Policy Uncertainty and Investment

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Overview

Investment expenditures are the most volatile component of spending over the business cycle.

My discussion will focus on the role of **uncertainty about government policy** in destabilizing investment spending.

The main issue is that investors often have considerable discretion about the **timing** of investment spending.

Specifically, many types of investment can be postponed.

This is true for any project that is 'proprietary' to a single investor, so a rival cannot jump in if the initial investor hesitates.

Overview

Uncertainty means that the investor does not know **how to exploit** the project to best advantage.

Thus, uncertainty makes it advantageous to **postpone** if the investor expects to receive—within a moderate time frame—information that will reduce or eliminate the uncertainty.

Some types of uncertainty are **unavoidable**.

—Will a **rival innovation** make the project unprofitable?

—Will **consumer tastes** change, making the project unprofitable?

But these sources of uncertainty are **idiosyncratic** to each firm, so they are unlikely to lead to aggregate shifts in investment.

Overview

Uncertainty about **macroeconomic policy**—fiscal policy, trade policy, and monetary policy—can also make a wait-and-see strategy attractive for firms.

And since macroeconomic policies affect **all firms**, the impact on **aggregate** investment can be substantial .

For example, uncertainty about Central Bank policy can have a destabilizing effect on investment, creating a recession followed by a boom.

Destabilizing effects of this type are entirely **avoidable** if the policy maker adopts systematic **"rules"** about how to behave in any particular economic environment.

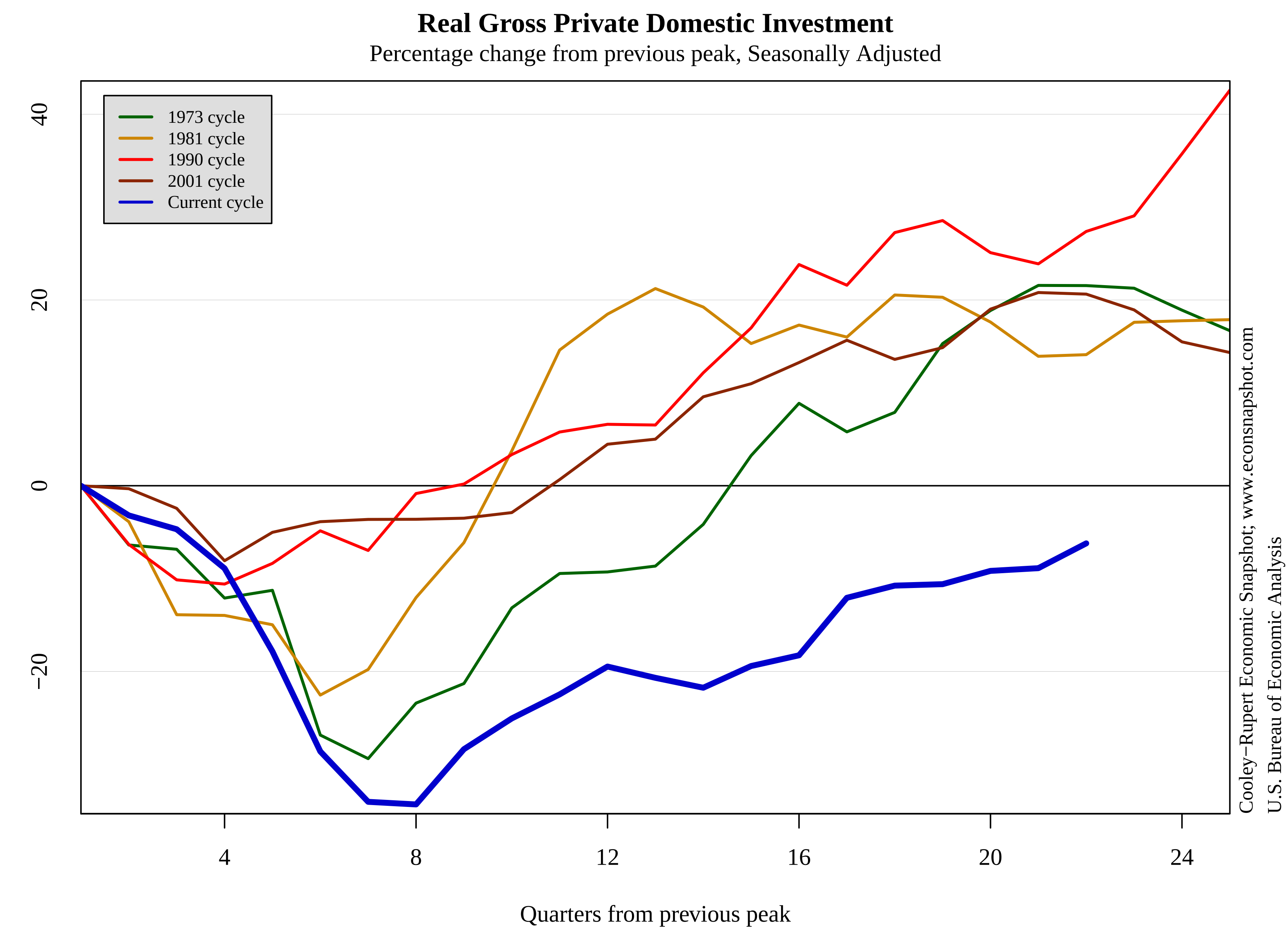
A U.S. example?

Fact 1: After falling dramatically in 2009, investment in the U.S. has remained low, prolonging the downturn.

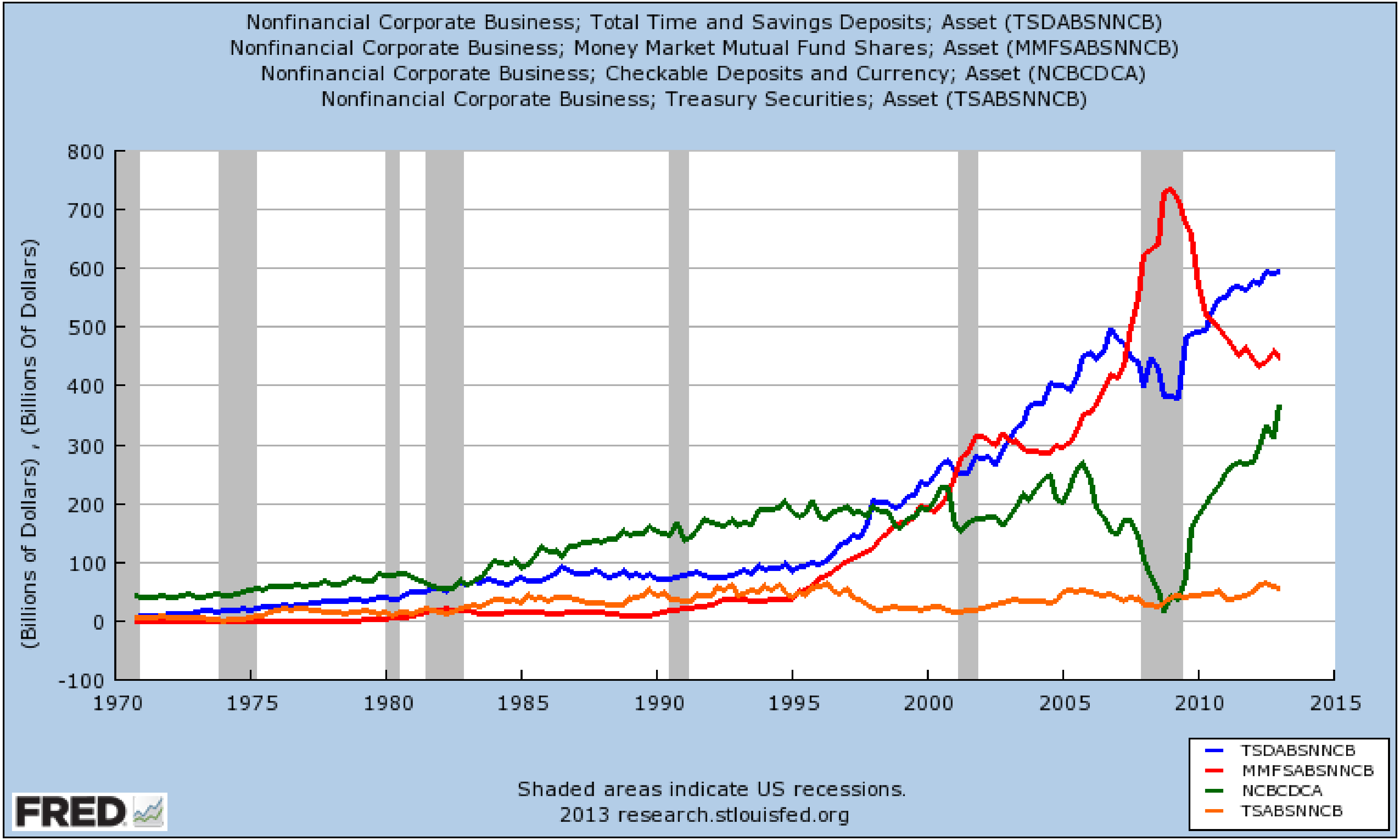
Fact 2: Many large firms hold substantial reserves of liquid assets.

(Apple is the most famous example, but it is true more broadly.)

For these firms, difficulty in obtaining bank loans is not an issue.



Real Gross Private Domestic Investment
Percentage change from previous peak, Seasonally Adjusted
1973 cycle
1981 cycle
1990 cycle
2001 cycle
Current cycle
40
20
0
−20
4
8
12
16
20
24
Quarters from previous peak
Cooley−Rupert Economic Snapshot; www.econsnapshot.com
U.S. Bureau of Economic Analysis



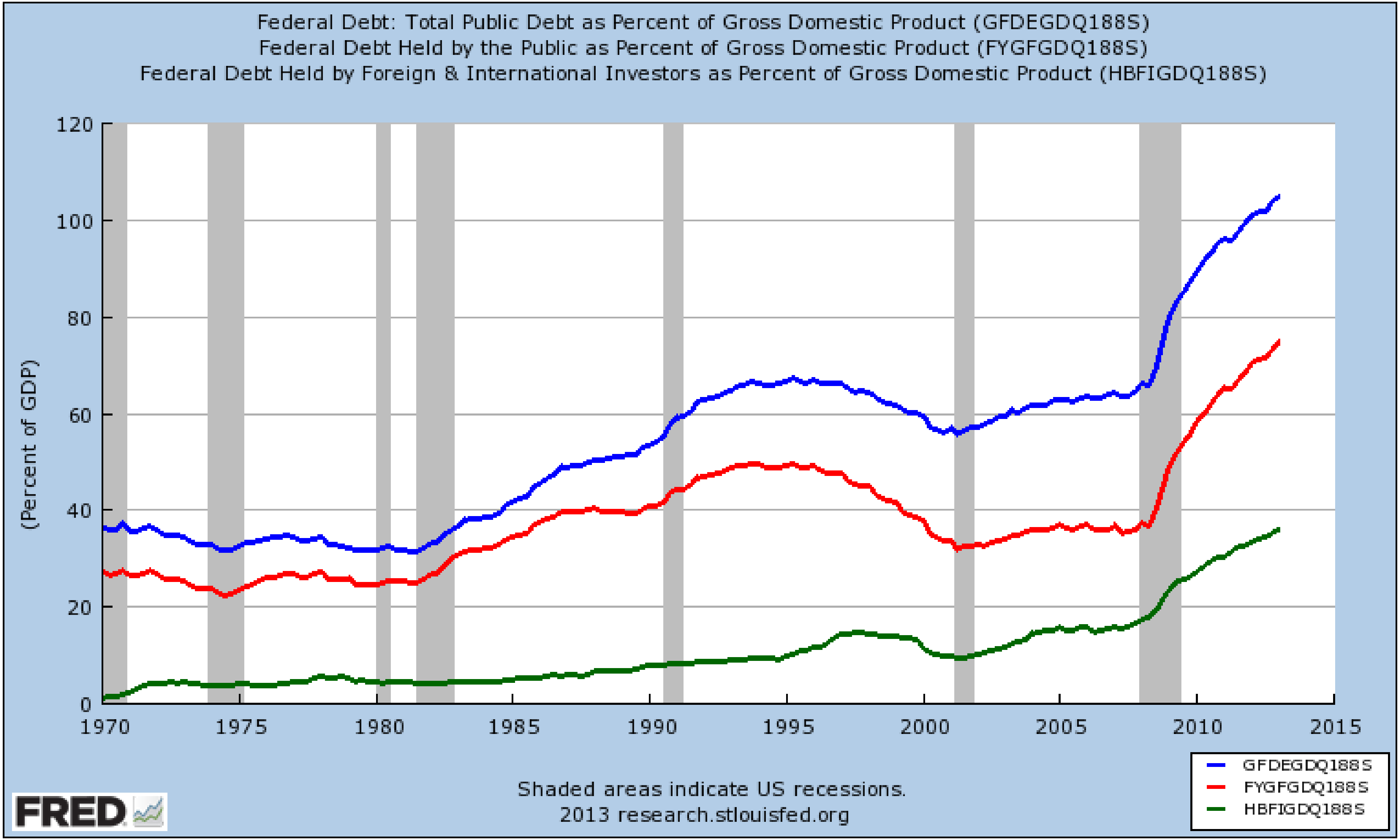
Nonfinancial Corporate Business; Total Time and Savings Deposits; Asset (TSDABSNNCB)
Nonfinancial Corporate Business; Money Market Mutual Fund Shares; Asset (MMFSABSNNCB)
Nonfinancial Corporate Business; Checkable Deposits and Currency; Asset (NCBCDCA)
Nonfinancial Corporate Business; Treasury Securities; Asset (TSABSNNCB)
(Billions of Dollars) , (Billions Of Dollars)
800
700
600
500
400
300
200
100
0
-100
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
TSDABSNNCB
MMFSABSNNCB
NCBCDCA
TSABSNNCB
Shaded areas indicate US recessions.
2013 research.stlouisfed.org
FRED

A U.S. example?

Fact 3: The U.S. has been running large deficits, and the debt/GDP ratio is growing rapidly.

The costs of Social Security and Medicare will rise as baby boomers retire, and the ratio of retirees to working population grows.

The U.S. is on an unsustainable fiscal course: major reforms will be needed in the not-too-distant future.



Federal Debt: Total Public Debt as Percent of Gross Domestic Product (GFDEGDQ188S)
Federal Debt Held by the Public as Percent of Gross Domestic Product (FYGFGDQ188S)
Federal Debt Held by Foreign & International Investors as Percent of Gross Domestic Product (HBFIGDQ188S)
(Percent of GDP)
120
100
80
60
40
20
0
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
GFDEGDQ188S
FYGFGDQ188S
HBFIGDQ188S
Shaded areas indicate US recessions.
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A U.S. example?

Fact 4: There is no consensus on what the fiscal reforms should look like.

Some groups advocate large cuts in entitlements and other spending.

Other groups advocate substantial tax increases.

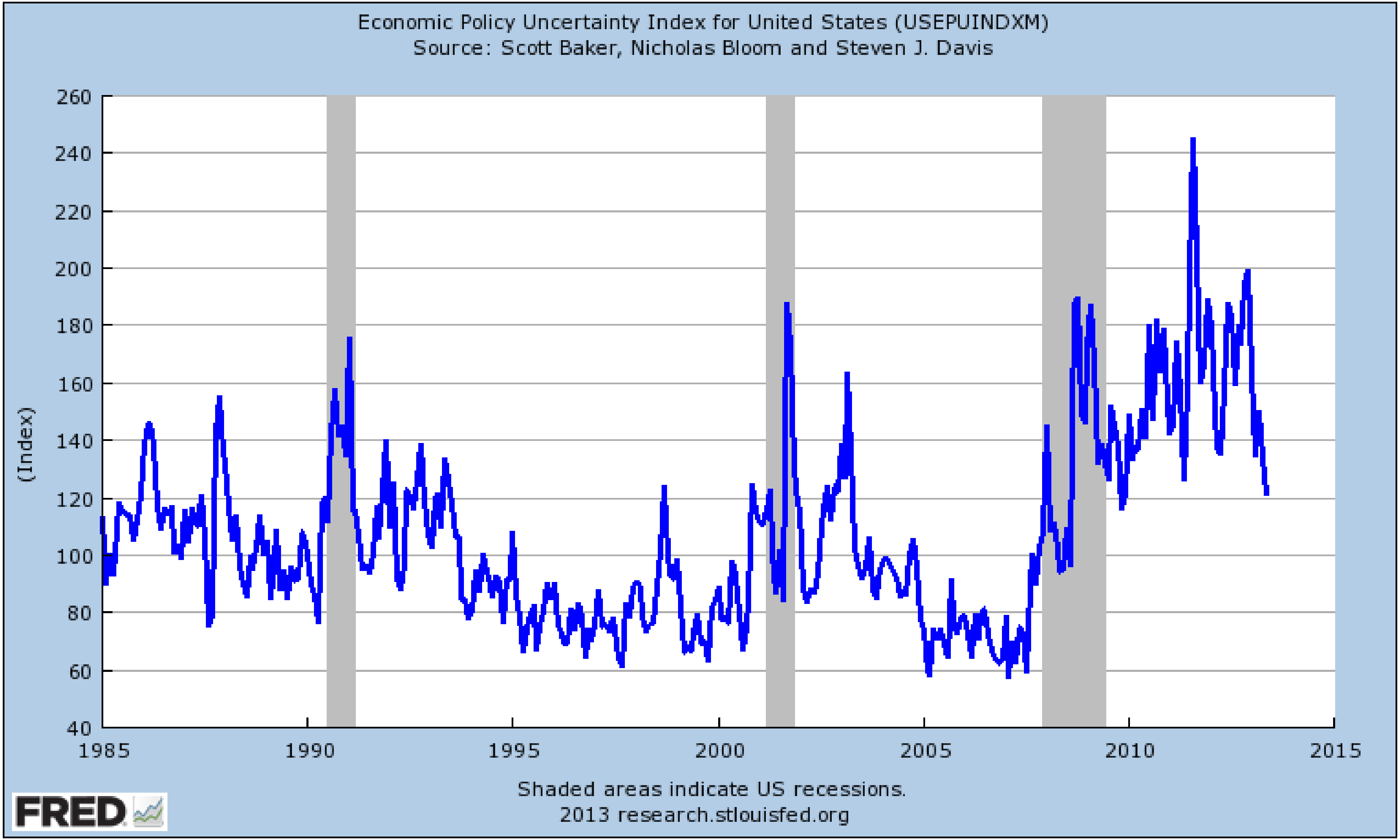
Fact 5: The shape of the fiscal reforms will have a large impact on the profitability of investment.

Baker, Bloom and Davis (2013) have constructed an **uncertainty index** that uses as inputs

—frequency of news media references to economic policy uncertainty

—number of federal tax code provisions set to expire

—extent of forecaster disagreement about inflation and about federal government purchases.


Economic Policy Uncertainty Index for United States (USEPUINDXM)
Source: Scott Baker, Nicholas Bloom and Steven J. Davis
(Index)
260
240
220
200
180
160
140
120
100
80
60
40
1985
1990
1995
2000
2005
2010
2015
Shaded areas indicate US recessions.
2013 research.stlouisfed.org
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A U.S. example?

Hypothesis:

Fiscal uncertainty is contributing to depressed investment.

The high degree of uncertainty about **tax changes** increases

the option value of waiting to make investment decisions

that are difficult/expensive to reverse.

Framework for this idea

Investment has three key features.

1. Investment requires a '**project**' as well as cash, so it

   involves exercising a **one-time option**.

   A project can be thought of as particular investment opportunity:

   —for a chain store, the location for a new retail outlet,

   —for a manufacturing firm, the opportunity to build a new plant,

   —for a real estate developer, a vacant parcel of land.

   It is important that projects are exclusive to one investor.

   Otherwise Bertrand competition would make delay impossible.

Framework for this idea

2. The initial decision about how to exploit a project is either

   irreversible or reversible only at high cost.

   Uncertainty about tax policy **increases the option value**

   of waiting, leading to a temporary decline in investment.

3. Projects are storable: they **do not depreciate** too quickly.

   When the uncertainty is resolved, there is a temporary investment

   boom, as projects that had been shelved are exploited.

   The size of the boom depends on the realized policy, with

   more business-friendly policies generating larger booms.

Diagnosing policy uncertainty

For Central Banks, one good indicator of policy uncertainty is the reaction of markets.

If Central Bank policy is formulated on the basis of well understood rules, **markets should not be surprised** by policy announcements: those announcements will merely confirm what was expected anyway.

Consequently, financial markets should **not** display

—excessive **price volatility** or

—especially **large trading volumes**.

Limits to policy rules

What are the downside risks from a Central Bank using a policy rule?

1. The rule must be simple enough to be well understood, which

   limits how subtle/flexible it can be.

2. An escape clause is surely needed for extraordinary situations.

   How should 'extraordinary' be defined?

Conclusions

Fiscal policy, trade policy, and other policy decisions made by **elected** officials will necessarily be more unpredictable, because of political uncertainty.

- Different political parties will have different views about policies.

Monetary policy has a better chance, since it is less subject to political pressure.