

U.S. then, Europe now

Thomas J. Sargent

February 28, 2012

Situation now in Europe

1. Monetary union (23 countries)
2. A European central bank (ECB)
3. Weak central government
4. Fiscal authority lies in 23 subordinate national governments

Situation now in Europe

1. Weak center can't tax and spend much
2. Big debts from subordinate national governments
3. Deep discounts on some countries' debts
4. Obscure European policies toward bailouts and disciplines

Questions facing Europe's voters

1. Who pays what?
2. Struggles about sovereignty
3. Struggles about generosity of welfare state(s)
4. What is Europe to be?

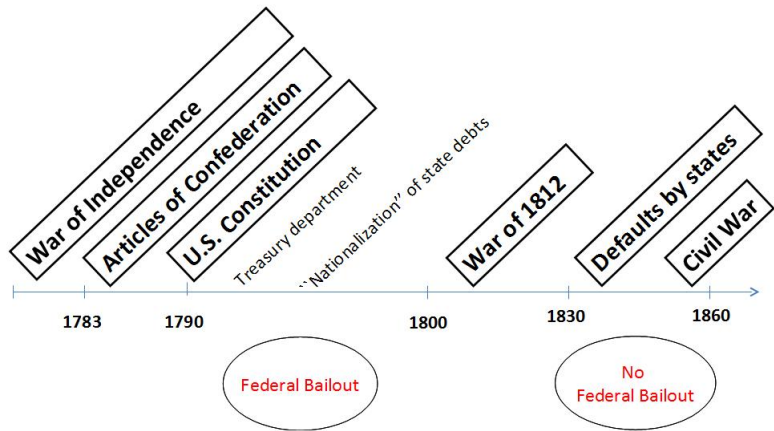
We have been here before

1. Underlying economic and political issues
2. Design (or evolution?) of federal systems
3. A north American example

Fundamental questions for Europe

1. Should governments **default** on their debts?
2. Should a central government **bailout** subordinate states?
3. Should a monetary union precede a fiscal union?
4. Should a fiscal union precede a monetary union?

"United States Then" - Fiscal Timeline



Outline

- ▶ **Fiscal arithmetic**
- ▶ **Fiscal and monetary choices of U.S.**
- ▶ **The current situations in the U.S. and EU**
- ▶ **Lessons**

Model For Government Debt – Variables

- ▶ $g_t \sim$ government purchases.
- ▶ $T_t \sim$ tax collections.
- ▶ $s_t = T_t - g_t \sim$ net-of-interest surplus.
- ▶ $R \sim$ gross (risk-free) interest rate.

A Simple Model For Government Debt

- ▶ The value of the government debt is cumulated value of past *deficits* $-s_{t-j}$.
- ▶ The value of the government debt also equals the expected present value of future *surpluses* s_{t+j} .

Economic Theory

1. What determines s_t ?
2. Economic Model
 - ▶ Environment
 - ▶ Agents
 - ▶ Actions
 - ▶ Information flows
 - ▶ Timing protocols
 - ▶ Optimizing behavior
 - ▶ Equilibrium

Economic Theory and Outcomes

Environment + Behavior + Eqb = Prob. Dist. Over Outcomes

Economic Theory and Outcomes

Economic Model



Environment + Behavior + Eqb

= Prob. Dist. Over Outcomes

Economic Theory and Outcomes

Economic Model

Environment + Behavior + Eqb

= Prob. Dist. Over Outcomes

- Government, Voters, Creditors
- Fiscal and Monetary Policies, Voting and Portfolio Choices
- Political Institutions (Constitutions)

$\{s_t\}$, R

1781-1787 : U.S. After War of Independence

Environment

- Articles of Confederation
- Weak Continental Congress
- High debt from war
- Uncoordinated trade/fiscal policies

Outcomes

- Deep discounts on IOU's
- 14 $\{s_t\}$

1790's : The U.S. Constitution

“New” Environment

- The U.S. Constitution
- Federal bailout of states
- Consolidation of trade/fiscal policies
- Exclusivity to tax

Outcomes

- No discounts on IOU's
- Increased liquidity
- Large federal tax revenue

Monetary arrangements as an afterthought.

1790's : The U.S. Constitution

“New” Environment

- The U.S. Constitution
- Federal bailout of states
- Consolidation of trade/fiscal policies
- Exclusivity to tax

Outcomes

- No discounts on IOU's
- Increased liquidity
- Large federal tax revenue

Monetary arrangements as an afterthought.

Reputation with creditors vs. reputation with states

1840's: Fiscal Crisis

- ▶ What kind of fiscal union?
 - ▶ Expenditure
 - ▶ Bond-issuance
 - ▶ Taxation
- ▶ Eleventh Amendment and Congress's refusal to bail out states
- ▶ Rewritten state constitutions with balanced budget provisions

U.S. then

- ▶ Deep discounts on bonds
- ▶ Uncoordinated fiscal policies

- ▶ “Messy” monetary arrangements
- ▶ Large federal debt

EU now

- ▶ Deep and varied discounts on member state bonds
- ▶ Uncoordinated fiscal policies

- ▶ Centralized monetary arrangements
- ▶ No “federal” debt

Questions

1. Should governments **default** on their debts?
2. Should a central government **bailout** subordinate states?
3. Should a monetary union precede a fiscal union?
4. Should a fiscal union precede a monetary union?