Econ 340
Lecture 17
European Monetary Unification and the Euro

Outline: European Monetary Unification and the Euro

• What Is It?
• History of the EMU
• Need for Convergence
• Pros and Cons of Unification
  – Why Adjustment Is Hard
  – Winners and Losers under EMU
• What Happened?
• The Eurozone Crisis

What Is It?

• The move to a common currency for a group of countries of Europe
  – Originally 12 countries
  – Now 19, with addition of Lithuania Jan 1 2015
• Purpose: To further the economic integration of Europe that
  – Began with the European Economic Community (a customs union – see next time)
  – And is today called the European Union (EU)
What Is It?

- The currency is shared by all 19 countries and is not controlled by any one of them
- It is controlled by the European Central Bank (ECB), based in Frankfurt, Germany
- The group of countries is called the Economic and Monetary Union (EMU) (Also, informally, the Eurozone)

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History of the EMU

• Before 1973:
  – All these currencies were pegged to the US dollar

• After 1973:
  – The Bretton-Woods system collapsed and major currencies stopped pegging to US$
  – By default, currencies began to float
  – Europe, because of its large internal trade, found exchange rate movements especially troublesome

History of the EMU

• After 1973:
  – Europe tried several arrangements to get greater stability
    • Wide-band peg to $ with narrower peg to each other: “Snake in the tunnel”

History of the EMU

• After 1973:
  – Europe tried several arrangements to get greater stability
    • Narrow peg to each other with no peg to $: “Floating snake”
History of the EMU

• 1979
  – European Monetary System (EMS) established
  – Features:
    • An Exchange Rate Mechanism (ERM) of exchange rates pegged to each other within ±2.25% bands
    • Provision for adjusting the pegs when needed
    • A basket of currencies forming the European Currency Unit (ECU) that floated with respect to outside currencies
    • Capital controls
  – Did it work?
    • Inflation rates differed, but their differentials gradually fell
    • 11 currency realignments during 1979-87

• 1989: First official statement of the goal of moving toward a common currency
• 1991, December: Maastricht Treaty
  – Agreement on greater unification of member countries, forming the “European Union”
  – Also included the terms for adopting the common currency

• 1992: Crisis
  – Denmark voted NO to the Maastricht Treaty
  – Speculative attacks on currencies forced some to drop out of ERM
• 1993:
  – ERM widened bands to ±15%
  – Prospects for EMU looked bleak
  – Denmark ratified Treaty but “opted out” of the euro; UK also opted out
  – Germany was last country to ratify Maastricht Treaty
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Need for Convergence

• Difficulties of adopting common currency
  – If countries have different rates of inflation
    • High-inflation countries will lose markets to low-inflation countries
    • Exchange rates won’t adjust (a la PPP) to correct for differences
  – If countries have different interest rates
    • Capital will flow to high-interest rate countries seeking higher return
    • Uncertainty about exchange rate won’t offset this
  – Temptation to run budget deficits when able to borrow from other countries

Need for Convergence

• Difficulties of adopting common currency
  – These suggest that success with a common currency requires countries to have similar
    • Inflation rates
    • Interest rates
    • Budget deficits
    • Government debts
  – Achieving this was called “convergence” and was required in the Maastricht Treaty before a country could adopt the euro
Need for Convergence

- **Maastricht Convergence Criteria**
  1. National currency in ERM for 2 years
  2. Budget deficit < 3% of GDP
  3. Government debt < 60% of GDP
  4. Inflation < 1.5% above average of lowest 3
  5. Long-term interest rates < 2% above average of lowest 3

- **How well were they doing?**
  - Following graphs from 1998 article

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**Figure 1**

**CPI Inflation Rates**

![Graph of CPI Inflation Rates]

Source: International Monetary Fund.

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**Figure 2**

**Government Bond Yields**

![Graph of Government Bond Yields]

Source: International Monetary Fund.
Maintaining Convergence

• Stability and Growth Pact (SGP)
  – Agreed in 1996 that members of the Eurozone would
    • Keep their budget deficits below 3% of GDP
    • Pay fines if they broke this limit

As we’ll see later, this has been a problem!
Timetable

• May 1998: Membership was set
  – Based on convergence
  – All of the then 15 EU members, except
    • UK, Denmark, Sweden – who opted out
    • Greece – who failed to converge (Greece did enter soon after)
• Jan 1, 1999: Euro was launched (except notes/coins)
  – Value of euro = 1 ECU as of midnight Dec 31, 1998 = $1.18
  – Currencies “irrevocably” linked
  – Single monetary policy: ECB (European Central Bank)
  – New public debt issued in euros
  – Financial markets started using euro
• Jan 1, 2002: Notes/coins started circulating
• Jul 1, 2002: National notes/coins retired

The euro notes and coins

• Note what does not appear:
  – People
  – Actual buildings and places
• Purpose was to treat all members equally
• Result was that the currency lacks personality
• People don’t much like it, and they miss their old national currencies.
• See Kulish
Members

• As of 2002, EU had 15 members, of whom 12 adopted the euro

Belgium
Austria
France
Luxembourg
Italy
Netherlands
Portugal
Ireland
Greece
Spain

BAFFLING PIGS

Members

• And 3 did not

Denmark
United Kingdom
Sweden

DUKS

Members

• Since 2002, the Eurozone has become:

BAFFLING PIGS +

SCLELMS?

Cyprus
Estonia
Ireland
Latvia
Malta
Slovakia
Slovenia

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Pros and Cons of Unification

• Proponents expected
  – Complete the internal market
  – Improved competition & efficiency
  – Arbitrage across national borders
  – New era of prosperity
  – Stable prices
  – Fiscal discipline
  – Lower interest rate
    ➢ thus higher investment
    ➢ Stronger growth
  – More jobs

Pros and Cons of Unification

• Opponents expected
  – Division of the EU (baffling pigs vs. duks)
  – Loss of sovereignty
  – Little popular support
  – Regulatory & other costs
  – Difficulties of adjustment to asymmetric shocks
    (As had happened before, e.g., with German unification and discovery of North Sea Oil)
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Pros and Cons of Unification

• Why adjustment is hard
  – Like states in the US, countries in Eurozone have
    • No exchange-rate tool
    • No separate monetary policies
    • Very limited fiscal policies (due to SGP)
  – Unlike US states, however, in Eurozone
    • Labor is less mobile across countries
    • Wages are less flexible, due to social policies
    • No mechanism for fiscal transfers among countries

Pros and Cons of Unification

• Without adjustment
  – When one country is hit with a shock that others are not (i.e., an "asymmetric shock"),
    • Its markets don’t adjust (rigid wages)
    • Its people don’t move
    • It has fewer policies to deal with this
    • Other countries don’t help
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Winners and Losers from EMU

• Winners
  – Multinational companies: their costs of operating in multiple countries were reduced
  – Europe’s biggest banks were expected to gain, through consolidation across borders
  – Consumers, able to comparison-shop across borders
• Losers
  – Small firms (e.g. shops, restaurants), for whom changeover was costly, with little benefit

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What Happened?

- Euro started (Jan 1, 1999) at 1.18 $/€
- Now (Nov 5, 2018) it is 1.14 $/€
- So euro has simply fallen, right?
- Hardly! Not that simple.

What Happened since 1999?

From IMF, International Financial Statistics

What Happened over the Last Year?

From X-Rates.com
What Happened over the Last Month?

From X-Rates.com

What Happened?

• Euro fell, after its creation by about 25% to 2001
• Then it rose by 2004 back to slightly above where it started
• By 2008 it had risen to over $1.50, only to fall in 2009
• From 2004 to 2014, it stayed at or above $1.20
• It then fell to about $1.10, then $1.05 where it stayed until early 2017.
• Some thought it would go below “parity” of $1.00, but it instead rose to over $1.20 and is now $1.13

What Happened?

• Why all this change? I don’t think we know, for the changes that happened over most of this period.
• The fall since 2014 – from over $1.30 in 2013 to about $1.05 a year ago – was due to
  – Weakness of the Eurozone economies
  – The ECB’s use of “Quantitative Easing” to lower interest rates and stimulate the economy
  – The US Fed’s interest rate increase and signals that it will raise them further
• Why has it risen over the last year? Some would say because of Trump
What Happened?

- Has the euro worked well for Europe?
  - There were problems, even in the early years
  - Many in Europe perceived that prices rose when converted to euros
  - Several countries broke the limit of the SGP
    - Portugal: suffered criticism but was not fined
    - France, Germany
      » Too big even to criticize
    - Instead EU revised the SGP
    - In the last decade, the PIGS (Portugal, Ireland, Greece, & Spain)
      » Or PIIGS, including Italy

What Happened?

- Has the euro mattered for the US?
  - Not much
  - When the euro fell initially, it made it hard for US to compete
  - In 2007-8, with euro’s rise,
    • US benefited as sellers
    • US was hurt as consumers and as tourists

What Happened?

- Has the euro mattered for the US?
  - There used to be talk of central banks switching from dollars to euros as reserves
  - So far, little sign that this is happening
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The Eurozone Crisis

- The crisis consisted of (see Baldwin et al.)
  - News of Greek debt, and concerns about Greece’s ability to manage it
  - Increased interest rates in Greece and other Eurozone countries, threatening debt problems there as well
  - Bailouts by EU, ECB, and IMF (the “Troika”)
  - Concern that the Eurozone might break up
  - Commitment by ECB’s Draghi to “Do whatever it takes” to save the eurozone.

The Eurozone Crisis: Timing

Figure 7: Prelude and Phase One of the Crisis: Correlation in the periphery

Source: Baldwin et al., “Rebooting the Eurozone”
The Eurozone Crisis: Timing

Figure 8: Timing of bailouts in the Eurozone

Source: Baldwin et al., "Rebooting the Eurozone"

Note that Greece is not solved, and crisis may not be over.

The Eurozone Crisis: Timing

Figure 10: Yields converged after Draghi’s intervention

Source: Baldwin et al., "Rebooting the Eurozone"

What Happened?

- The problem of Eurozone imbalances
  - The common currency fostered current-account imbalances
  - Surplus countries lent to deficit countries
  - Without institutions (banking union, fiscal union) to assist adjustment, loss of confidence could cause “sudden stop” of creditors’ willingness to lend
  - That set the stage for crisis.
What Happened?

• The problem of Greece (started in 2010)
  – Greek government deficits had been over 10% of GDP
    • (compare SGP limit of 3%)
  – Greek debt rose to about 160% of GDP
    • (compare SGP limit of 60%)
  – Markets feared default; speculators attacked both Greek bonds & euro
  – EU (esp Germany) were reluctant to help (& was prohibited by Lisbon Treaty)
  – Greek austerity caused massive protests

What Happened?

• The Euro Zone today
  – In process of negotiating a mechanism to
    • Provide loans to member countries in trouble
  – Put pressure on them for austerity:
    – Cut spending
    – Raise taxes
  – Form “banking union” to safely manage bank failures
What Happened?

• The Euro Zone today
  – Still trying to solve the problem of Greek debt
  – Tradeoff between
    – Bailout money from others to pay it off
      » Favored by weaker EU countries (e.g., France)
    – Cutting value of bonds to private sector holders
      » Called “haircut” (also “bail-in”)
      » Also called “Private-sector involvement” (PSI)
      » Favored by stronger EU countries (e.g., Germany)

What Happened?

• The Euro Zone today
  – Fear that if not solved,
    • Greece would default
    • Speculators would attack other weak countries’ bonds
    • Greece and others will be forced to leave the euro
  – These concerns seemed to have abated in 2014, but
    then Greece elected a government opposed to the
    terms of the bailout.
  – Greece is still struggling, and fears of crisis in the
    Eurozone have lessened but not disappeared

What Happened?

• The Euro Zone today, per the Smaghi reading
  – Crises are caused by
    • “Doom loop” where banks hold government debt,
      and doubts about the latter cause bank runs
    • “Perverse loop” (Smaghi’s term) where fear of exit
      from the euro causes capital outflow that makes
      exit more likely
  – Smaghi recommends a formal procedure for
    exiting the euro, and that it be combined with
    exiting the EU
    • That, he says, would discourage those who want
      to exit the euro
Next Time

- Preferential Trading Arrangements and the NAFTA
  - What are they?
  - Their effects
  - NAFTA
  - Other