

The Institutional Origins of the Eurozone and the Greek Crisis

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Current Situation. Internal Developments

- **Big and prolonged recession**
- **Severe austerity**
 - Massive tax increases (VAT, property, income taxes)
 - Significant wage cuts in the public sector (approximately 30%)
- **Debt to GDP (and to some lesser extent fiscal deficit) still quite high**
- **Unemployment (especially among the youth; brain drain)**
- **Lack of finance (severe banking problems)**
- **Slow progress on structural reforms**
 - Privatization
 - Product markets (liberalization of closed professions)
- **Illegality (coupled with feeling of injustice)**
- **Institutional breakdown (weak state symptoms)**

Current Situation. External to Greece Developments

— EU/IMF/ECB plan

- “Ambitious”
- Unrealistic in many aspects (not well-designed)
- Different incentives between the three parties (IMF, EU, ECB)

— Contradictory and inconsistent EU policies

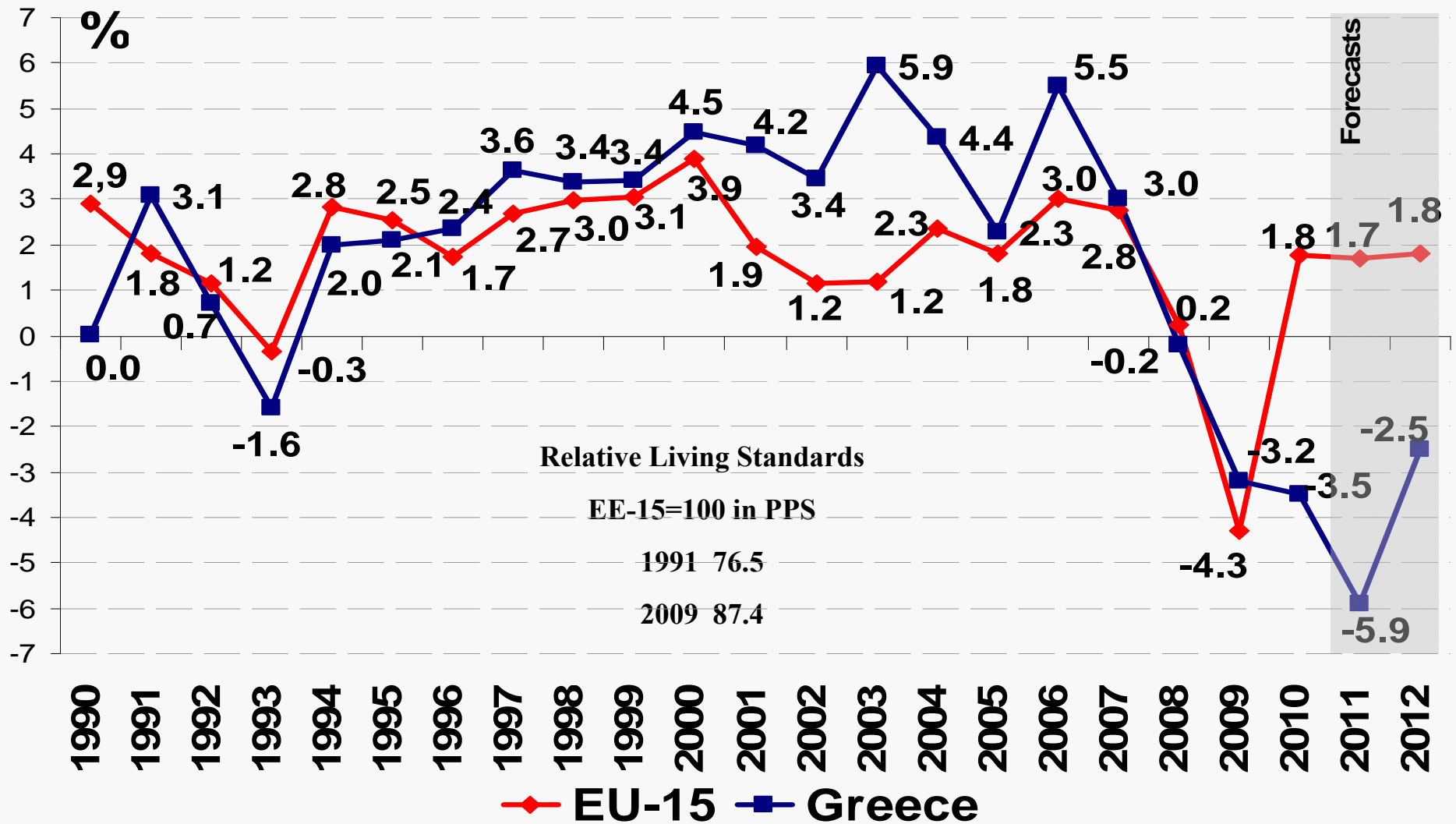
- EFSF (role; capacity)
- ECB interference
- Different policies-objectives within the EU (“*All politics is local*, LBJ”)

— Global uncertainty

— Contagion to other countries

— Lack of a plan for the euro (even a bad one; even after the recent EU summit)

Real GDP Growth



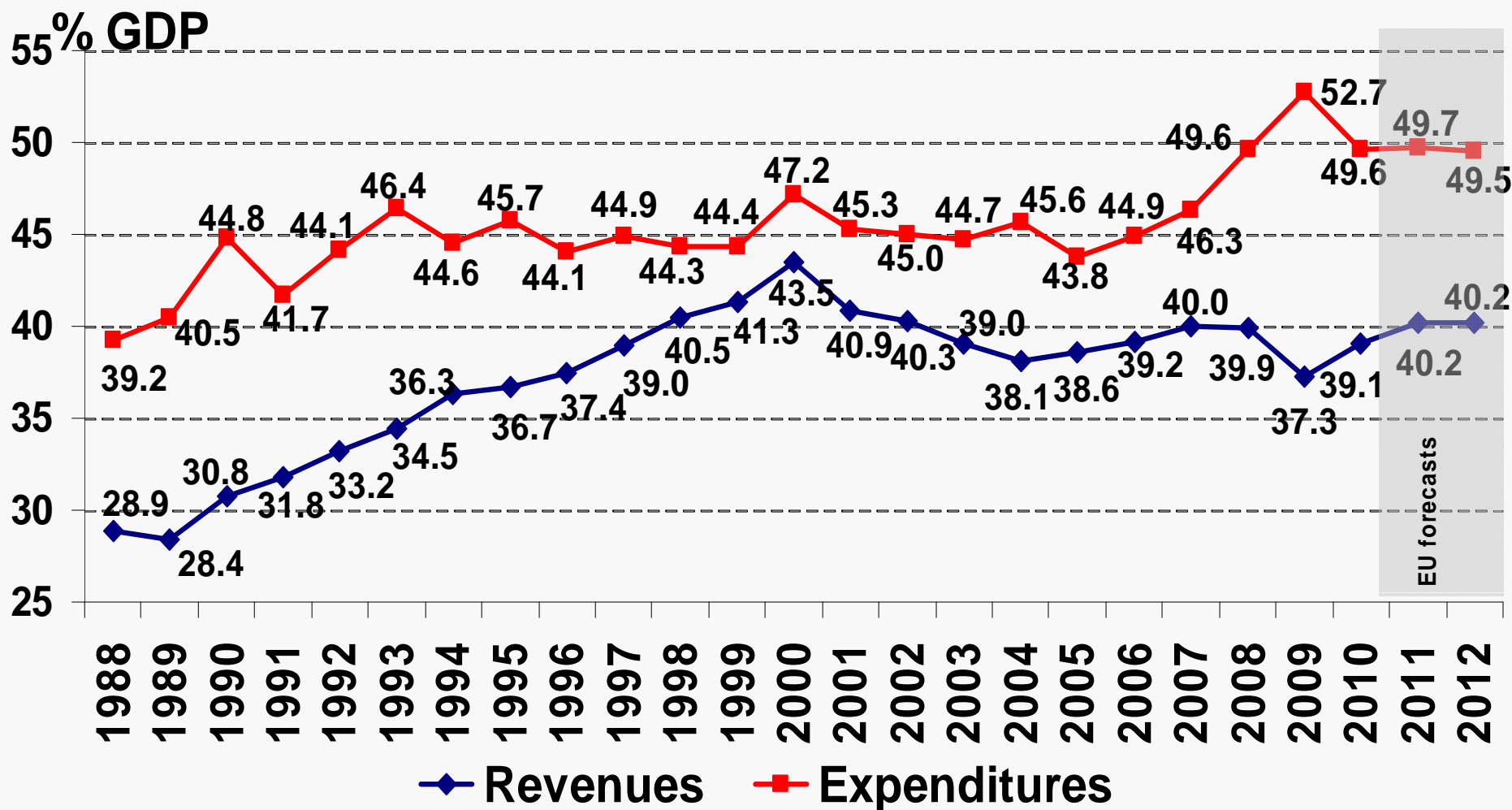
Source: EU, ELSTAT, EFG Forecasts

Unemployment Rate



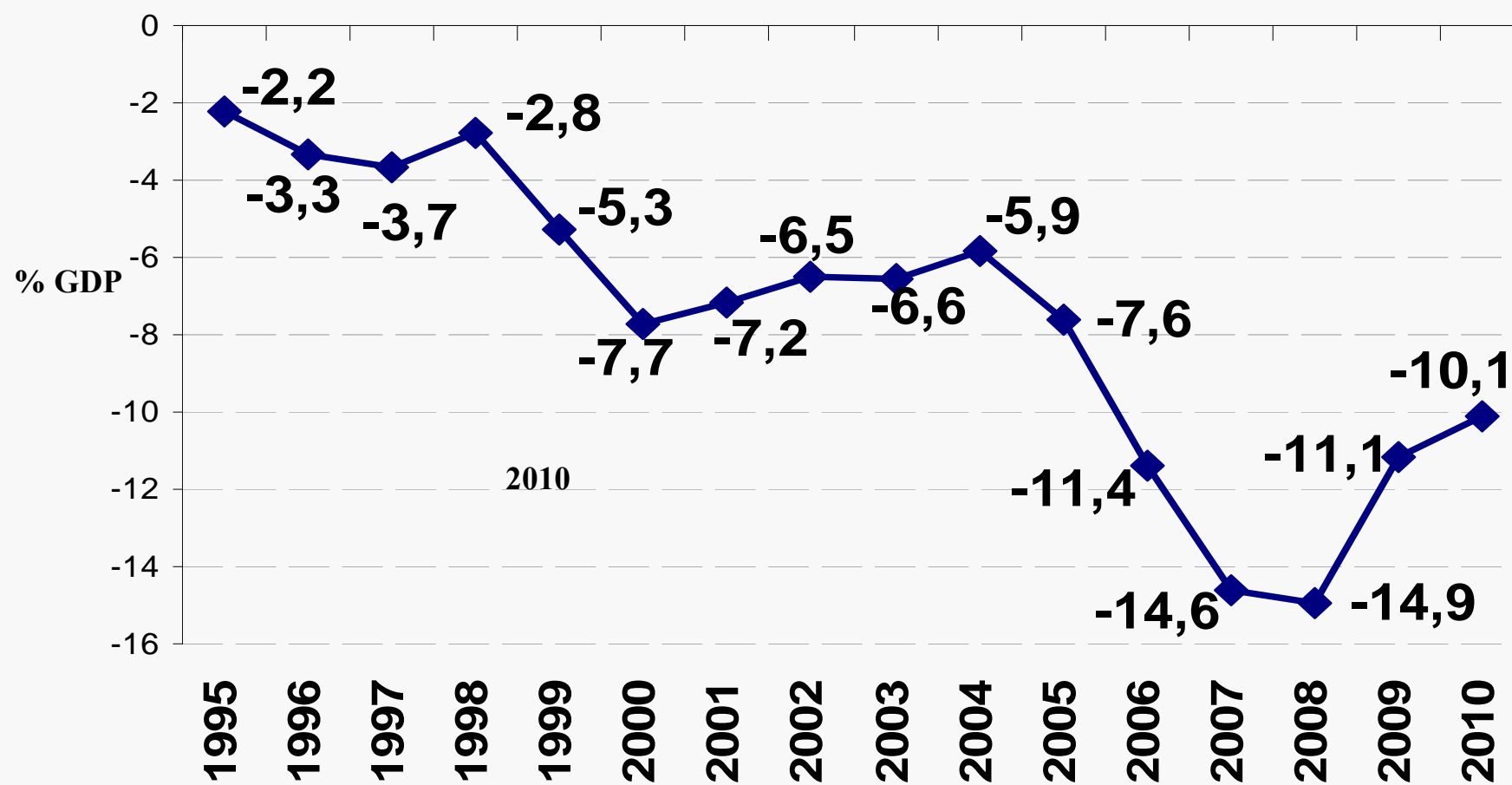
source: TradingEconomics.com; National Statistical Service of Greece

Fiscal Conditions

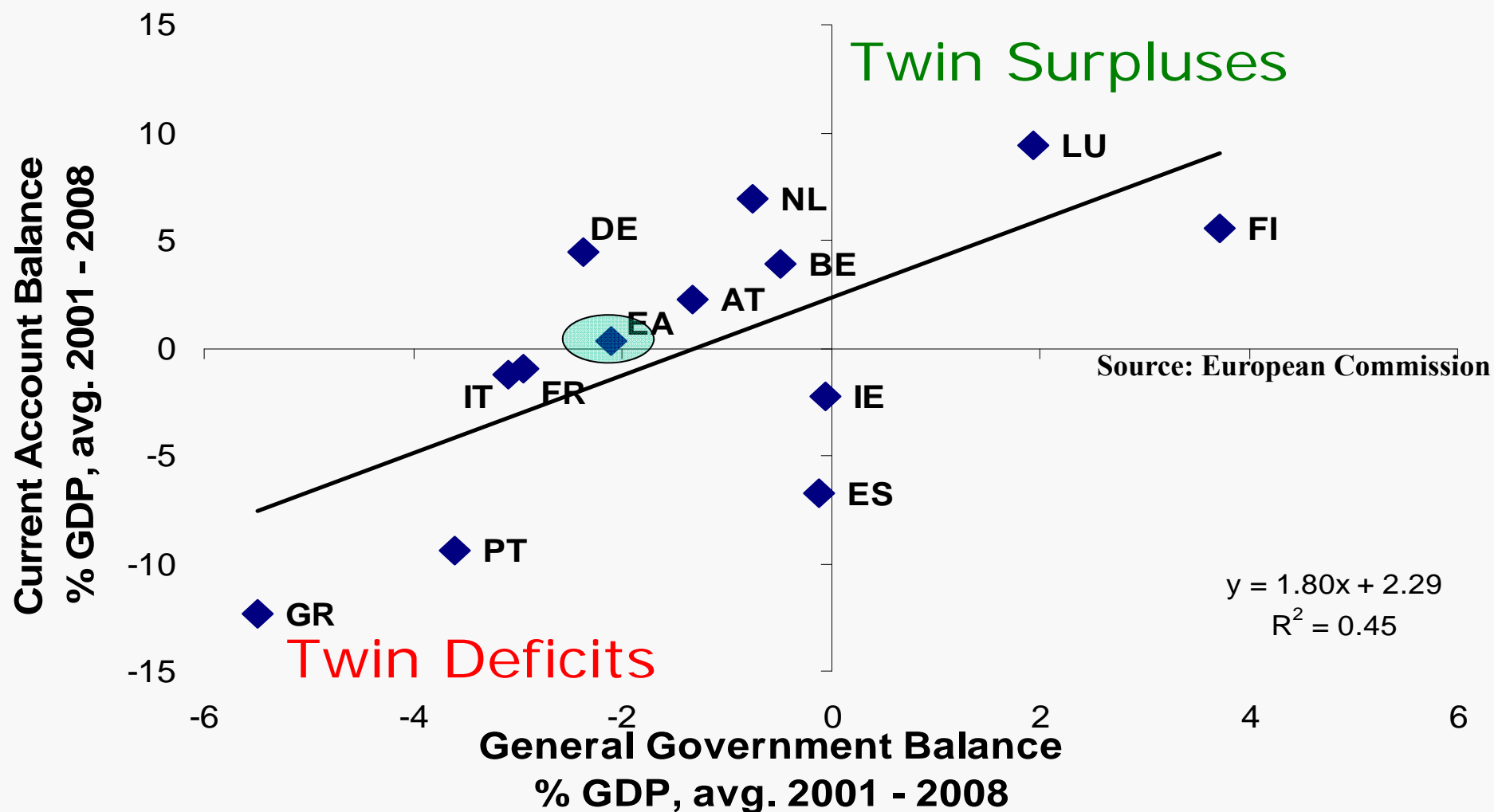


Source: European Commission, Spring 2011 forecasts

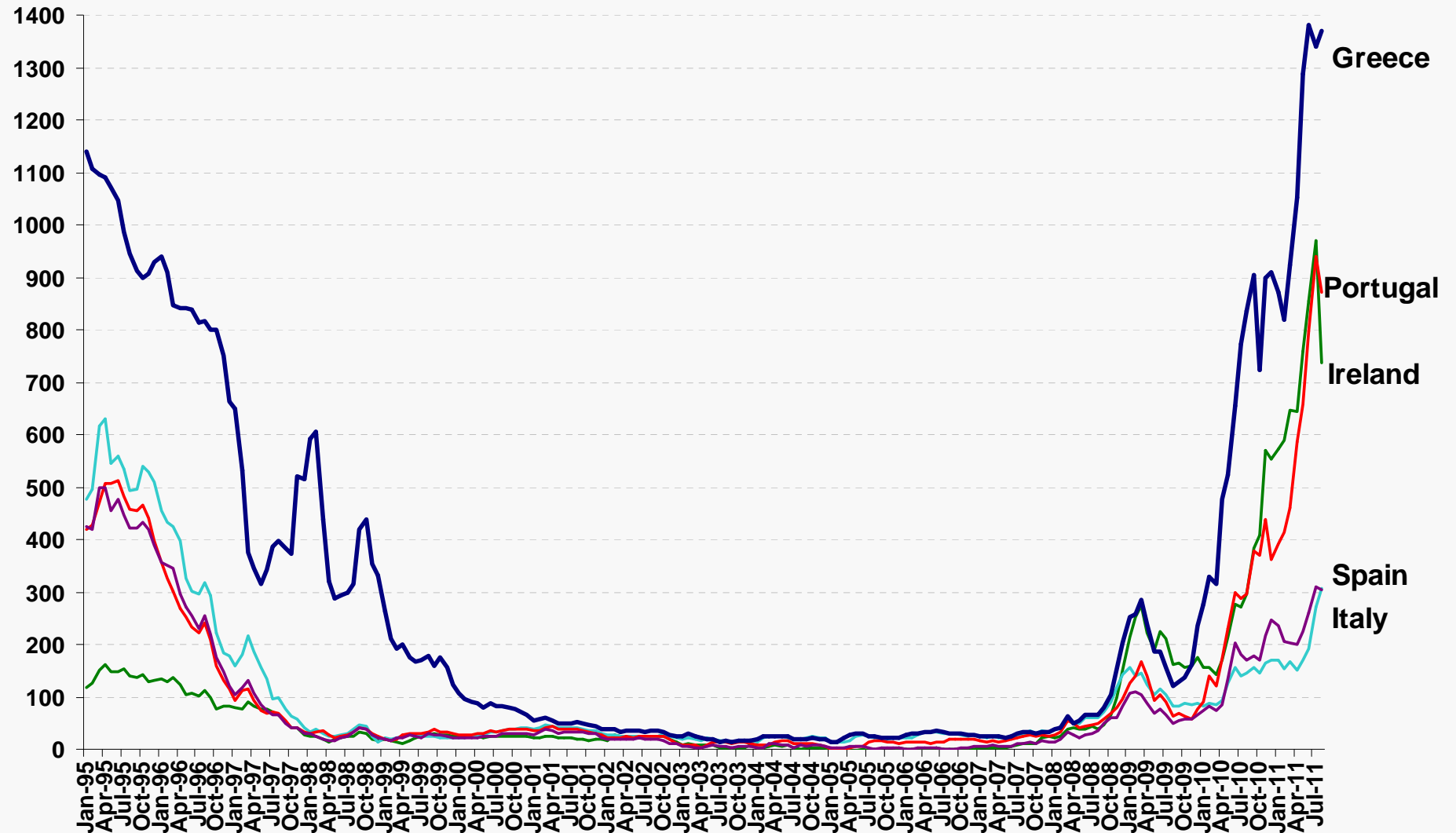
Current Account Imbalances



Twin Deficits (within a currency area)



Spreads over German Bunds



Macroeconomic Developments before the Recent Crisis.

Summary

- positive GDP growth but at a decelerating rate
- anti-cyclical fiscal policy (slight increase of debt/GDP even after the upward revision of GDP in 2007)
- rising deficits of central government and state-affiliated agencies and municipalities (highest debt/GDP and deficit/GDP in the euro area)
- rising private sector debt (though still much lower than in other EU countries)
- huge internal liabilities of the government (to construction companies and pharmaceutical firms; approx. 7 billion euros)
- steady loss of competitiveness (high inflation, real wage growth + euro appreciation over the dollar)
- alarming current account deficit
- **Poor institutional quality AND steady decline of institutional capacity**
- **BUT...still low cost of borrowing from the international debt markets (just 20bps over German bunds)**

The IMF/EU/ECB Program

After a lengthy (3 month) period of negotiations, hesitation by some countries (mainly Germany), opposing remarks by EU officials, and immense market pressure the Greek government, the EU Commission, the ECB, and the IMF agreed in March 2010 on:

- ➔ Largest assistance plan in history: 150 billion dollars (around 110 billion euros)
- euros 80 billion provided by euro area member states (at a rate of 4.5%-5%; subsequently lowered to 3%)
- euros 30 billion provided by the IMF (at a rate of around 2.0-2.2%)
- 3 year horizon. The program is monitored through twelve quarterly reviews (and installments). [recent extension of the horizon to 2020]

The IMF/EU/ECB Program

— Extremely "ambitious" program

- Some unrealistic provisions (e.g. privatization; computerization of courts)
- Optimistic assumptions
 - Greece
 - Global economic environment
- Standardized prescription (not tailored to the needs and idiosyncratic features of the Greek economy/society)

— Immense and unprecedented scale of adjustment (in a period of recession coupled also by global uncertainty a pan-European crisis of confidence)

— Focus on fiscal side rather than on institutional reform

- Deficit and debt → symptom of institutional breakdown and weak state

The Structure of IMF/EU/ECB Program

— **Fiscal measures**

- **Expenditure**
- **Revenues (mostly)**

— *Labor Markets*

— *Pension reform*

— Banking (Fund for Financial Stability; ECB liquidity provision facilities)

— Product Markets (privatization; opening of closed professions)

— Lack of institutional reform (Papaioannou and Vayanos, Bloomberg August 10 2011)

Fiscal Measures. Initial Rounds. Revenues

- Elimination of special taxation rules
- Increase in excise tax for alcoholic beverages and tobacco (three rounds)
- Tax increase in petrol and gasoline (two rounds)
- Increase in property taxes (two rounds, even before the recent special measure)
- Increase in VAT (sales) tax by 4 percentage points and then further increase (23%)
- Introduction of excise tax in electricity (250 million)
- Increase in corporate tax rate
- Special (one shot!) levy on highly profitable firms (in 2009, 2010, 2011,...)
- Amnesty on land use violations and taxation of unauthorized establishments (“moral hazard”)
- Legislation allowing firms and individuals to settle past tax disputes with small fines (“moral hazard”)

Fiscal Measures. Initial Round. Expenditures

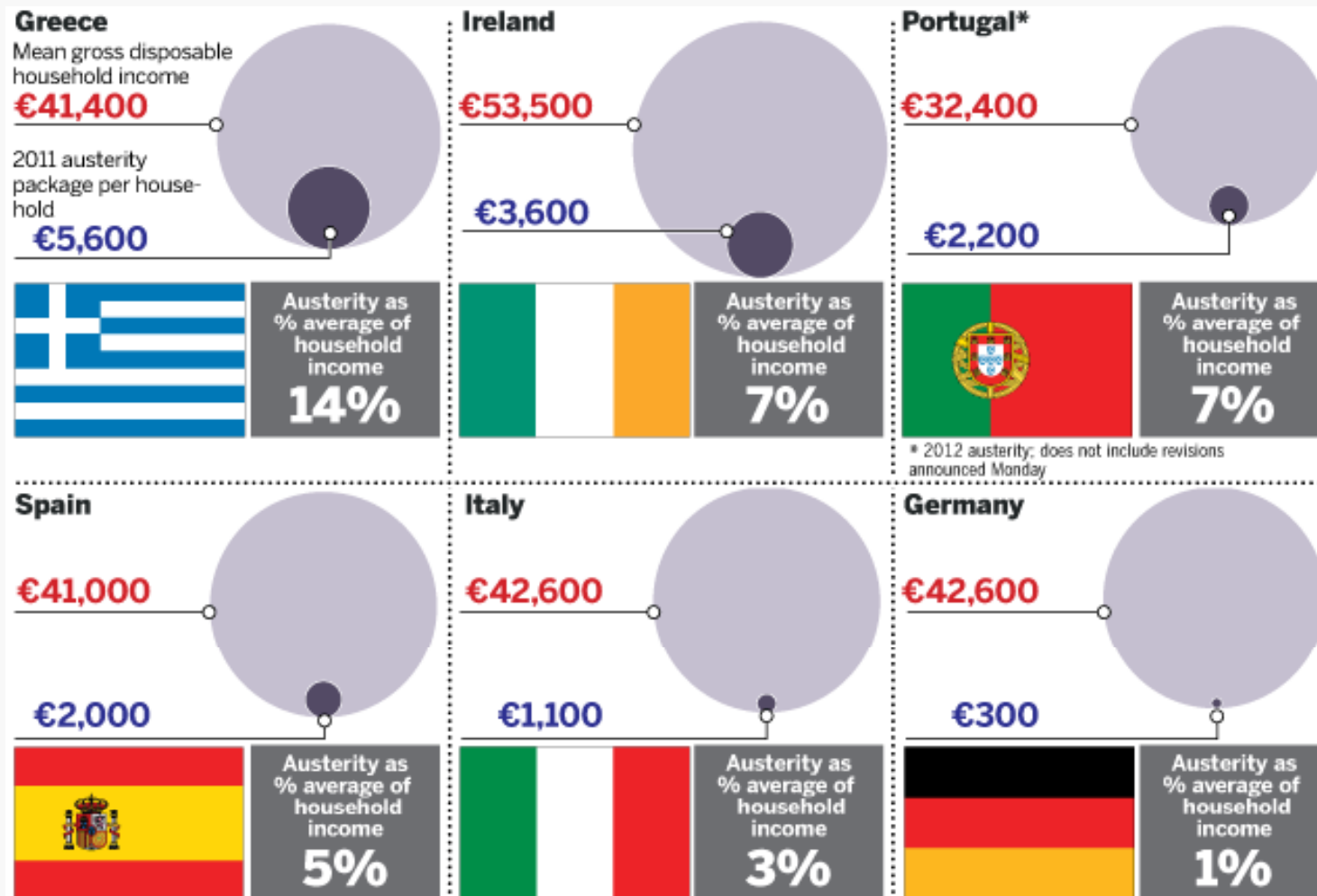
- Elimination of so-called 14th salary (around 7% of total real wages)
- Public sector wage cuts of 10%.
- 20% (10%+2%+8%) cut on salary allowances (massive effect)
- Pension cuts of 9%
- Recruitment freeze (no exemptions, so far...)
- (Almost) elimination of short-term contracts in the public sector
- Reduction of public investment program
- Salary caps for high-ranked public sector officials;
- Reduction of overtime payments by 30%
- Elimination of around 500 public sector agencies
- Pension freeze for 3 years
- Defense spending cuts (around 20%)
- Some effort to reduce health expenses

Is this enough?

No. Recent (September 2011) Fiscal Measures

- Special levy on property (via electricity bills). On average 5 euros per square meter.
- Massive reduction of no-tax-limit (from 12,000 to 10,000 to 5,000 euros)
- Firing (placing on reserve) of 30,000-90,000 public sector employees
- Further reduction of public sector salaries and pensions exceeding 2,100 euros per month

Outcome of Austerity Measures (not including the latest round)



Source: Finance ministries; Eurostat

Figures have been rounded. Household income figures for 2010 except Greece (2009).

Not Again!!

Pressure for New Austerity Measures (as of yesterday)

- Reduction of minimum wage
- Further tax increases
- Reduction of the threshold income that is tax-exempt

Largest fiscal consolidation ever by a Eurozone economy

- General Government deficit reduced by 5 percentage points of GDP in 2010.
- Cyclically adjusted general government deficit reduced by around 6 percentage points of GDP (from -14.9% in 2009 to -9% in 2010).
- Primary deficit reduced by 5.4 percentage points (from 10.3% of GDP to 4.9%).
- Cyclically adjusted primary deficit reduced by 7.2 percentage points (from -9.8% to -2.6%).
- Primary expenditures reduced as a percentage of GDP from 47.6% in 2009 to 44.0% in 2010.
- Total Revenues increased as a percentage of GDP from 37.3% in 2009 to 39.1% in 2010 (second largest increase in EU).
- Real unit labor costs down by 3.5% in 2010, real wages per head down 7.9%.
- Exports are growing fast: 35% average growth in exports per month (y-on-y)

But is this enough? Nope (→ unsustainable debt dynamics)

Things did not work smoothly because

- The EU, the IMF, and Greece focused on a short run perspective, essentially postponing the full acceptance of the problem
- Whenever there was a shortfall on revenues, the troika has been pushing to make up for the shortfall with additional measures
 - Belief that the program is failing
 - Different approach on lack of progress on product market reforms
- Serious disagreements arose among the EU members, and between the EU and the ECB
- Some of the imposed requirements were unfeasible
- The Greek government failed to implement some key program provisions (mostly on product markets, privatization)
- Total failure to tackle chronic tax evasion (→ legitimacy lost; feeling of injustice)

Mistakes. (0). Internal Problems

- Greek government failed to act quickly (steadily lost the “window of opportunity”)
- Most reforms were partial
 - Focus on legislation; not on the implementation
- Greece: symptoms of “weak state”
- Lack of support
 - Opposition
 - Unions
 - Some segments of the population

Mistakes. (1). Obsession with fiscal austerity

- Unprecedented scale of adjustment
 - Inability to tackle chronic tax evasion (reforming/reengineering tax collection mechanisms)
 - Focus on revenue side (rather than on expenditure side), especially in the initial phase
-
- ➔ **Fiscal adjustment costs fall into middle class (private sector workers; public sector employees) that cannot hide their revenues**
 - ➔ **Lost legitimacy; lost public support for the program**

Mistakes. (2). A Standardized Prescription

— Pension reform (needed).

- Legislation in the summer of 2010
- Pending additional legislation in reforming the regime for early retirement for “heavy duty” occupations

Mistakes. (2). A Standardized Prescription, cont.

— Labor market reform

- Legislation in the summer of 2010
- Troika keep pushing (erroneously) for further liberalization (allow for firm-level agreements) and for reducing minimum wage (miniscule effect; massive opposition)

Mistakes. (2). A Standardized Prescription, cont.

— Product Market Reform

- Not a priority (though included in the program)
- Partial legislation
- Privatization (nope)
- Opening of “closed” occupations (a bit)
- Enhancing competition (nope)

Mistakes. (3). Lack of Serious Institutional Reform

- **Justice System**
- **Public Administration**
- **Banking and capital markets regulation**

Mistakes. (4). Haircut or not?

- Initially (early 2010) the European leaders dismissed the IMF; then they invited the IMF to assist
- Then EU leaders argued that Greece is “special”; rating agencies had it “wrong”; no need for restructuring
- After a year the EU announced that a restructuring of the Greek debt was unavoidable and that a small haircut (PSI) was needed (21%).
- The markets were not convinced, but the EU leaders (as always) dismissed them.
- However soon afterwards (in October 2011) they announced an even larger, voluntary, haircut of 50% (PSI++)
- Currently Greek bonds trade at an even larger discount

Mistakes. (5). Communication; Marketing

- Initial strong support for the program has steadily vanished
- During the initial stages of the program the troika enjoyed popularity as ordinary Greeks viewed the program as an opportunity to tackle chronic problems
- **Strong opposition to the program**
- **Inconsistent and confusing statements by EU politicians**
- **Repeating rounds of austerity measures → belief that the program is failing**
- **Problems at the European level**

Mistakes. (6). Contradictory Policies and Statements at the EU level

- Different incentives among EU countries
- Different objectives/incentives between the EU and the IMF
- Disagreement on the role of the ECB
- EFSF (and ESM); funding, operations
- Absurd approach (bold statements at EU summits; details left over)

- Talk; talk; talk; talk.
- Failed actions
- Lack of a coherent program at the EU level

Short-run Policies. Non-Actions

1. **Shhhhhhhh**

- Every time EU politicians talk yields go up (and stock markets go down)
- Actions; not words)

2. **Avoid heated debates on long-term issues now**

- Super costly to proceed now with a Treaty change

3. **Respect current institutional arrangement**

- No exits are allowed

Short-run Policies. Actions

1. Bank Recapitalization Plan

- Is there a plan?
- Continue liquidity provision mechanisms

2. Respect independence of ECB

- Severe damage

3. EFSF-ESM

- Put them to work

Medium-Run Policies. Adjustment Programs

1. Abandon one program fits all approach

- Design programs tailored to the needs of each country (massive heterogeneity)
- Acknowledge that fiscal adjustment alone cannot solve the underlying structural problems

2. Jobs, Jobs, Jobs

- Help the needed (perhaps via the EU structural and the social cohesion funds)
- Promote growth policies (remember the Lisbon agenda!!)

3. Reform the Stability and Growth Pact

- Credible punishments
- Monitor also “soft” competitiveness (structural) indicators

Conclusion

— Euphoria in booming years

- Lack of market discipline
- Demagogic policies
- Institutional breakdown

— Greece under crisis

- IMF/EU/ECB program → coherent, but incomplete
- (Previous) government → missed the window of opportunity
- Unions → populism
- Opposition → populism
- Lack of coherent and consistent policies at the EU level
- Conflict at the EU level

Conclusion, cont.

- In spite of a sizable fiscal adjustment (6 percentage points of GDP in a period of prolonged recession) and some significant reforms (mostly in pension, labor markets, and cutting pork), the people believe that the program is failing.
- Massive uncertainty
- Not clear what is going to happen
- People are desperate for something new, but cannot specify what they need

Appendix Material

Composition of Greek Debt

— **Bilateral loans: total €65.6b**

- EU bilateral loans: total €47.7b
- IMF bilateral loans: total €17.9b

— **Greek Sovereign Bonds: total € 284.2**

Exposure to Greek Debt

— ECB (bought in open market)	55.0
— Greek banks (held as collateral by the ECB)	40.0
— Greek pension funds and insurance comp.	30.0
— French banks	56.9
— German banks	28.3
— UK banks	14.7
— Portuguese banks	10.2
— US banks	8.7
— Dutch banks	5.2
— Italian banks	4.5
— Austrian banks	3.3
— Swiss banks	3.0
— Belgian banks	2.0
— Japanese banks	1.3
— Spanish banks	1.1
— Others (insurance, hedge funds)	20.0

Debt Dynamics

- **Greek sovereign debt: €328 billion at end of 2010**
 - Presently about €350
- **In May 2010, EU & IMF promised Greece a €110 billion loan**
 - First 5 installments were delivered, about €70b, most used to pay expiring bonds
 - Sixth installment is about to be delivered
- **Remaining/uncovered/private debt: €280 billion**
 - Unclear if €55b held by the ECB can be subject to haircut
- **Greek GDP was €230 billion in 2010; €215 in 2011**
- **Greek sovereign debt was 143% of GDP at the end of 2010**
- **Greek debt is growing because:**
 - Despite cuts in public sector expenses, the Greek public sector had a budget deficit of 10% in 2010, which increased debt
 - Severe recession in Greece reduces the GDP and therefore increases Greek sovereign debt as a percentage of GDP

Debt Arithmetic

- let d_t be public debt (D) as a share of nominal GDP (Y) in year t :
$$d_t = \frac{D_t}{Y_t}.$$
- T and G denote respectively tax receipts and public sector spending respectively.

$$d_t - d_{t-1} = (r_t - g_t)d_{t-1} + \left(\frac{G_t}{Y_t} - \frac{T_t}{Y_t} \right)$$

- where r_t is the interest rate (cost of debt) and g_t denotes the growth rate of GDP.
- **ways to reduce debt**
 - ① run primary deficits ($\frac{G_t}{Y_t} < \frac{T_t}{Y_t}$)
 - ② experience positive growth of (nominal) GDP that exceeds the cost of borrowing ($r_t < g_t$)

Debt Dynamics. Pessimist Scenario

- **Even if Greece had public sector, debt reaching 150% or more of GDP cannot be fully financed from the surplus, even at a relatively low interest rate of 4%-5%.**
- **At 5% interest rate**
 - yearly interest on Greek sovereign debt is €17.5 billion
 - or about 21% of public revenue
- **This is unsustainable, and markets understand that**
 - Expecting a default or deep haircut
 - At present, the interest rate of 2-year Greek debt is 74%
- **Greece cannot impose reductions on EU and IMF bilateral loans of €70b**
 - Needs to reduce its private debt of €280b (perhaps including that held by the ECB)

Debt Dynamics. Optimistic Scenario

- 4% interest rate
- 4% nominal GDP growth (2% real growth + 2% inflation)
- 4% primary fiscal surplus (as in 1998—1999)
- Debt reduction by 50 billion euros
 - Privatization
 - Lease of public property
 - Current PSI program (bond swap)

→ debt/GDP as of 2020 of approximately 85%.

The Way Forward

— Developments in the next 2-4 months

- Implementation of the budget
- Implementation of the new lending agreement (PSI+)
- Stability of the banking system
- Legislation of product market reforms
- Judicial reform

— Developments after the new elections

- Political uncertainty
- Demagogic policies
- Multiple equilibria (uncertainty)

Many Open (External) Issues

— EU/IMF/ECB policies

- Germany
- EU level
- ECB (change of presidency)
- IMF (change of power)

— Global economic environment

Greek Banking System

- Greek banks have about €40 billion exposure to Greek bonds and less than €10 billion total market value
- They will take an accounting hit of €20 billion
- These losses have already occurred, but, using an accounting trick, banks do not show the losses in their books
- Restructuring will imply an accounting recognition of the existing losses
- Greek banks need to recapitalize
- If they cannot, Greece can give them convertible bonds (as the US gave Citibank in 2008) or other aid; ECB can provide liquidity (but only if they do not experience losses)

Disorderly Default

- **Greece can impose an involuntary haircut implying a “credit event”**
- **Most Greek bonds are governed by Greek law and an involuntary haircut would requires just an act of parliament**
- **This hard default would have very adverse (Lehman-like) consequences to the world financial markets**
- **For Greece:**
 - Exclusion from capital markets for years
 - May be unable to pay salaries and pensions to civil servants
 - May have to leave the Euro

What if the voluntary exchange occurs. Contagion?

■ **Optimistic:**

- Quick solution on Greece will avert long crisis that put pressure on Italy, Spain
- Greece will be seen as a special case

■ **Pessimistic:**

- Large haircut will show that this can happen in Europe, and therefore to Portugal, Italy, Spain, Belgium, etc.
- Some countries (e.g. France) could lose their AAA rating when they support domestic banks, widening the crisis

An Exit?

Not Legally Possible. But in any case devastating

- If Greece leaves the euro, its new drachma will be devalued significantly compared to the old drachma
- Debt is in euros, suddenly gets multiplied by 2-4 in new drachmas
 - Required haircut has to be close to 100%
- Huge inflation
- Depositors get wiped out (massive violence; riots)
- To pay public servants salaries, Greece will be forced to print too many new drachmas, thereby creating an inflationary spiral
- Outside the euro, Greece will be forced to borrow at very high interest rates