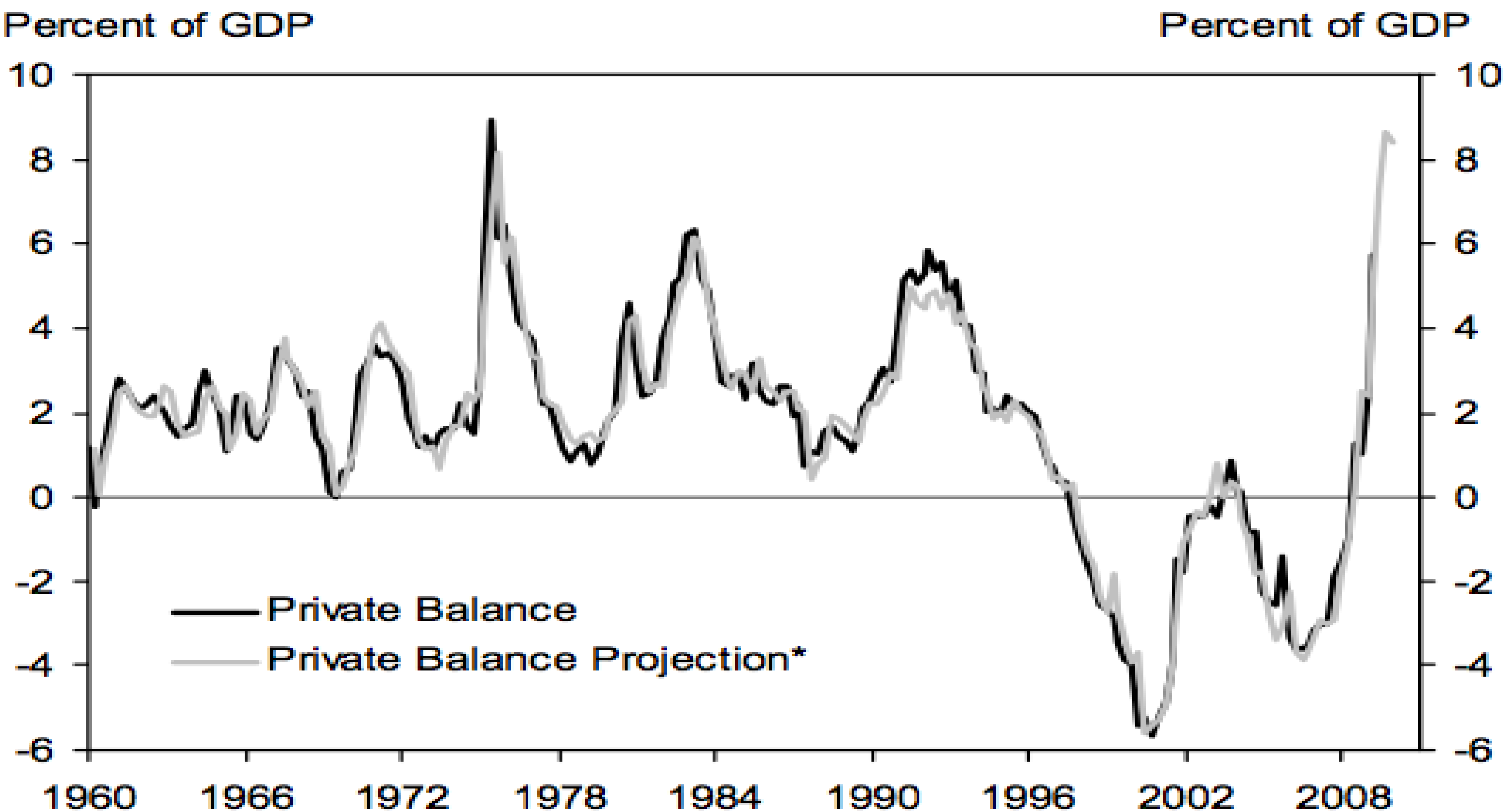
Household net wealth as a ratio of disposable income



[1] Estimates of 2008 net wealth based on changes in net worth (excluding revaluation of residential property). [2] Estimates of 2008 net wealth based on changes in net worth due to gross saving and capital transfers.

Sources: ECB; Federal Reserve flow of funds accounts; Datastream; UK Office for National Statistics; national data.

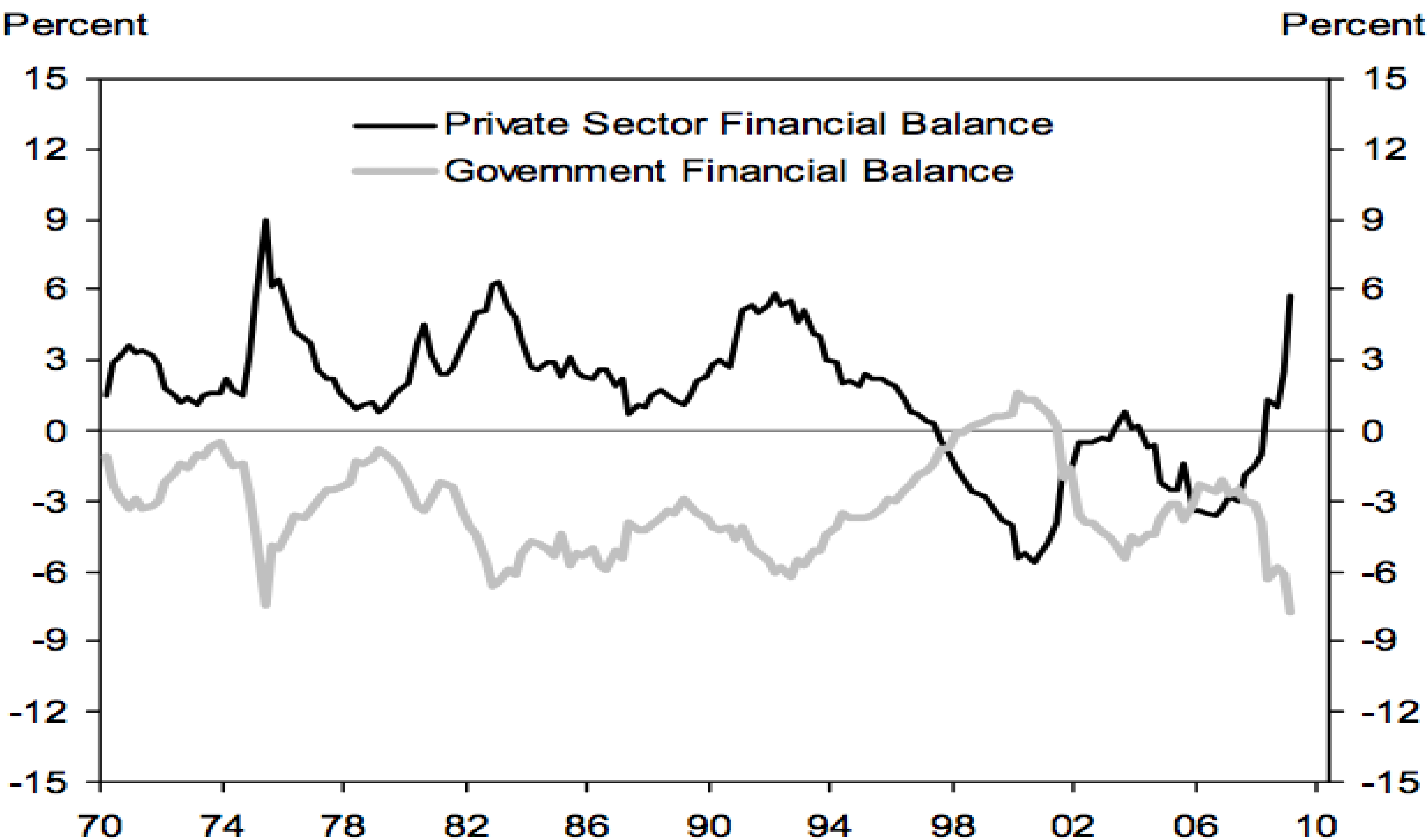
The Private Sector Continues to Retrench



* Projection assuming current values for equity wealth/GDP ratio and credit spreads, and a further 10% home price decline.

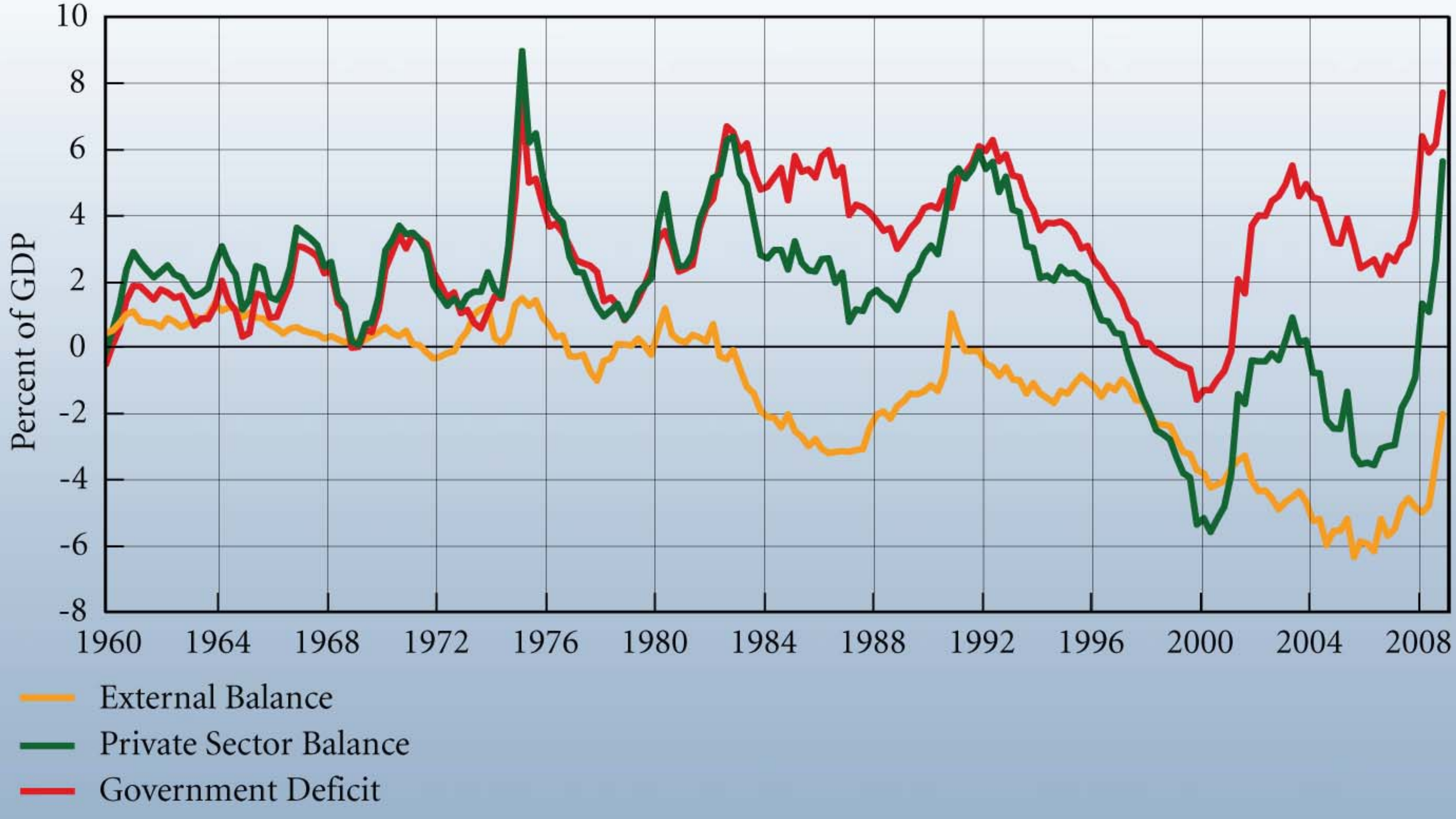
Source: Federal Reserve Board.

Private Sector Surplus Offsets Public Sector Deficit



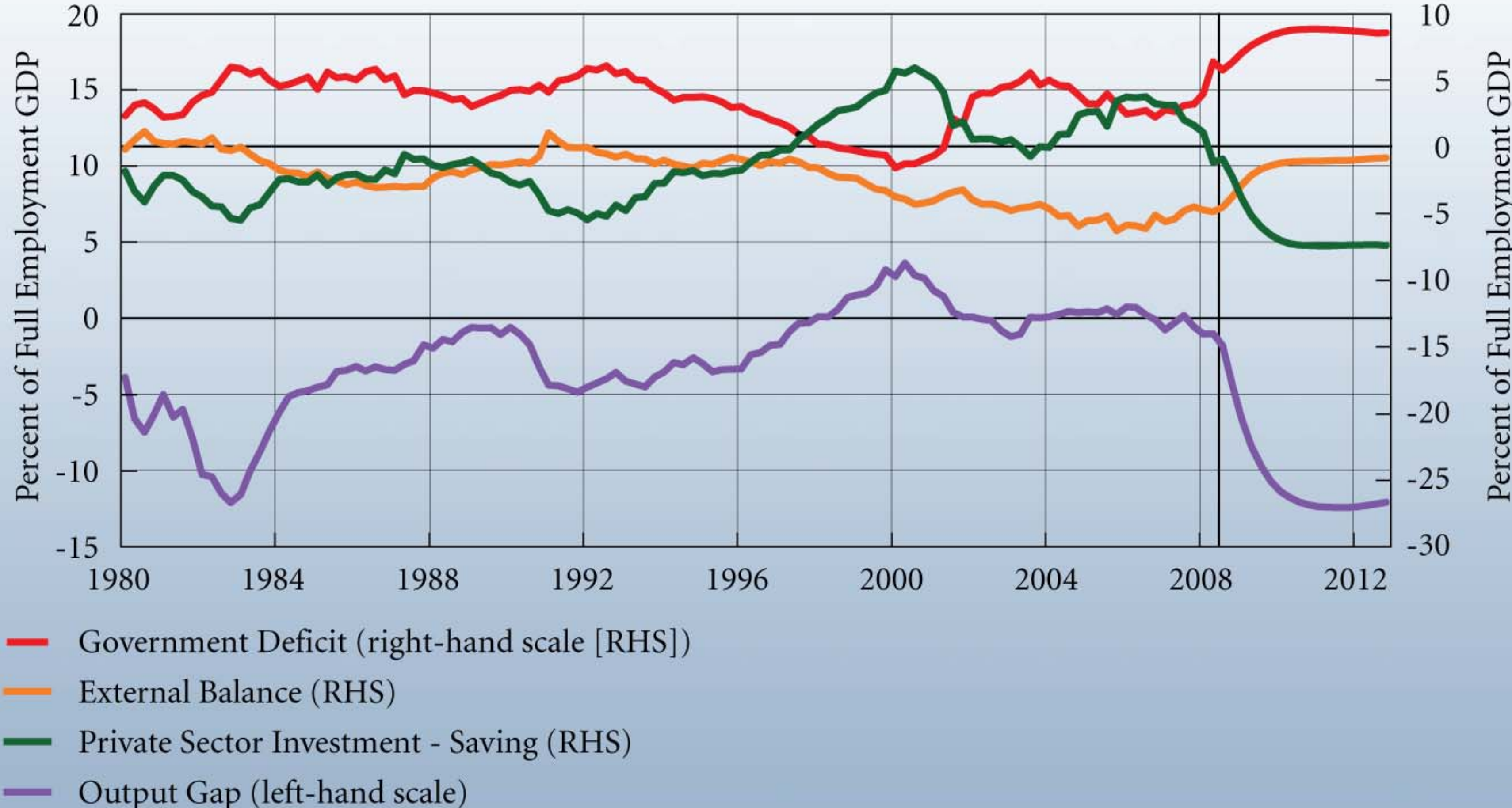
Source: Department of Commerce. Our calculatons.

U.S. Main Sector Balances



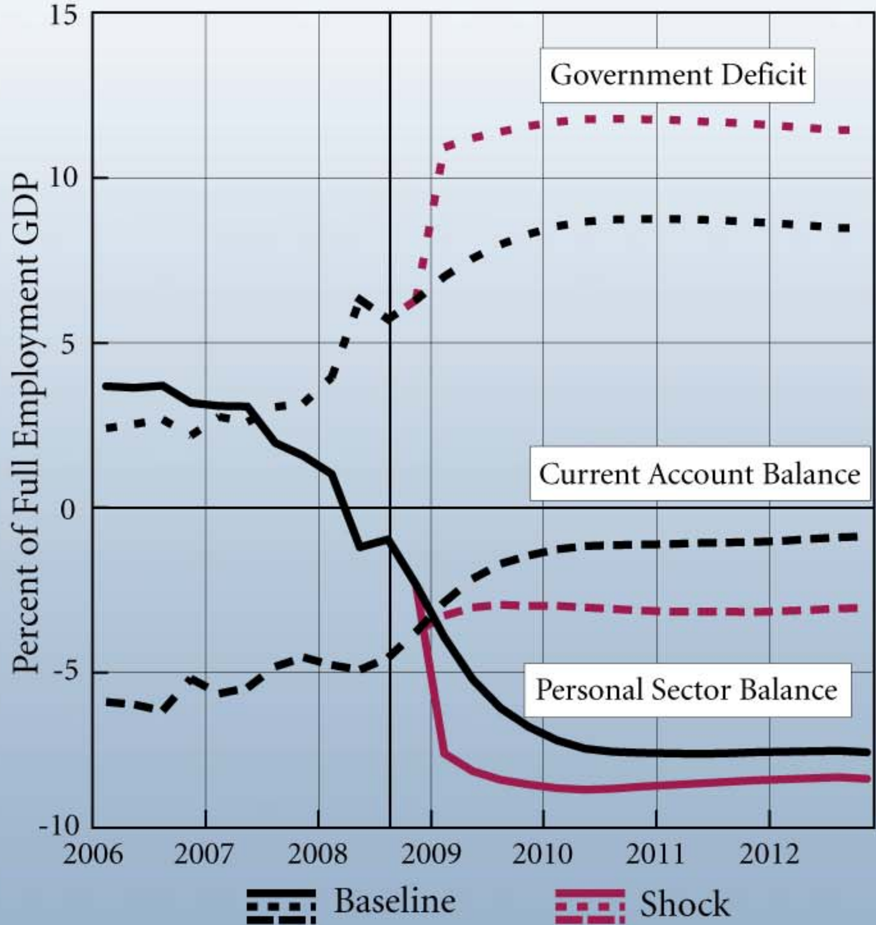
Sources: BEA, National Income and Product Accounts (NIPA), and authors' calculations

Main Sector Balances and Output Gap

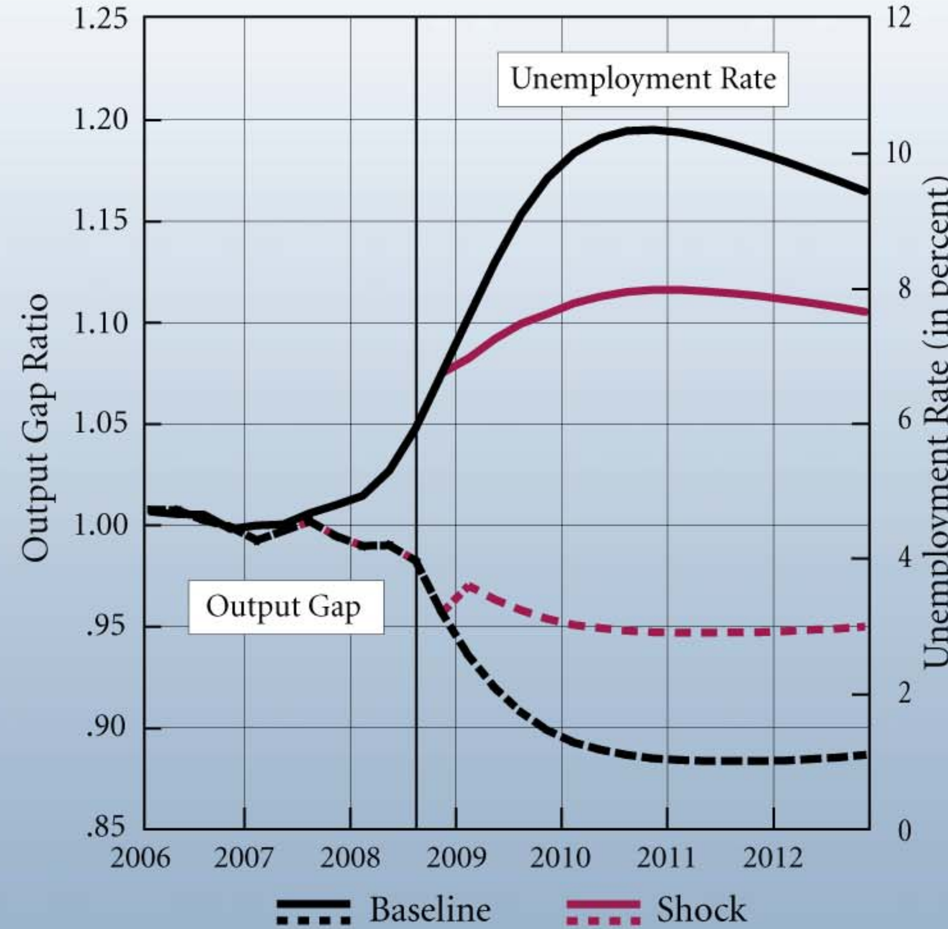


Sources: Federal Reserve and authors' calculations

U.S. Main Sector Balances



Output Gap and Unemployment



Sources: Federal Reserve and authors' calculations

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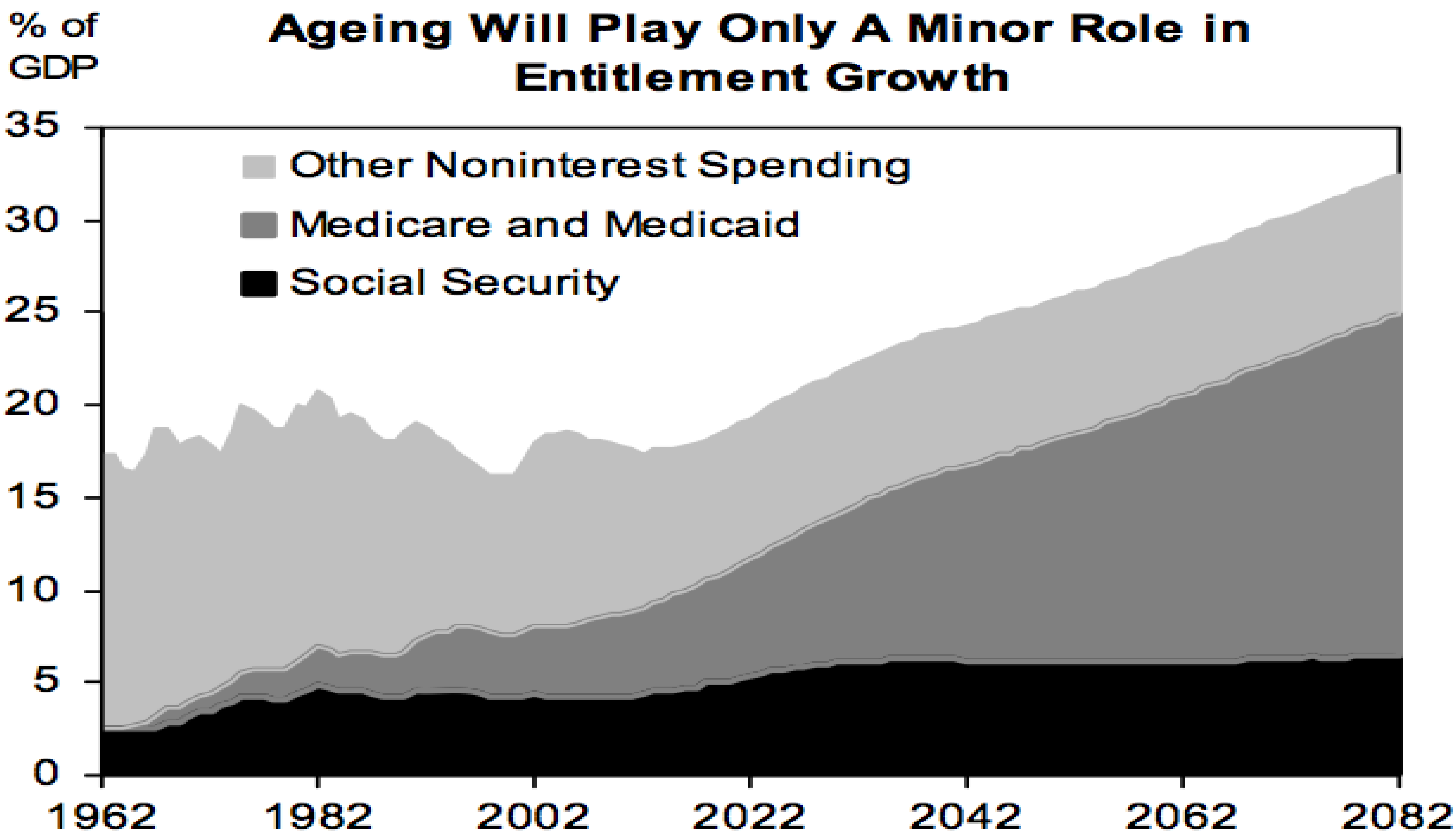
Ageing Will Play Only A Minor Role in Entitlement Growth



Source: CBO