Looking Beyond The Greek Crisis

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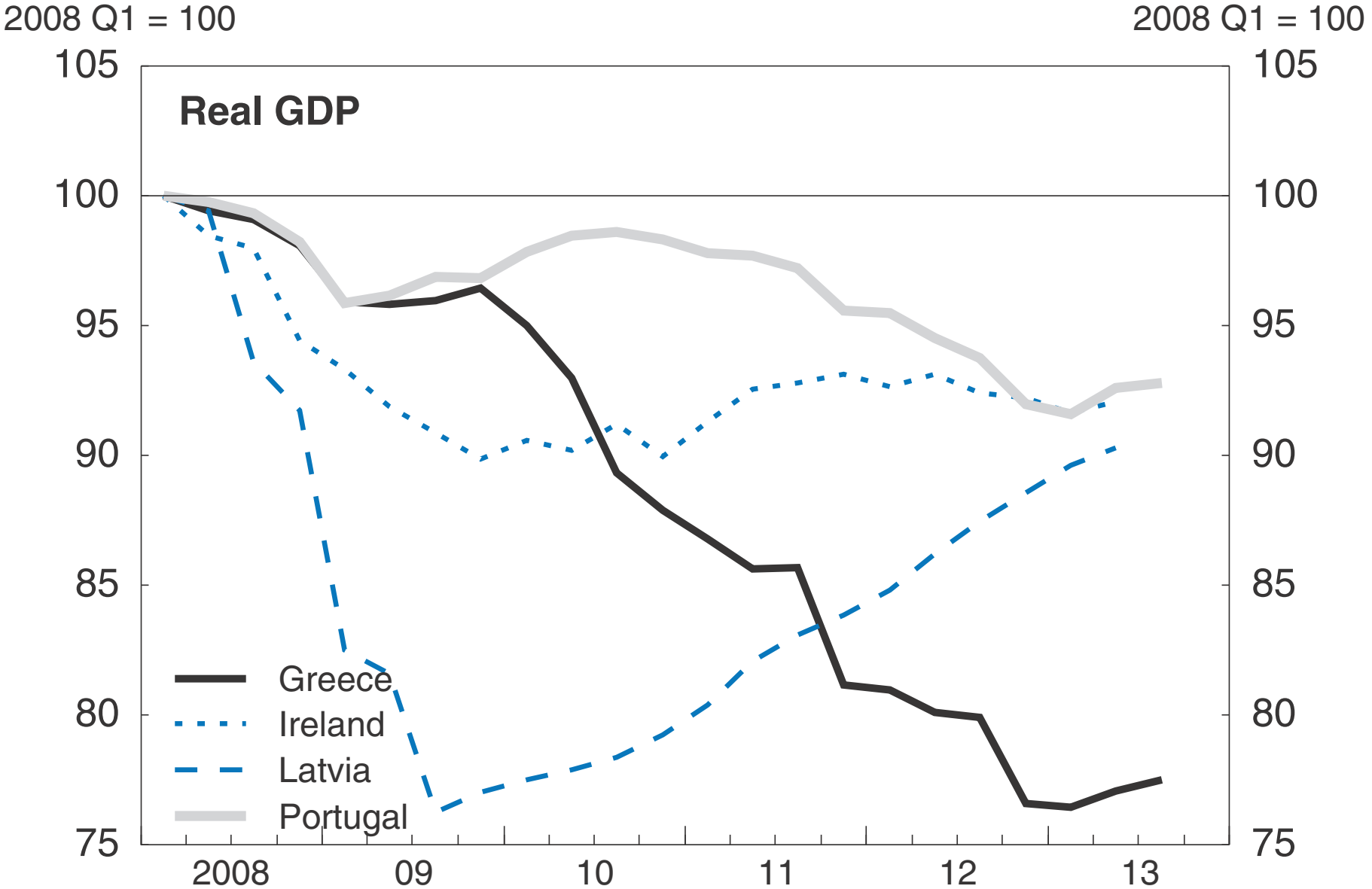
Outline

- 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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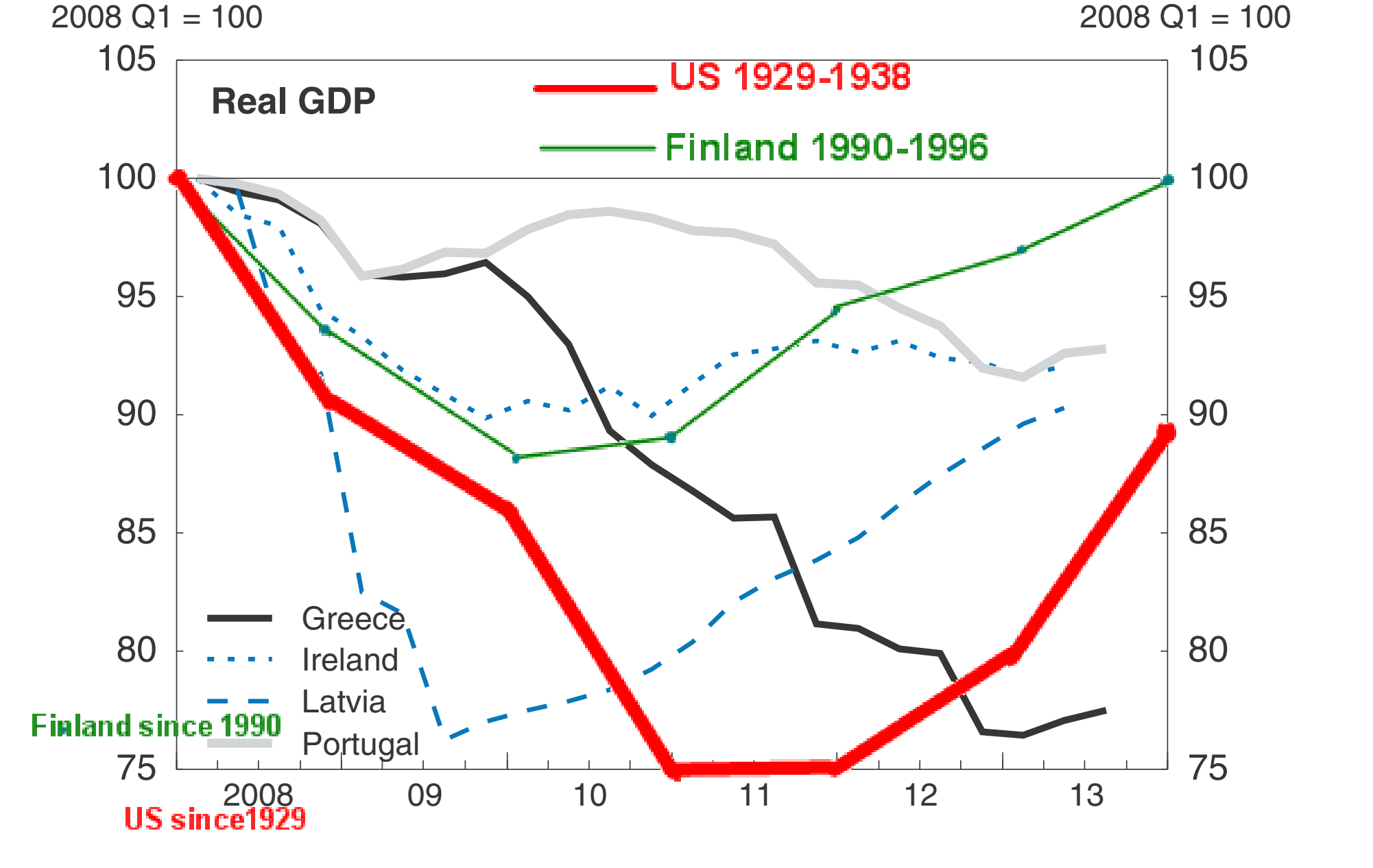
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Understanding the Greek Crisis

- 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 in the Greek economy
- Accomplished huge reduction in unit labor costs
- But, persistent product market rigidities have prevented *huge* commensurate price reductions
- NBG study: prices adjust to wages, with a 5-quarter lag.
- Structural reforms take time but needed to improve competitiveness, accelerate price adjustment, reallocate resources to most productive sectors and exports.
- Modernization of public services essential for raising trust, increasing tax compliance, strengthening the rule of law, encouraging 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 ⇒ 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. 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, down 58%.
- Mobilize entrepreneurial and artistic talent plus ICT capital.
  Examples: `Upstream`, `Corallia Clusters Initiative`.
- Large privatizations complemented by massive public investments can work as *Big Push*.
- Examples of new industries (McKinsey study): 70,000 jobs, adding GDP E 7 billion by:
  "Stars": 1. Generic drugs. 2. Acquaculture. 3. Medical tourism, long term 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.

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 Total Factor Productivity (TFP) Growth.
- Lowers entry barriers, allows larger firm sizes, eliminates monopolistic situations to allow catch up with best international practices:
- Promotes latest technology adoption
- Flexibility allows 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

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.

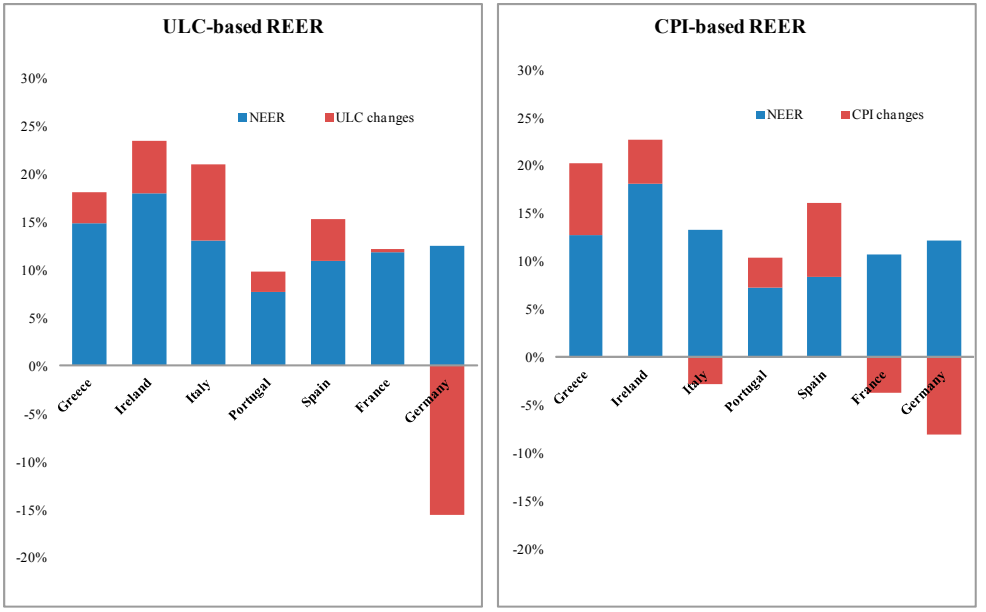
Medium Run Evolution of Employment and New Opportunities

- 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.
- 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 Greece of skilled workers.

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?

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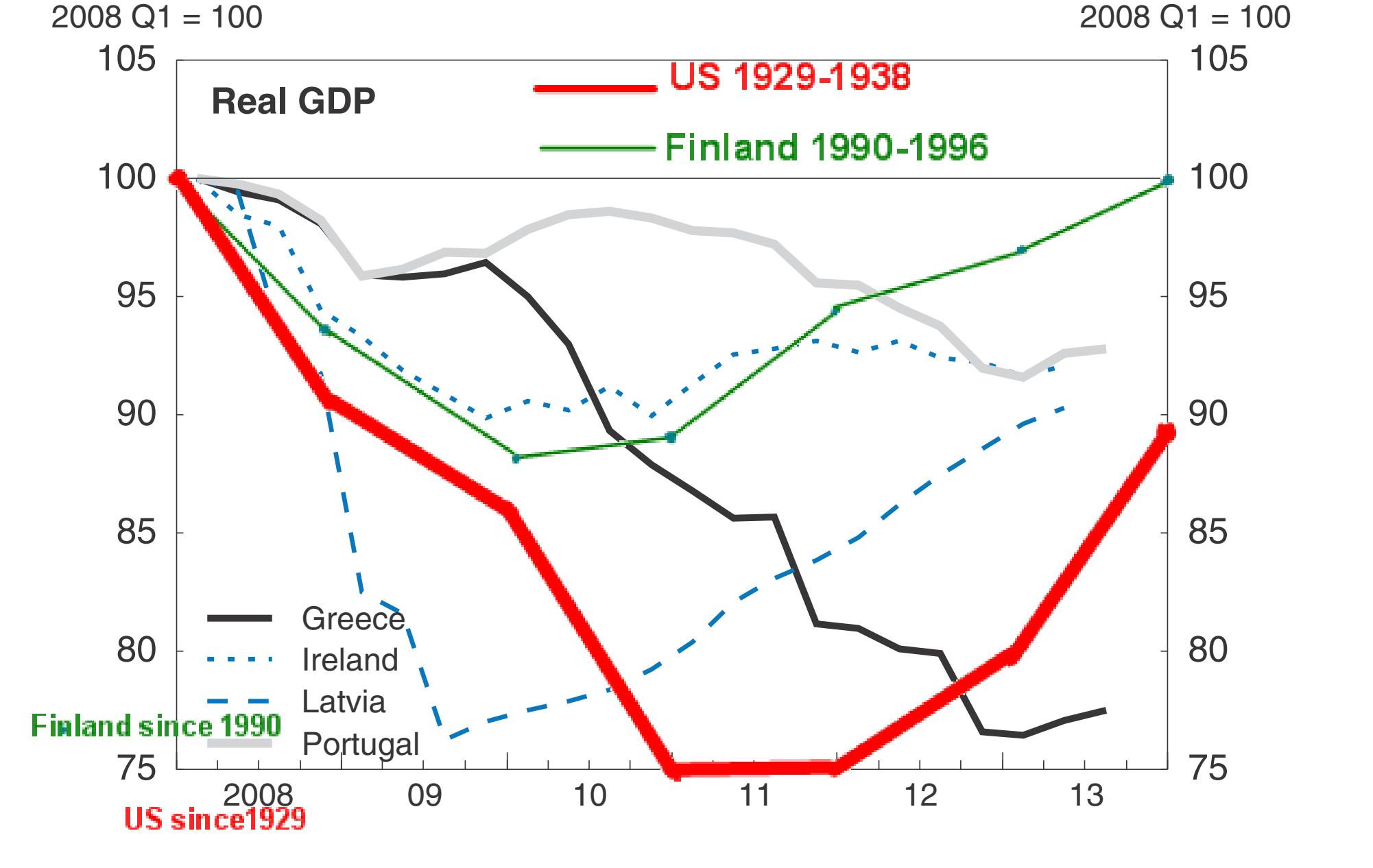
A Crucial Role for Expectations

- 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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  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 conducting business differently,
  - policies delivering,
  - political environment is conducive.
- May 9th, financial press focusing on deflation in the eurozone: even more pressing for Greece to focus on structural reforms to maintain competitive advantage.

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.
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