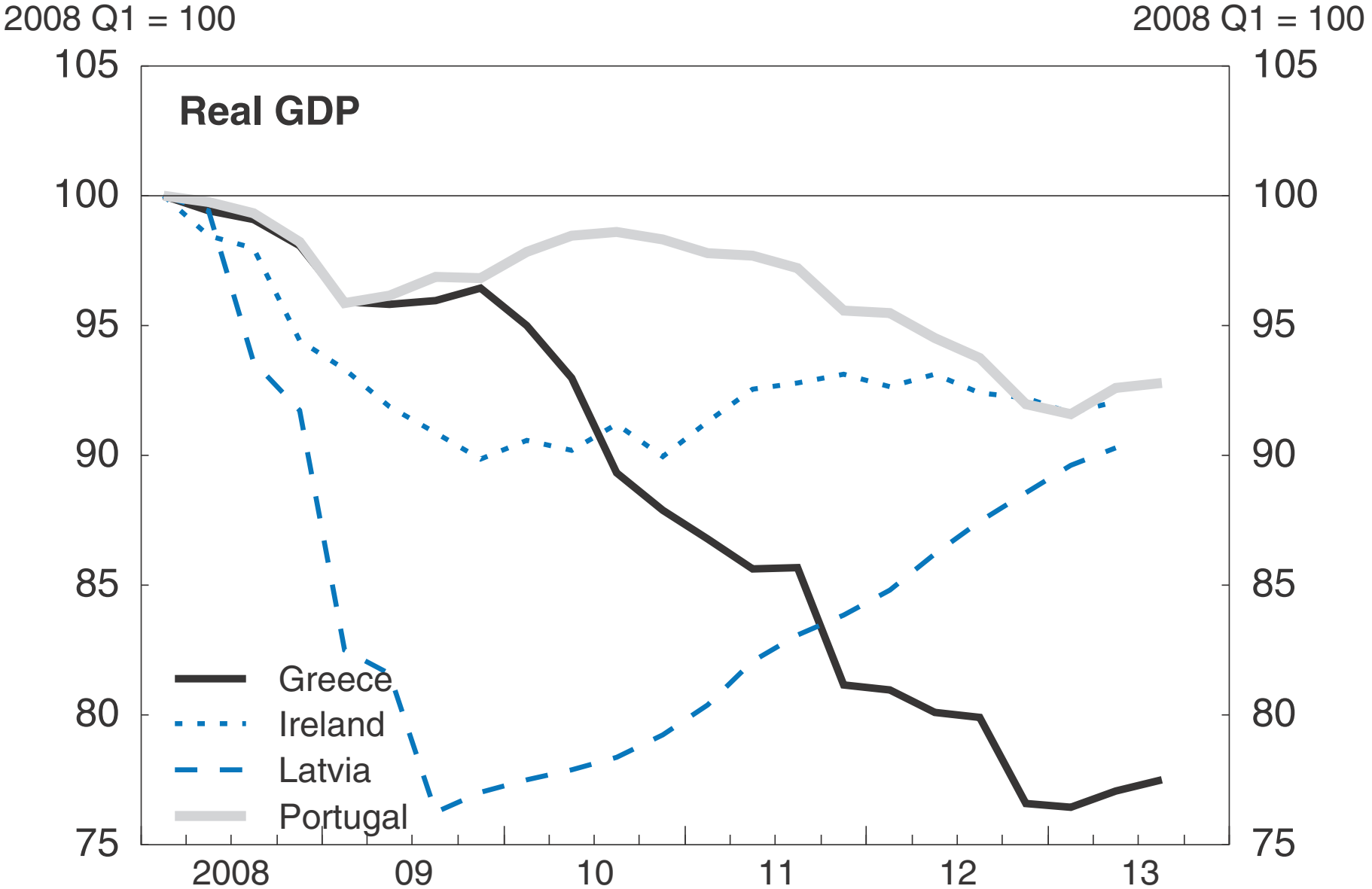
Looking Beyond The Greek Crisis and Lessons for Europe

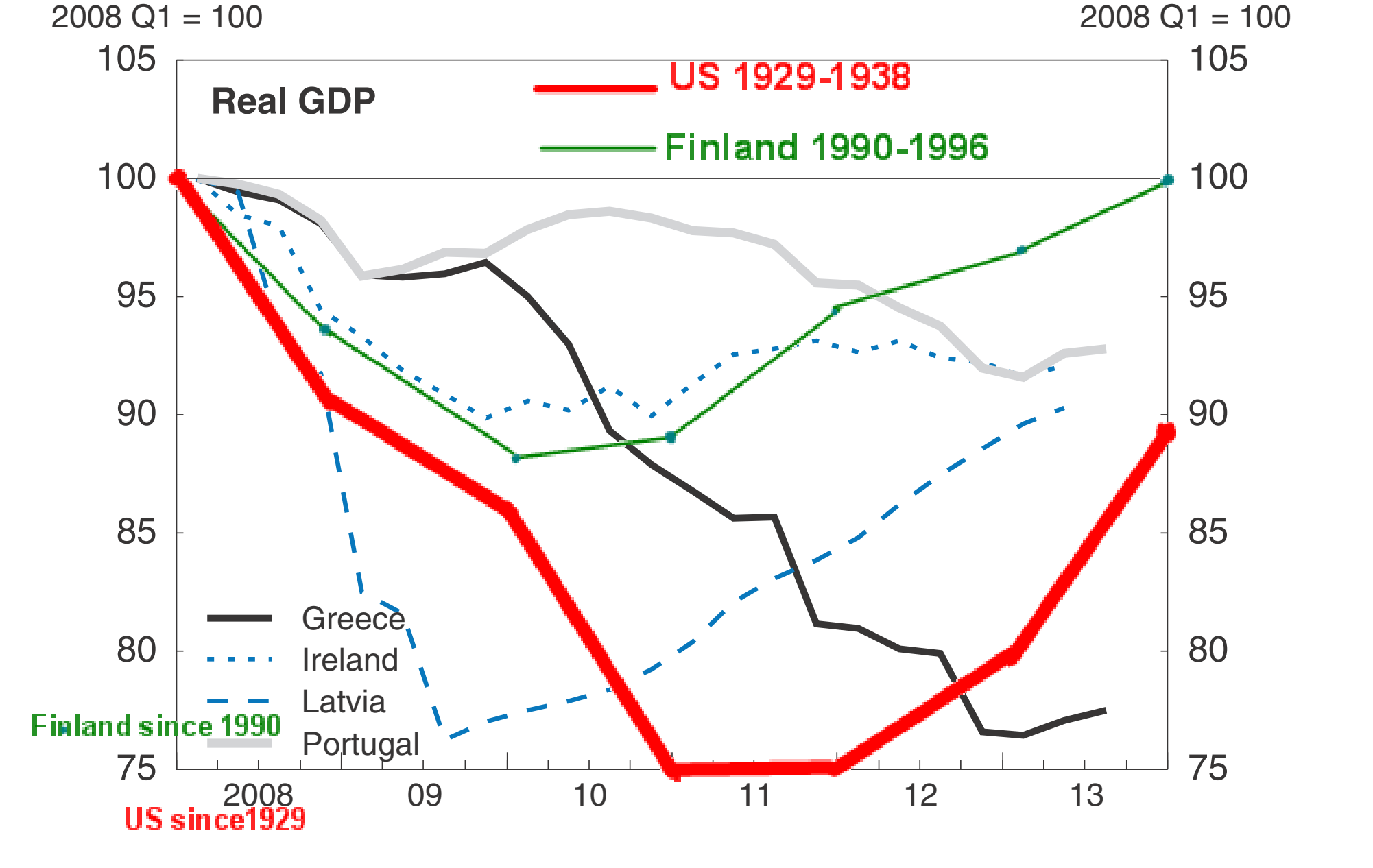
Yannis M. Ioannides
Tufts University

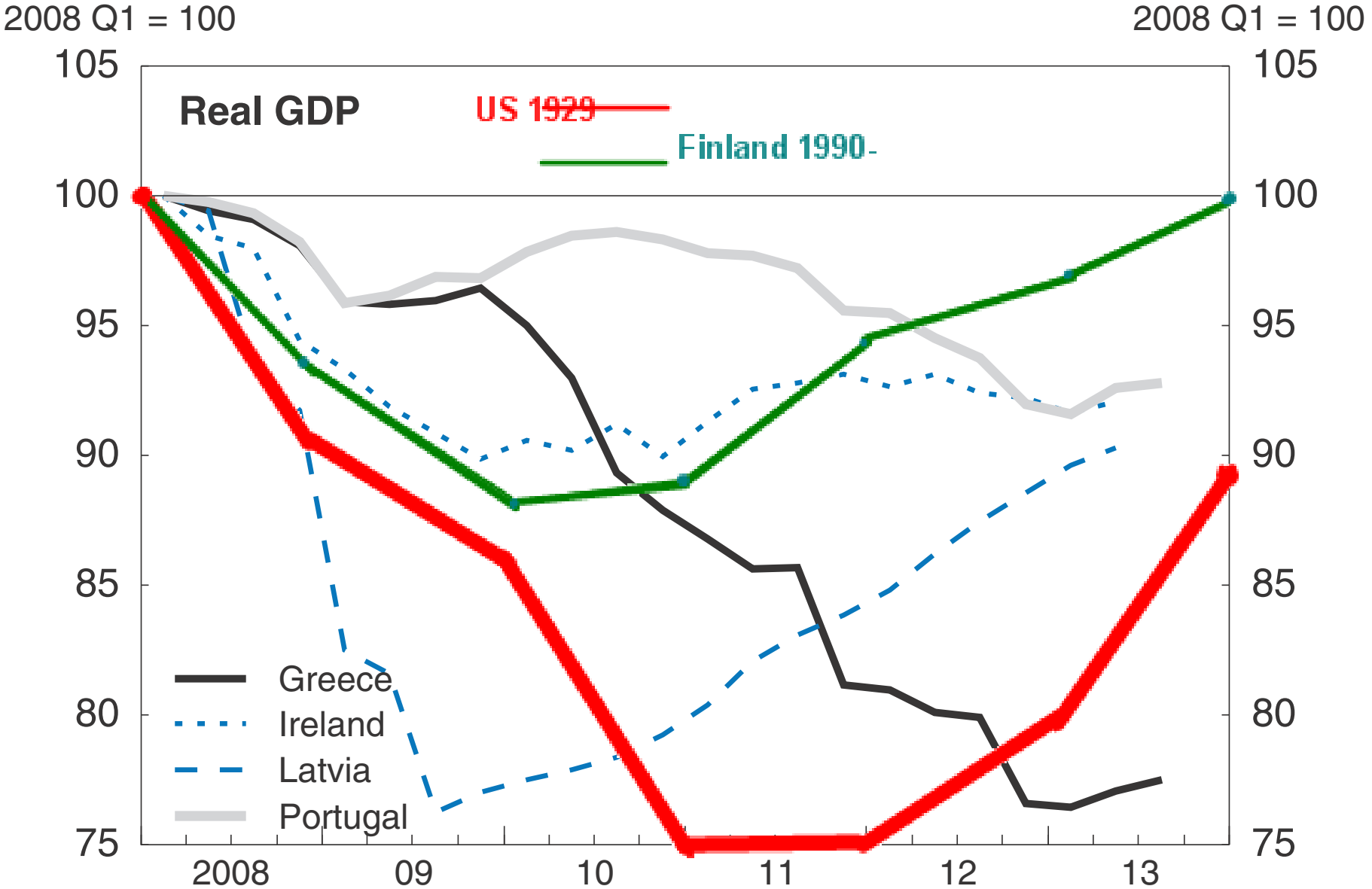
Conferència XREPP, Universitat de Girona, March 18, 2015

Outline

- Crises
  - Greek Great Recession, vs. Ireland, Portugal
  - US Great Depression (1929-1938): standard reference
  - Finnish Great Depression (1990-1997): Finland's most severe since 1929
  - Crises end, with restructuring
- Competitiveness
  - Structural reforms to unleash technological progress, competitiveness
  - Small improvements grow geometrically in the long run
  - Investments: human and physical capital, infrastructure
  - Quality of education, rule of law, and institutions
  - Aim at world markets, internal linkages will follow
- Reinventions


2008 Q1 = 100
2008 Q1 = 100
Real GDP
105
100
95
90
85
80
75
Greece
Ireland
Latvia
Portugal
2008
09
10
11
12
13


2008 Q1 = 100
2008 Q1 = 100
Real GDP
US 1929-1938
Finland 1990-1996
105
100
95
90
85
80
75
Greece
Ireland
Latvia
Portugal
Finland since 1990
US since1929
2008
09
10
11
12
13


2008 Q1 = 100
2008 Q1 = 100
Real GDP
US 1929
Finland 1990-
105
100
95
90
85
80
75
Greece
Ireland
Latvia
Portugal
2008
09
10
11
12
13

Outline

- Crises
  - Greek Great Recession, vs. Ireland, Portugal
  - US Great Depression (1929-1938): standard reference
  - Finnish Great Depression (1990-1997): Finland's most severe since 1929
  - Crises end, with restructuring
- Competitiveness
  - Structural reforms to unleash technological progress, competitiveness
  - Small improvements grow geometrically in the long run
  - Investments: human and physical capital, infrastructure
  - Quality of education, rule of law, and institutions
  - Aim at world markets, internal linkages will follow
- Reinventions

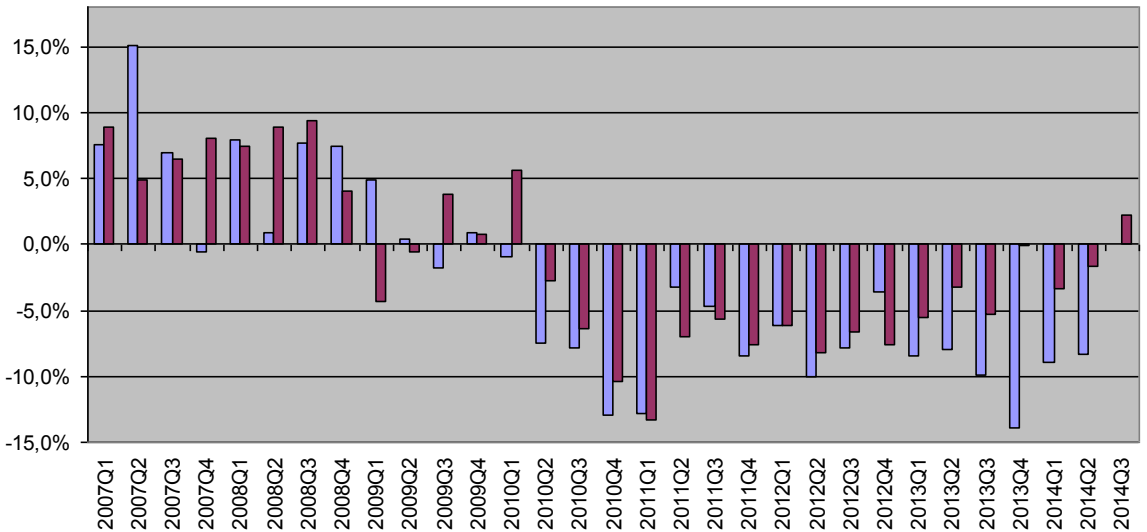
Understanding the Greek Crisis

- Fiscal contraction + cutoff of bank credit + persistent uncertainties related to public debt + one third fall of the real wage + pessimistic expectations + collapse of investment
  $\Rightarrow$ Contraction of aggregate demand
  $\Rightarrow$ huge rise in unemployment, accentuated by pervasive frictions
- Accomplished huge reduction in unit labor costs
- Product market rigidities prevented *huge* commensurate price reductions. KEPE 2015, 1.3.1, 1.3.2
- Huge reduction in living standards. ELSTAT Jan. 23, 2015
- Structural reforms to improve competitiveness, ease price adjustment, reallocate resources to most productive sectors and exports.
- Modernization of public services to raise trust, increase tax compliance, strengthen rule of law, encourage foreign investment.

Εξέλιξη του ακαθάριστου διαθέσιμου εισοδήματος και της καταναλωτικής δαπάνης των Νοικοκυριών και ΜΚΙΕΝ

ELSTAT Jan 23 2015

(μεταβολή σε σχέση με το αντίστοιχο τρίμηνο του προηγούμενου έτους)



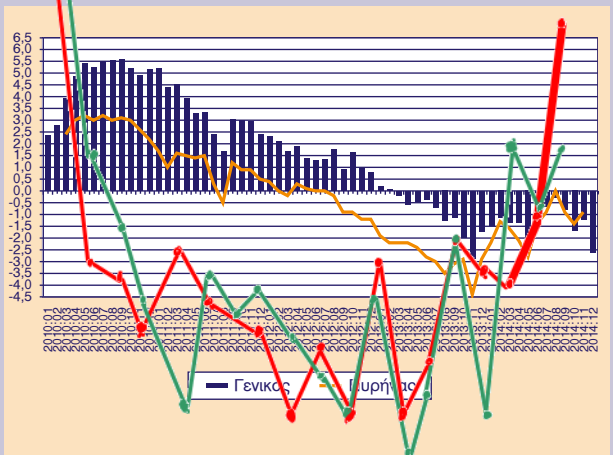
Gross Disp. Income

Final consumption spending

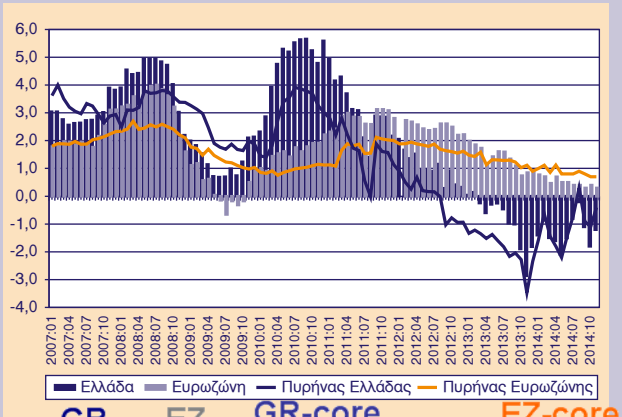
Wage index, y-y, seas. adj

Wage index y-y, seas. unadj., hrs-adj.

ΔΙΑΓΡΑΜΜΑ 1.3.1
ΔΤΚ, % μεταβολή (ως προς τον αντίστοιχο μήνα του προηγούμενου έτους)



ΔΙΑΓΡΑΜΜΑ 1.3.2
Εναρμονισμένος Δείκτης Τιμών Καταναλωτή σε Ελλάδα και ΟΝΕ, % μεταβολή (ως προς τον αντίστοιχο μήνα του προηγούμενου έτους)



GR EZ GR-core EZ-core

Understanding the Greek Crisis

- Fiscal contraction + cutoff of bank credit + persistent uncertainties related to public debt + one third fall of the real wage + pessimistic expectations + collapse of investment
  $\Rightarrow$ Contraction of aggregate demand
  $\Rightarrow$ huge rise in unemployment, accentuated by pervasive frictions
- Accomplished huge reduction in unit labor costs
- Product market rigidities prevented *huge* commensurate price reductions. KEPE 2015, 1.3.1, 1.3.2
- Huge reduction in living standards. ELSTAT Jan. 23, 2015
- Structural reforms to improve competitiveness, ease price adjustment, reallocate resources to most productive sectors and exports.
- Modernization of public services to raise trust, increase tax compliance, strengthen rule of law, encourage foreign investment.

Understanding the Greek Crisis

- Fiscal contraction + cutoff of bank credit + persistent uncertainties related to public debt + one third fall of the real wage + pessimistic expectations + collapse of investment
  $\Rightarrow$ Contraction of aggregate demand
  $\Rightarrow$ huge rise in unemployment, accentuated by pervasive frictions
- Accomplished huge reduction in unit labor costs
- Product market rigidities prevented *huge* commensurate price reductions. KEPE 2015, 1.3.1, 1.3.2
- Huge reduction in living standards. ELSTAT Jan. 23, 2015
- Structural reforms to improve competitiveness, ease price adjustment, reallocate resources to most productive sectors and exports.
- Modernization of public services to raise trust, increase tax compliance, strengthen rule of law, encourage foreign investment.

Flashback: Income/person – Greece, Finland, Ireland

How did Ireland overtake Finland and Greece?

Country	EEC/EU	At entry	1995	2007
Ireland	1973	same as Greece	175% Greece	125% Finland
Greece	1981	88% Ireland	60% Ireland	47% Ireland
Finland	1995	same Ireland	175% Greece	80% Ireland

- Ireland: "problem economy" in the 1980s. Then massive foreign investment + massive investment in human capital.
- Finland: Poorer than Greece in 1865, still poorer in 1918 (independence from Russia), twice as rich as Russia in 1990.
  - Finland: Industrialized after World War II, using renewable natural resources plus massive investments in human capital and industry. And, educational system world-class model.
  - Finland's forests contribute 5% of GDP.
    Greece's seas (tourism) contribute 15.8% of GDP.

Lessons from Finland's Great Depression, 1990–1997

- Collapse of Soviet Union, 1990 (biggest trading partner) + a banking crisis $\Rightarrow$ Finnish Great Depression: 1990–1997
- Lessons from Finland's recovery: emerged restructured, a dynamic high-tech economy. Example: Nokia
  - old low-tech firm, grew enormously after crisis riding high-tech revolution to contribute 2.8% to GDP, 2% of government revenue, 1.6 percentage points to Finnish annual growth. Employs now 90,000 across 120 countries. Phone business now sold to Microsoft. Spawned industry of start-ups.
    Spends a lot on R&D domestically and internationally, close relationships with universities.
  - Information technology industries contributed 0.9% to Finland's output growth of 4.1% (1995–2004).
- Quality improvement of the Finnish labor force added 0.5 percentage points to average TFP growth.
- Lessons Finland, Ireland: Aim at world markets, small price reductions make huge differences; internal linkages follow.

Greece: Resources, Reforms, Ideas

- Income plus wealth shocks shrunk national savings: needed massive foreign investment.
  Foreign Direct Investment: down to 9.95% (GDP) 2012 (13.12%, 2009); Ireland, up 161.62% (111.64%,, 2009); Portugal, up 55.2% (49.01%). Investment, since 2010, down 58%.
- Mobilize entrepreneurial and artistic talent plus ICT capital.
  Examples: `Upstream`, `Corallia Clusters Initiative`.
- Large privatizations + massive public investments = *Big Push*. Held up!
- *"Stars"* (McKinsey study): 70,000 jobs, + 7 billion to GDP:
  1. Generic drugs. 2. Acquaculture. 3. Medical tourism, elderly care (big, with portable pensions in EU). 4. Regional cargo/logistics hubs. 5. Waste management. *More "stars"*: 6. "Classical" tourism, niche tourism. 7. Specialty foods. *Jronia k Jronia*,
- Caprichos griegos. Hortaleza 75, Madrid. `JroniakJronia.com`


jronia ķ jronia
caprichos griegos

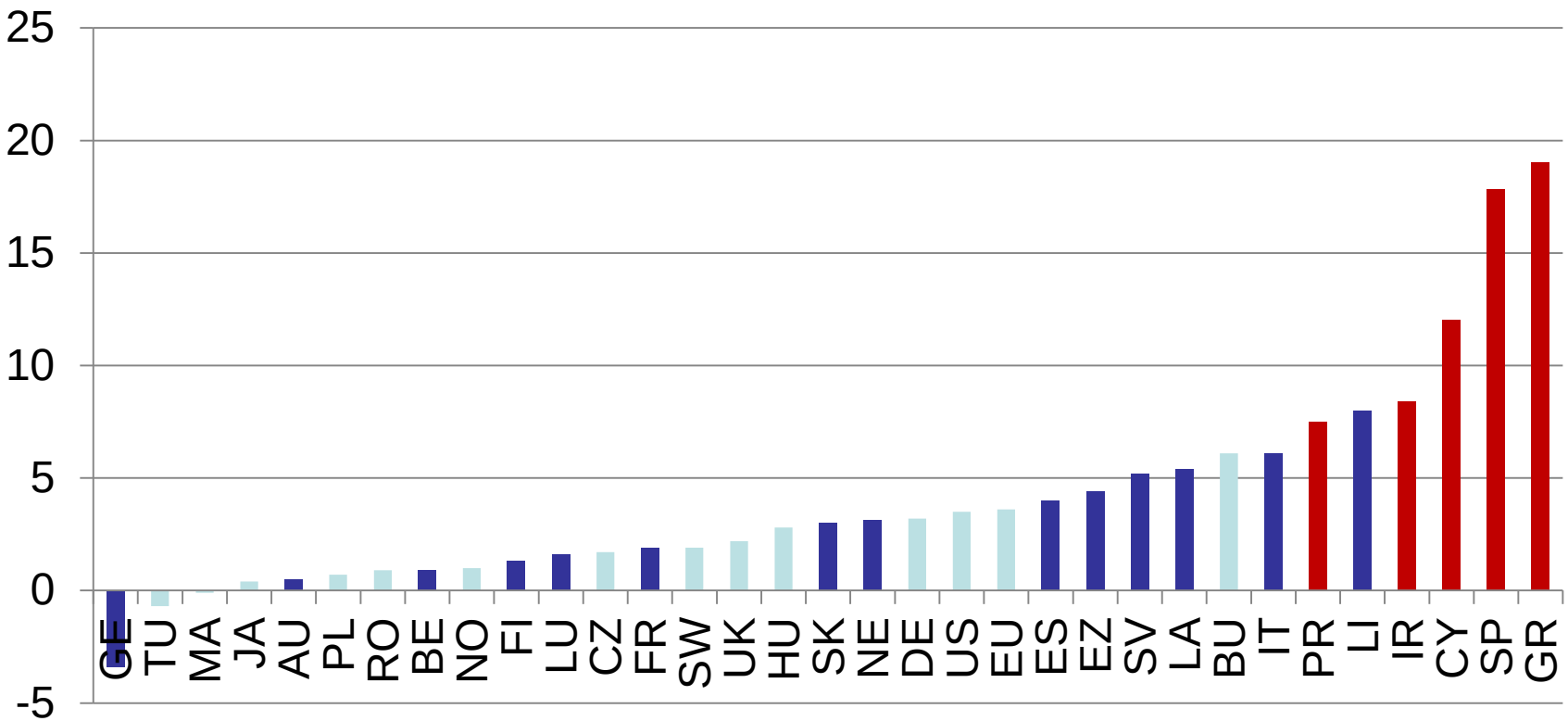
Productivity gains from deregulation and structural reforms

- Removal of restrictions in product and labor markets increase income by increasing economic activity (like economic integration): 5-15% GDP over 10 years for Greece.
- Contributes to growth in income per person, over and above increased capital per person, due T.F.P. Growth.
- Lowers entry barriers, allows larger firm sizes, eliminates monopolistic situations to allow catch up with best international practices:
- Promotes latest technology adoption
- Flexibility, most productive firms to attract greatest increase in sectoral employment: With Sweden and Finland the leaders in the EU, Greece does better than Poland only.
- Deregulation in product and labor markets work better when combined. Together with gap from best performers account for 60% of TFP Growth, OECD, 1983–2003

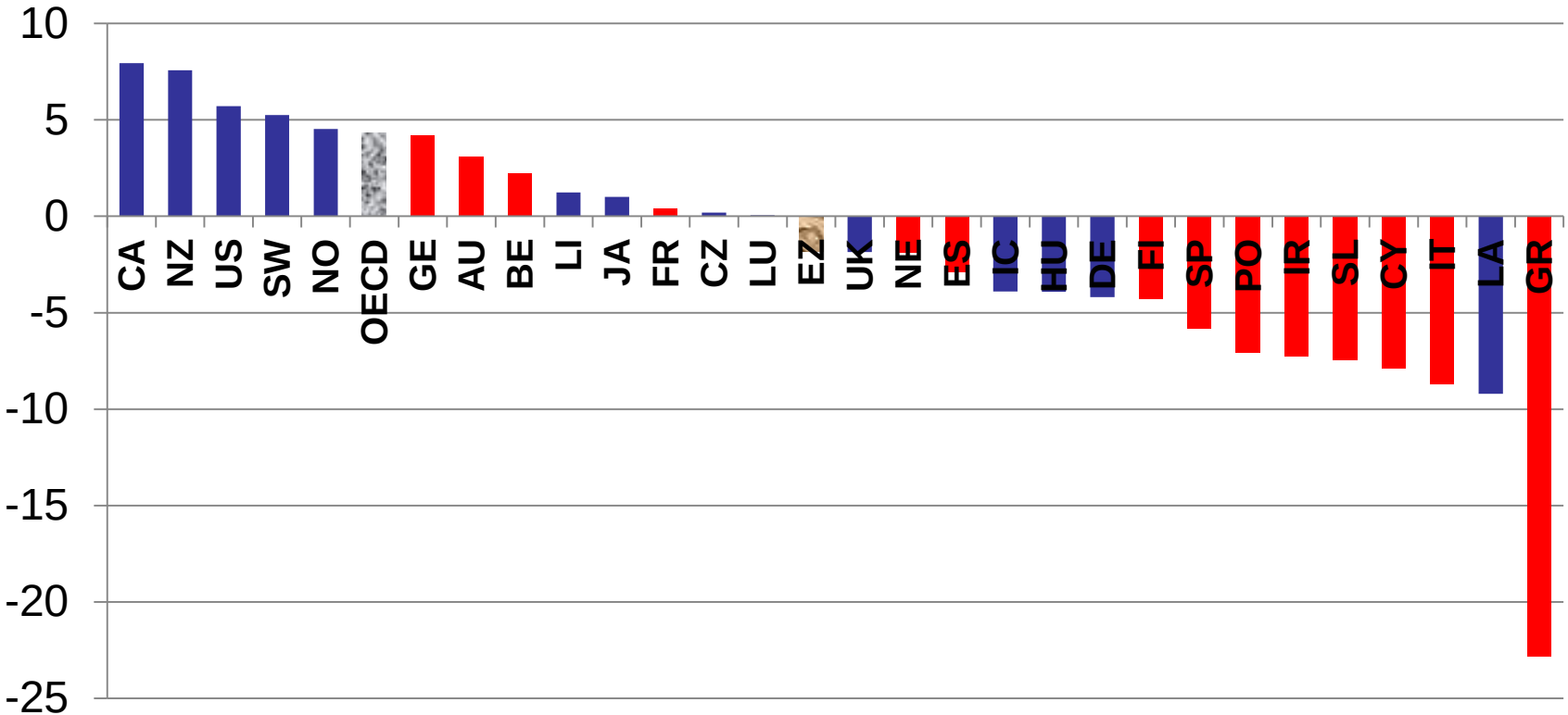
Productivity improvements and the future of the EMU

- Draghi (2014): "If some countries in monetary union perpetually adjust more slowly than others, they are likely to have consistently higher unemployment. And if they also have lower growth potential, then that unemployment is more likely to *become entrenched and structural.* In other words, lack of structural reforms raises the spectre of permanent economic divergence between members. And insofar as this threatens the essential cohesion of the Union, this has potentially damaging consequences for all EMU members ... Euro area countries cannot be agnostic about whether and how others address their reform challenges. Their own prosperity ultimately depends on each country putting itself in a position to thrive within the Union. And for this reason, there is a strong case for sovereignty over relevant economic policies to be exercised jointly. That means above all structural reforms."
- Eurozone does have a problem: compare with OECD

Unemployment change 2007-2012



Cumulative change in GDP 2007-13 (Eurozone in red)



Small differences grow geometrically in the long run

- Gains from deregulation depend on specific policies and quality of institutions.
- Gains look small; power of compound interest makes them huge over the long run.
  Growth rates, real income per person:
  - India 1884–2010: 6.1 times, 1.43% per year.
  - US 1865–2010: 12.9 times, 1.72% per year.
  - Greece 1864–2009: 12.3 times, 1.69% per year.
  - Greece 1950–2009: 6.97 times, 3.24% per year.
- Already progress in market reforms in Greece.
- Performance weak within EU.
- But World Bank 2014 Doing Business Report: Greece jumped from 147th to 36th in "ease of starting business".

Reforming the educational system

- Mathematics and science education crucial for growth: relative to mean OECD, higher mathematics and science scores (PISA) by 1/2 standard deviation add $= 0.93$ percentage points to growth rate GDP/person. Pearson–Economist rankings: aggregate cognitive skills scores (PISA, TIMSS and PIRLS for reading, mathematics and science) and educational attainment place Greece about a standard deviation below the mean of OECD countries.
- Total factor productivity is correlated with *trust.*
  - Germany's improved competitiveness mainly due to cooperative environment: trade unions, employer associations, works council, and firm-level bargaining.
  - Large gap between vertical and horizontal teaching (teacher lecturing versus students working in groups) correlated with low trust across the world.
  - Greek educational system: lowest in tolerance and respect, high in distrust. It must do better in producing trust.

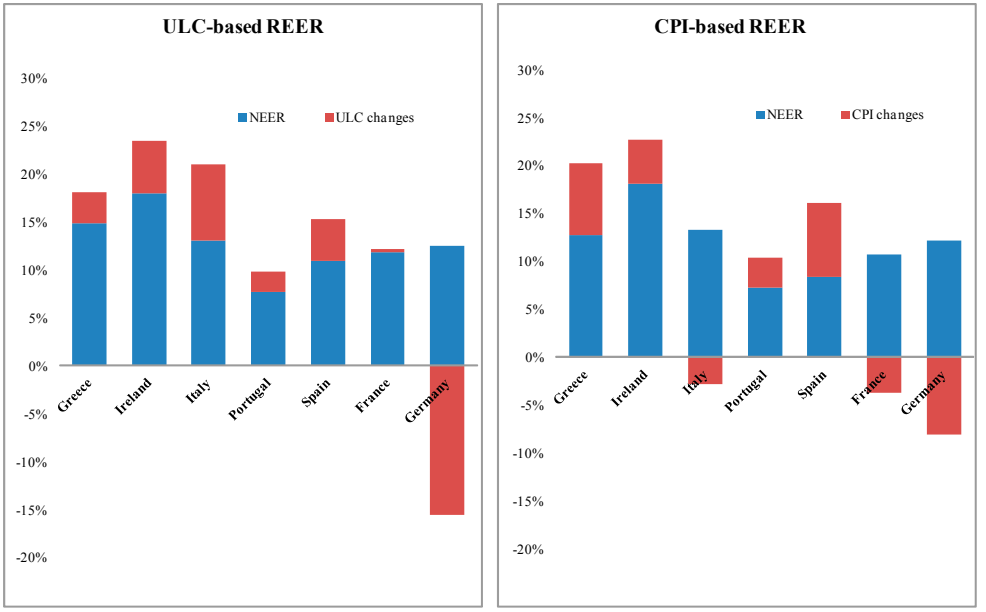
Medium Run Evolution of Employment and New Opportunities

- Finland's recovery slow, restructuring to favor services.
- Projections of slow recovery; unemployment to fall slowly.
- Lower and middle classes, especially youth, severely hit; must prevent loss of skills during unemployment.
- Vigorous safety net, special measures for households with no members employed.
- OECD countries with rich vocational education and training have better unemployment record, esp. for young. If without tertiary education, better employment prospects with vocational than academic upper secondary education.
- Assessment of computer skills: use of internet, computer skills, below EU average; Greek high skilled near EU average; firms report little difficulty in filling high-skilled jobs. Knowledge curiosity high, but need to retrain labor force for business services.
- Geopolitical changes, rapprochement with Israel (an ICT giant) bring to the fore, opportunities in energy networks and trade

Competitiveness of the European Periphery

- Chen et al. IMF study: Loss of competitiveness 2000–2010 of European periphery mostly due to euro nominal appreciation and to asymmetric trade interactions with Eastern Europe, China, oil exporters; less to cost increases.
- Two-prong approach:
  - Germany needs to boost domestic demand, investment, reducing pressure on euro (argued by Ollie Rehn, blog 2013).
  - Massive infrastructure and ICT investment in periphery to boost productivity; spillovers throughout EU (advocated by EU Agenda 2020).
    EU economy, a large economic entity: neither too closed not too open; spillovers of investment spending within.

Figure 3. Decomposition of Real Effective Exchange Rates, Percentage Change from 2000 to 2010.



Source: ULC-based REER is from Eurostat, 36 trading partners; CPI-based REER is from INS.

Chen et al. Econ. Policy 2013

Why are Greek exports more expensive?

Competitiveness of the European Periphery

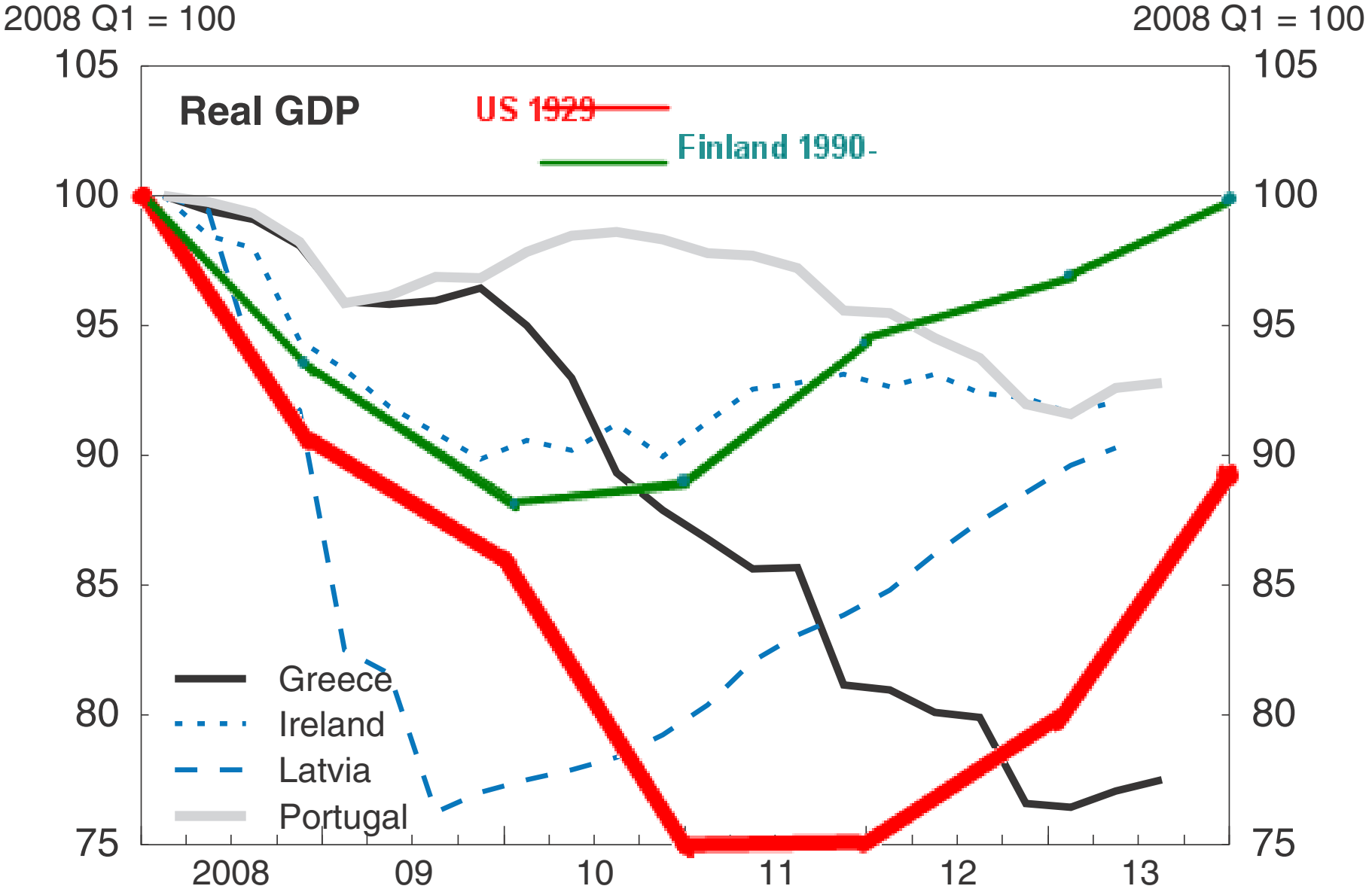
- Chen et al. IMF study: Loss of competitiveness 2000–2010 of European periphery mostly due to euro nominal appreciation and to asymmetric trade interactions with Eastern Europe, China, oil exporters; less to cost increases.
- Two-prong approach:
  - Germany needs to boost domestic demand, investment, reducing pressure on euro (argued by Ollie Rehn, blog 2013).
  - Massive infrastructure and ICT investment in periphery to boost productivity; spillovers throughout EU (advocated by EU Agenda 2020).
    EU economy, a large economic entity: neither too closed not too open; spillovers of investment spending within.

Demographics and Debts

- Demographics: more people, easier to pay off given debt.
- Greek population fell 1.3%, 2001–2011.
- Total fertility rates falling in European South.
- Out-migration selectively deprives country of skilled workers.
- Works slowly as an equilibrating device.

A Crucial Role for Expectations

- OECD (2013) finds little role for expectations; but takes very narrow view, ignores expectations of about new policies.
- Eggertsson (2008) study the end of US Great Depression: credits shift in expectations, Roosevelt credible when eliminated several policy dogmas, were responsible for 70–80% for the recovery, 1933 to 1937. Back to Figure


2008 Q1 = 100
2008 Q1 = 100
Real GDP
US 1929
Finland 1990-
105
100
95
90
85
80
75
Greece
Ireland
Latvia
Portugal
2008
09
10
11
12
13

A Crucial Role for Expectations

- OECD (2013) finds little role for expectations; but takes very narrow view, ignores expectations of about new policies.
- Eggertsson (2008) study the end of US Great Depression: credits shift in expectations, Roosevelt credible when eliminated several policy dogmas, were responsible for 70–80% for the recovery, 1933 to 1937. Back to Figure
  Output would have been 30 percent lower in 1937 than in 1933, instead of increasing 39 percent in this period
- Critical for speedy recovery *credibility* and *confidence* that:
  - Greece must conduct business differently,
  - policies delivering,
  - political environment is conducive.
- Focus on EZ deflation:
  even more pressing for Greece to focus on structural reforms to maintain competitive advantage.
  Quantitative Easing (QE) by the ECB, plus historical low of

Some Greece-specific issues

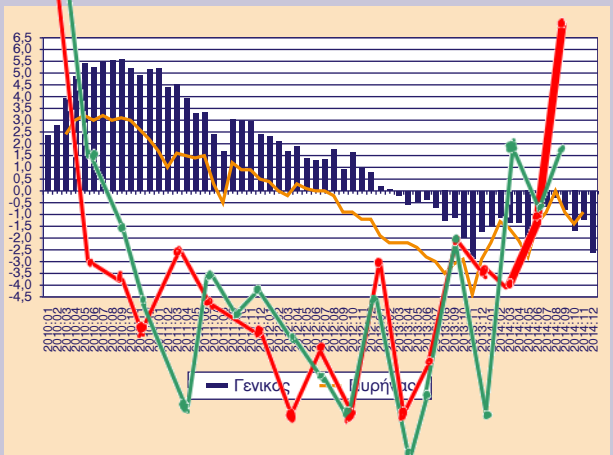
- External non-competitiveness → current account deficits
- Greek exports grew 1999-2007, imports grew more. Decreased slightly 2008–2013. Graphs: *GR, IE, PT, ES, Core EZ*

  GR: Most adjustment from decreased imports; others more balanced.
- Future Gain in competitiveness easier: larger firms survived. Most contraction from smaller firms, 67% of job loss, 2009–13
- HICP started falling Sept. 2012.Graph *GR inflation*
  - Product market reforms overlooked. Regulation still big barrier
  - Credit for exporters, a greater barrier since 2010.
  - EZ core countries maintaining CA surpluses as peripheral deficits decreased
  - Greece eliminated twin deficits, enormous social cost, CA deficit "shaky"
  - Had Greece improved exports, huge impact in less contraction.

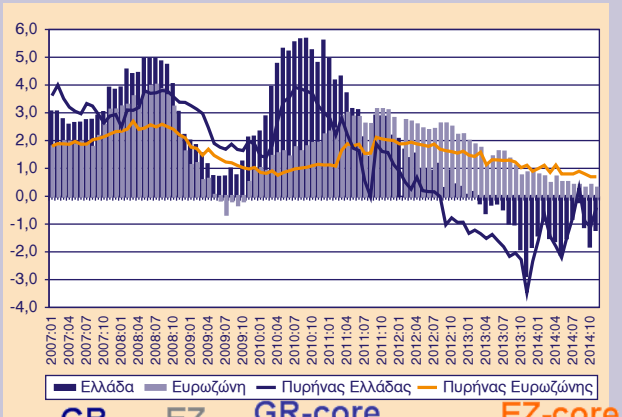
Wage index, y-y, seas. adj

Wage index y-y, seas. unadj., hrs-adj.

ΔΙΑΓΡΑΜΜΑ 1.3.1
ΔΤΚ, % μεταβολή (ως προς τον αντίστοιχο μήνα του προηγούμενου έτους)



ΔΙΑΓΡΑΜΜΑ 1.3.2
Εναρμονισμένος Δείκτης Τιμών Καταναλωτή σε Ελλάδα και ΟΝΕ, % μεταβολή (ως προς τον αντίστοιχο μήνα του προηγούμενου έτους)



GR EZ GR-core EZ-core

Trade Adjustment between 2008 and 2013 (% of 2008 GDP)

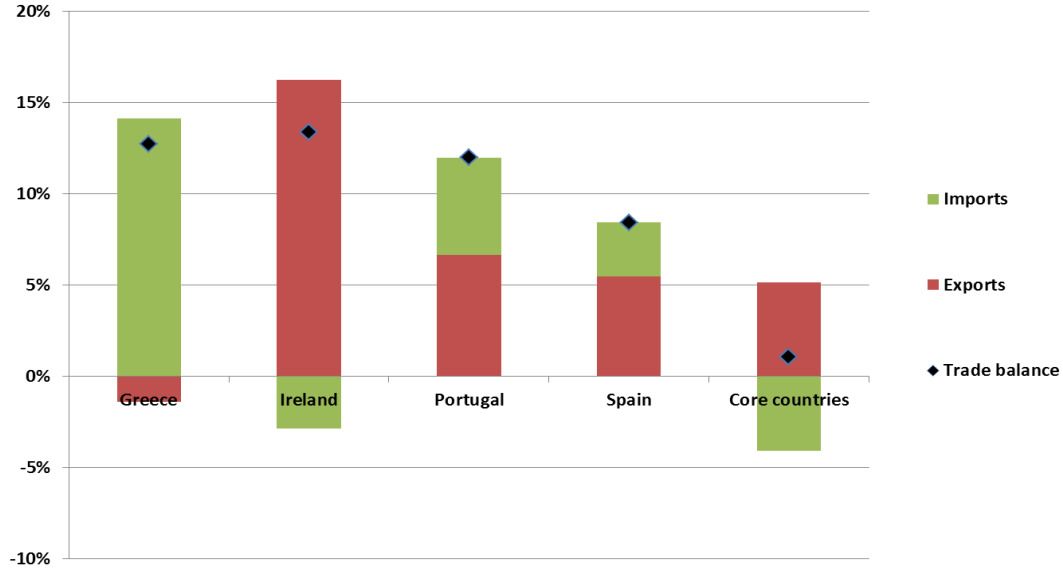


Figure 4.2

Source: Eurostat

Some Greece-specific issues

- External non-competitiveness → current account deficits
- Greek exports grew 1999-2007, imports grew more. Decreased slightly 2008–2013. Graphs: *GR, IE, PT, ES, Core EZ*
  GR: Most adjustment from decreased imports; others more balanced.
- Future Gain in competitiveness easier: larger firms survived. Most contraction from smaller firms, 67% of job loss, 2009–13
- HICP started falling Sept. 2012.Graph *GR inflation*
  - Product market reforms overlooked. Regulation still big barrier
  - Credit for exporters, a greater barrier since 2010.
  - EZ core countries maintaining CA surpluses as peripheral deficits decreased
  - Greece eliminated twin deficits, enormous social cost, CA deficit "shaky"
  - Had Greece improved exports, huge impact in less contraction.

Some Greece-specific issues

- External non-competitiveness → current account deficits
- Greek exports grew 1999-2007, imports grew more. Decreased slightly 2008–2013. Graphs: *GR, IE, PT, ES, Core EZ*
  GR: Most adjustment from decreased imports; others more balanced.
- Future Gain in competitiveness easier: larger firms survived. Most contraction from smaller firms, 67% of job loss, 2009–13
- HICP started falling Sept. 2012.Graph *GR inflation*
  - Product market reforms overlooked. Regulation still big barrier
  - Credit for exporters, a greater barrier since 2010.
  - EZ core countries maintaining CA surpluses as peripheral deficits decreased
  - Greece eliminated twin deficits, enormous social cost, CA deficit "shaky"
  - Had Greece improved exports, huge impact in less contraction.

Reinventions

- Reinventing Boston: 1630–2003
- Boston reinvented itself three times:
  - Early 19th century: Seafaring human capital for far flung trading and fishing empire
  - Late 19th century: factory town with immigrant labor
  - Between 1920–1980: Boston lost 26% population.
  - Late 20th century: prosperity returned due to human capital via new industries, education, information technology, biomedical technology.
- Secret of success?

Theorem

Secret of success:
Human capital (skilled workers) + institutions = the sources of long run growth!

Reinventions

- Reinventing Boston: 1630–2003
- Boston reinvented itself three times:
  - Early 19th century: Seafaring human capital for far flung trading and fishing empire
  - Late 19th century: factory town with immigrant labor
  - Between 1920–1980: Boston lost 26% population.
  - Late 20th century: prosperity returned due to human capital via new industries, education, information technology, biomedical technology.
- Secret of success?

Theorem

Secret of success:
Human capital (skilled workers) + institutions = the sources of long run growth!

Can Greece Reinvent itself?

- Greece in the Eurozone, as developed following the EZ debt crisis?
- Need to know a bit more about the EZ, EZ vs. the US