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)

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
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
    • There were 11 currency realignments during 1979-87

History of the EMU

• 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

History of the EMU

• 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

**Figure 1**
CPI Inflation Rates

**Figure 2**
Government Bond Yields
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

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**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  Ireland  Luxembourg  Italy  Netherlands  Portugal  Ireland  Greece  Spain

BAFFLING PIGS

• And 3 did not

Denmark  United Kingdom  Sweden

DUKS

• Since 2002, the Eurozone has become:

BAFFLING PIGS +

SCELMS?

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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
What Happened?

- Euro started (Jan 1, 1999) at 1.18 $/€
- Now (Nov 6, 2019) it is 1.11 $/€

- So euro has simply fallen, right?
- Hardly! It’s 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 instead it rose to over $1.20 and is now back down to $1.11

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 two years 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 did it rise, then fall, over the last two years? 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 PIIGS (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

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

Figure 9: The Eurozone Crisis: Timing

Note: The spreads are the difference between national 10-year government bond yields and those of Germany, in percentage points.

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.

Note that Greece is not solved, and crisis may not be over.
The Eurozone Crisis: Timing

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, now under another new government, 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 (after exam)

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