Adventures in Monetary Policy: The Case of the European Monetary Union

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The ECB and Its Watchers XIX

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Why the Discontent?

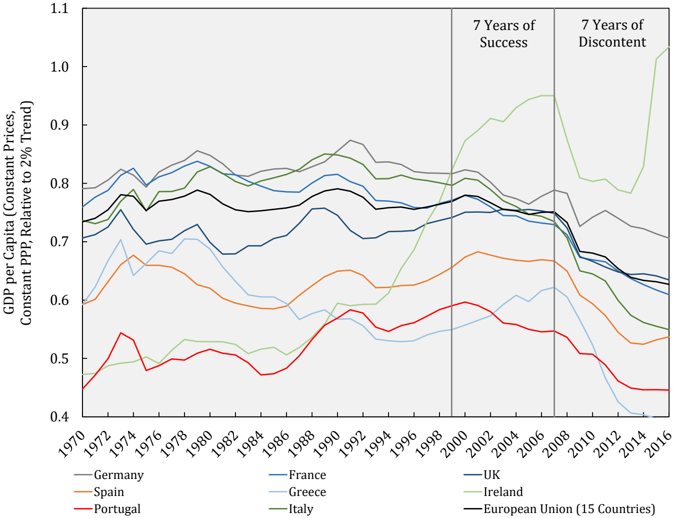
The Tell-Tale Graph:

Real GDP per Capita relative to US Trend (1970–2016): European Union (15 Countries)

US

The Tell-Tale Graph:

Real GDP per Capita relative to US Trend (1970–2016)



European Monetary Union: Past, Present, and Future

European Monetary Union

- What problems was it intended to solve?
- How well has it solved those problems?
- What future problems can it solve?

Three Themes from Theory

- Monetary union valuable only without commitment
- Monetary unions create externalities without commitment
- Solving externalities requires union wide policies

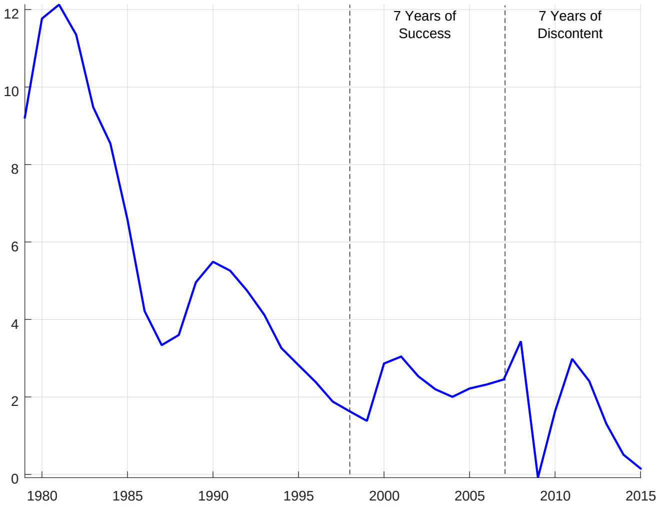
Monetary Union Valuable
Only without Commitment

Benefits and Costs without Commitment

- Chari, Dovis, Kehoe: Rethinking Optimal Currency Areas
- Prevents central bank from reacting to idiosyncratic shocks
  - Benefits in not reacting to temptation shocks
  - Costs in not reacting to Mundellian shocks
- Monetary unions are a costly commitment device
  - No point in a union if we already have commitment

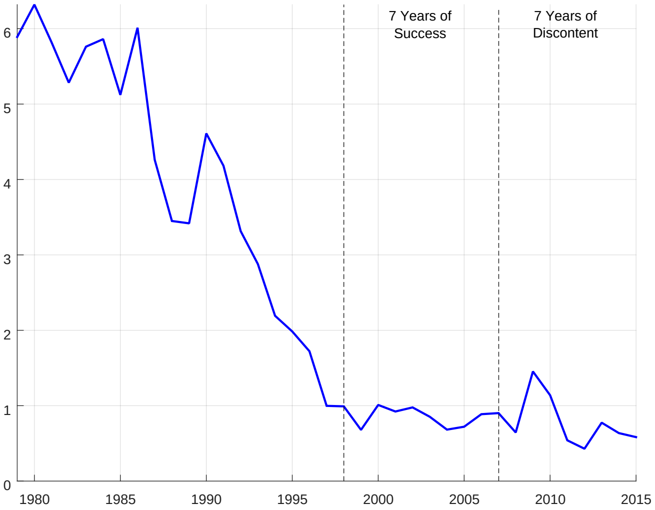
benefits & costs

Weighted Average Inflation in Euro Area



unweighted

Weighted Standard Deviation of Inflation in Euro Area



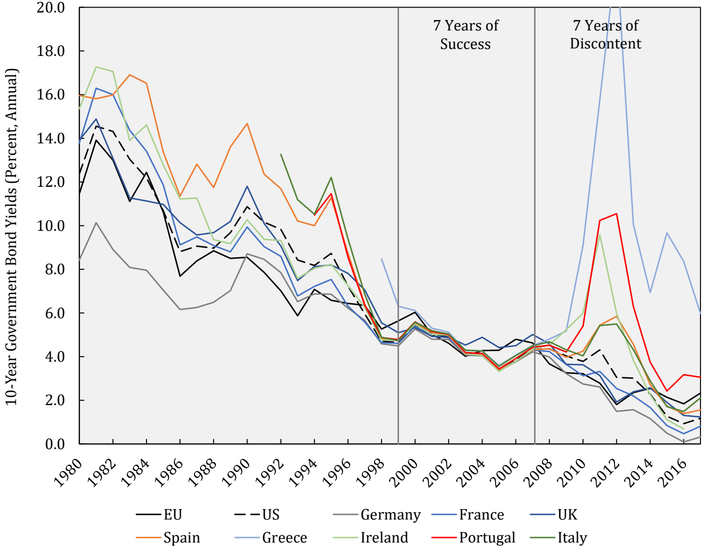
variance Japan US

European Union Leads to less Variable Inflation

Table 1. Standard Deviation of Inflation

	1979-1998	1998-2015
Europe	3.7	1.2

Long-Term Government Bond Yields (1980–2017)



Long-Term Government Bond Yields (1980–2017): Euro Area

Lack of Commitment Creates Externalities

Free Riding in a Monetary Union

- Chari and Kehoe, JME, JMCB, Bordo-Taylor volume (with Dovis)
- Consider a monetary authority with flexible exchange rates when the government has issued a lot of nominal debt
- Paying off debt requires raising distorting taxes
- Inflation is costly
- Monetary authority balances cost of inflation against tax distortions
- Lenders anticipate ex-post inflation and raise nominal interest rates

Free Riding in a Monetary Union

- Cost of inflation borne by all member countries
- Benefit of debt issue accrues only to issuing country
- Each country has incentive to free ride
- All countries issue too much debt

Bank Bailouts in a Monetary Union

- Central banks ex-post lend to bank debtors to avoid runs
- Debtors have no incentives to monitor riskiness of bank portfolios
- Banks have incentive to take on excessive risk
- National supervisors have weak incentives to supervise banks if central bank of the union will engage in bailouts
- Costs of inflation mainly borne by other countries
- Same free rider problem as with fiscal policy

The Central Banker as a Good Samaritan

- Suppose central banks are benevolent and lack commitment
- Ex-post will buy up debt of excessively indebted governments to reduce tax and other costs of debt
- Buying up such debt imposes costs on other countries in union
- Other countries have incentives to renegotiate debt of excessively indebted governments
- Ex-ante every government has incentive to issue excessive debt
- Same free rider problem as with fiscal policy

Moral of all of the Free Riding Stories

- If the European Central Bank or the European Stability Mechanism stands ready to buy the debt of countries or banks in trouble, then
- Individual countries will issue excessive amounts of debt or engage in lax supervision
- Incentive to issue debt larger if ECB or ESM has access to more resources

Limiting Free Riding in a Monetary Union

- Policy to limit debt issued by each member country desirable
- Rationale for fiscal policy limits in Maastrict treaty and Stability and Growth Pact
- Policy of union-wide supervision of banks desirable

Some Tensions Well Understood

- Framers of the EMU understood the economic issues
- Saw economic advantages to forming a monetary union
- Understood that commitment by the ECB was not a given
- Understood that lack of commitment creates externalities
- Imposed limits on fiscal policies
- Did not understand incentives to bail out banks

The Journey Down the Slippery Slope

The Slide Down the Slippery Slope

- Germany and France violated deficit limits
- No penalties imposed on them
- Each country had incentives to pursue irresponsible fiscal policies and irresponsible supervisory policies

The Slide Accelerates

- Many countries had high levels of debt by 2008
- Other countries had fragile banking system
- US financial crisis exposed vulnerabilities in Europe
- Ireland, Spain, others thought it necessary to bailout banks
- Italy, Greece, Portugal had trouble rolling over short term debt

Mario Draghi to the Rescue

- Promised to do whatever it takes
- Rollover crisis averted
- Negotiations with indebted governments difficult but progress made
- Private agents probably more convinced of bailouts in future crises
- Policy may well have increased incentives to take on debt and risk

Making Policy for the Future

Three Questions

- How big should be the role of ECB and ESM as lenders of last resort?
- Should bank regulation be centralized?
- What constraints on fiscal policies are desirable?

Answers to These from 16 Economists (CEPR)

- Lender of last resort:
  - Vast majority think Europe needs a lender of last resources with greater resources
- Bank regulation:
  - All agree on need for centralization
- Constraints on fiscal policies:
  - With few exceptions, pessimistic on enforcing constraints

Our Perspective

- Lender of last resort: Disagree
  - Exacerbates problems it is intended to solve
- Bank regulation: Agree
  - Externalities real, centralization desirable. Devil in details
- Constraints on fiscal policies: Agree
  - Pessimistic but limits on short term debt might work

- Analysis showed that problems are exacerbated
- Dangerous to expand powers of LLR without addressing incentive problems

Bank Regulation

- Who should we regulate?
  - Entities that fund illiquid/risky assets with short term debt
- Why should we regulate?
  - Without commitment, govts will bail out such entities
  - Anticipating bailouts, entities take on “excessive” risk
- How should we regulate?
  - In what universe does it make sense to fund risky/illiquid 30 year mortgages with overnight paper?
  - Move such assets outside bank balance sheets! Offer equity like claims on these assets
  - What assets are left? Commercial and Industrial Loans

Constraints on Fiscal Policies

- Constraints not enforced in the past
- Unlikely that blanket constraints will be enforced in the future
- One view is that the crisis occurred because countries were not able to rollover short term debt
- Remedy is to have a bailout fund for short term debt
- Problem is bailout fund worsens incentives to issue short term debt
- Policies to limit short term debt desirable, perhaps enforceable

On the Conduct of Monetary Policy

Monetary Policy as a Signal Extraction Problem

- Theory says policy is a rule for setting instruments as functions of shocks
- Explain diagnosis of shocks
- Explain responses to shocks
- Describe policy as a state-contingent rule

Appendix

With Commitment Monetary Union Only Has Costs

- With commitment by monetary authorities
- Flexible exchange rates best
  - Especially with sticky prices or wages
- Allows policies to be tailored to idiosyncratic shocks
  - Friedman-Mundell argument
- Policy under commitment internalizes how price and wage setters respond to anticipated policies

Without Commitment Monetary Union Has Benefits

- Consider policies with flexible exchange rates
  - Monetary policy responds to idiosyncratic *temptation shocks* taking prices as given
    - Markup, tax, labor market shocks
  - With sticky prices monetary policies expansionary when economy is very distorted
  - Price and wage setters anticipate policy and set prices and wages even higher
  - End result is excessive volatility in inflation, no effect on output

Without Commitment Monetary Union Has Benefits

- Consider policies in a union
  - Monetary policy does not respond to idiosyncratic temptation shocks
  - With sticky prices monetary policy does not attempt to reduce ex-post distortions in individual countries
  - Price and wage setters anticipate policy and do not set higher prices and wages
  - End result is reduced volatility in inflation, no effect on output

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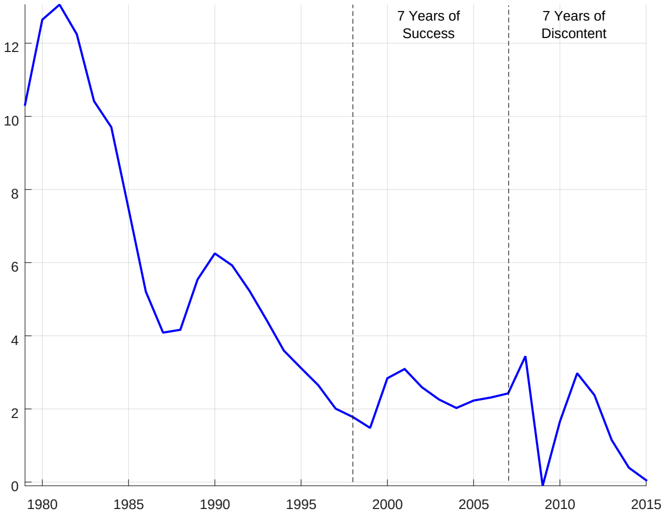
Unweighted Average Inflation in Euro Area



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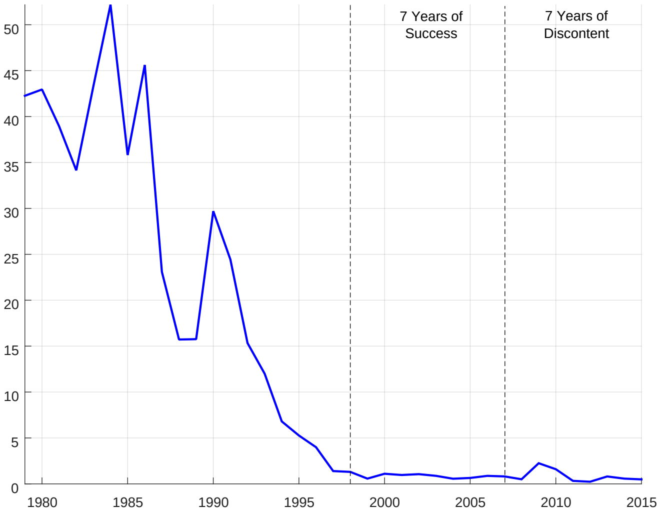
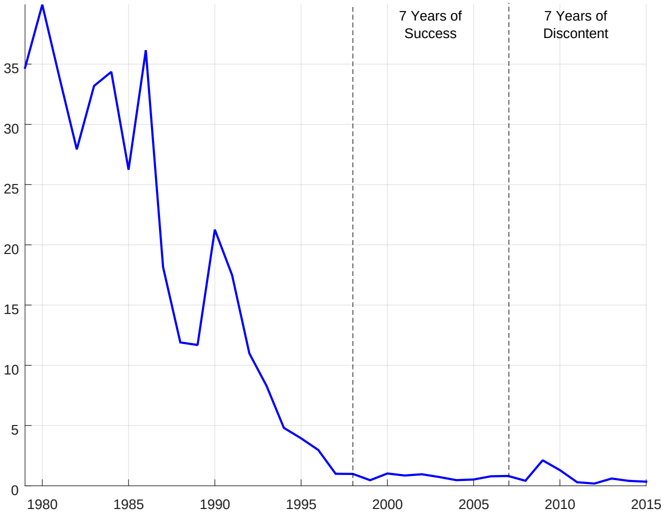
Unweighted Variance of Inflation in Euro Area



Weighted Variance of Inflation in Euro Area



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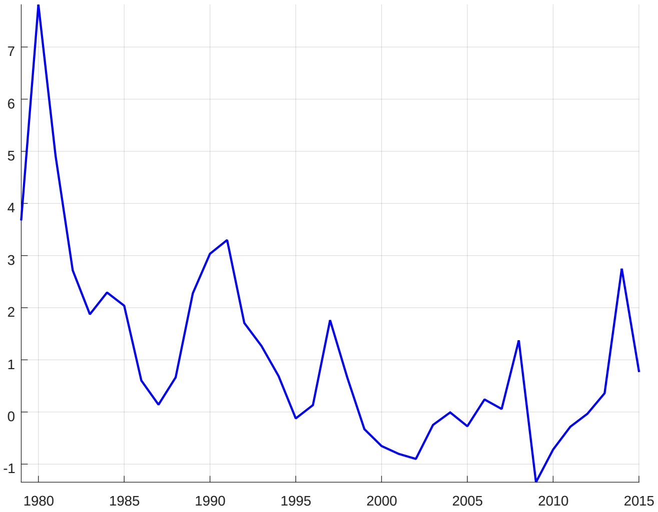
Inflation in Japan



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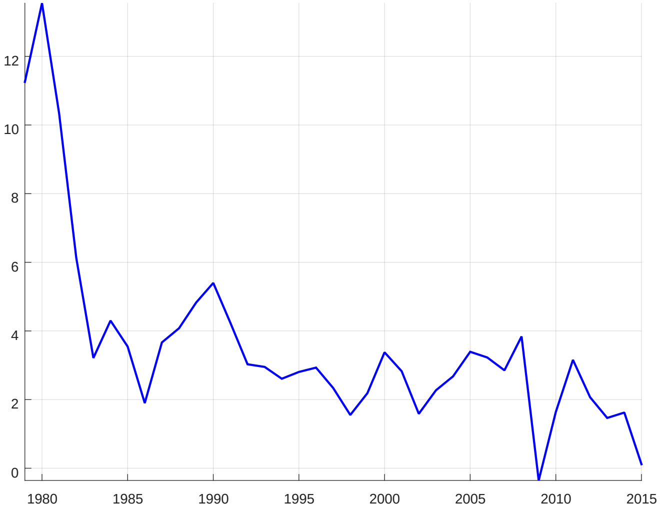
Inflation in US



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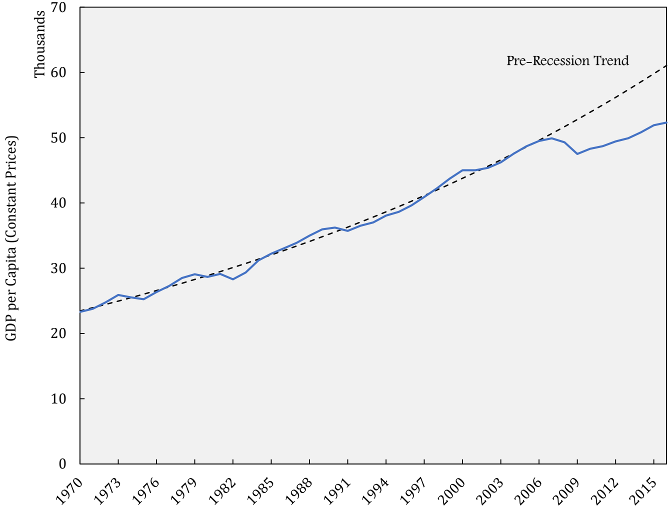
Real GDP per Capita in US (1970–2016)



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