Fletcher School, Tufts University

Macroeconomic and Financial Asymmetries in the Euro Area

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Monetary Cooperation in Europe

Five sub-periods in the evolution of monetary cooperation in the European Union.

First, the period of the Bretton Woods system of fixed but adjustable exchange rates. This was a period of relative monetary stability and low inflation. Towards the end of this period, the Werner Report first hinted at a single European currency.

Second, the period from the collapse of the Bretton Woods system of fixed parities in 1973, to the emergence of the EMS in 1979. This was a period of monetary turbulence, exchange rate volatility and a rise in inflation.

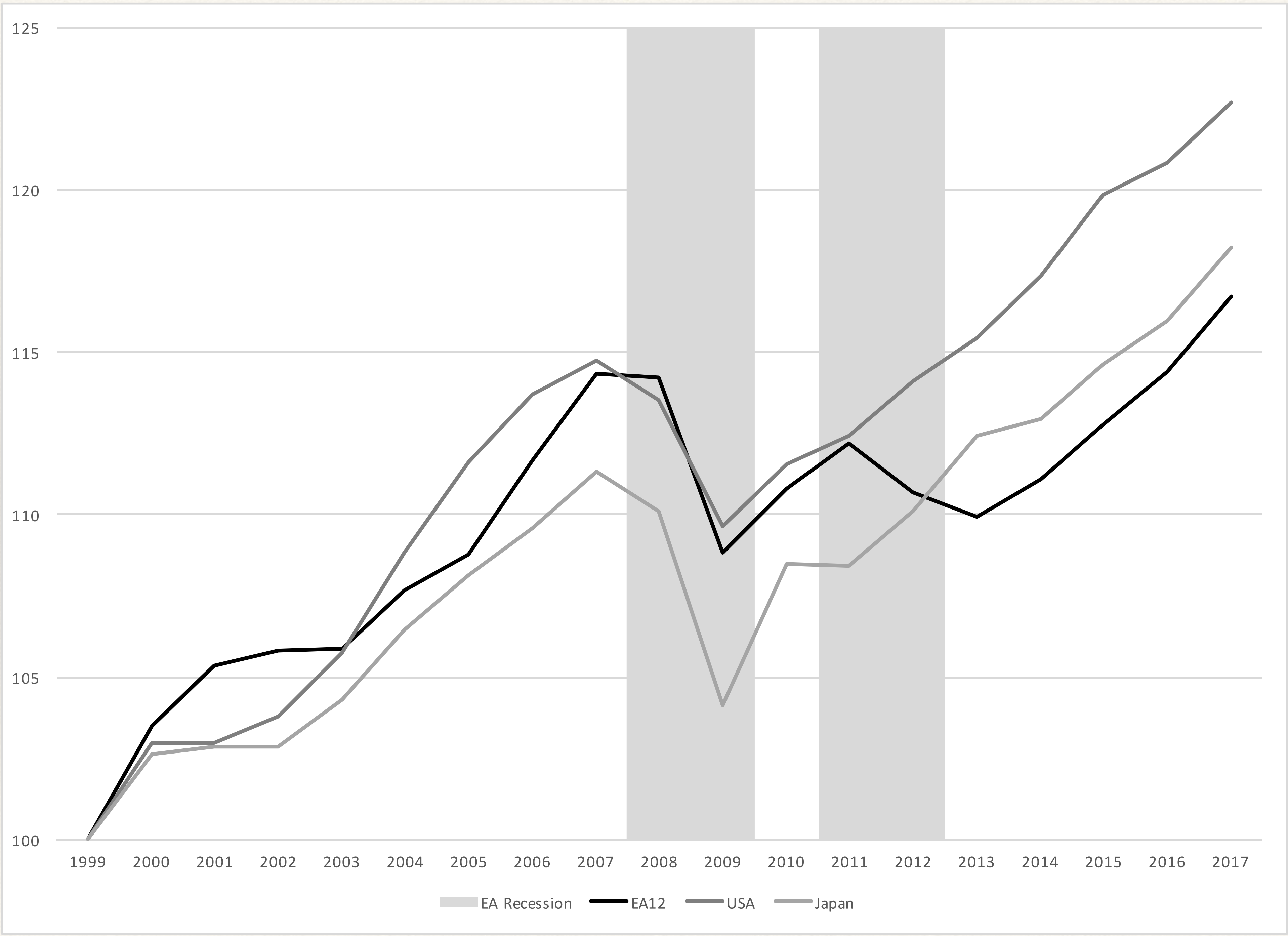
Third, the period of operation of the EMS, until the creation of the euro in 1999. This resulted in the tackling of inflation, as most EU economies conformed with the monetary policy of the Bundesbank, and the establishment of the process towards the euro.

Fourth, the first ten years of the euro area, before the crisis of 2009-2010. This was a period of macroeconomic euphoria, high growth and low inflation, which seemed to justify the establishment of the euro area. The dark cloud was the development of external imbalances between the core and the periphery of the euro area.

Finally, the period since 2010, when the euro crisis broke out. This has been a testing period, especially for the economies of the periphery of the euro area, who moved from boom to bust.

In each successive sub-period monetary integration was becoming gradually deeper, evolving from the “snake” of the 1970s, to the EMS of the 1980s, the tighter EMS of the 1990s, with infrequent reallignments, and, eventually to the creation of the euro.

Path of GDP per Capita in the Euro area, the USA and Japan (1999=100, log scale)



Macroeconomic and Financial Asymmetries between the Periphery and the Core of the Euro Area

All periods of monetary cooperation in the EU, since the 1970s, have been characterized by significant macroeconomic and financial asymmetries among member states in the *core* and the *periphery*, but also by different degrees of monetary integration.

With the deepening of monetary cooperation, in the evolution from the snake to the euro, some of these asymmetries were addressed, while others were not.

The main asymmetries addressed by the EMS and the euro were nominal asymmetries, such as asymmetries in inflation rates.

However, real asymmetries, such as labor and product market asymmetries, asymmetries in savings investment balances and asymmetries in international competitiveness were not addressed.

In fact, both during the convergence process of the 1990s, and after the euro was created in 1999, very little was done to address the remaining real and financial asymmetries, essentially shifting the burden of adjustment to individual euro area members and especially their fiscal systems.

As a result, while nominal asymmetries, such as differences in inflation rates, and nominal interest rates were addressed by the creation of the euro, real, financial and external asymmetries widened, both before and after the euro area crisis.

The Mundellian Trap and the Dilemmas of the Periphery of the Euro Area

The creation of the euro area (EA) constituted a major asymmetric shock for the economies of the EA periphery, as in resulted in a large reduction in real interest rates.

The reduction in real interest rates, as the devaluation risk disappeared, boosted aggregate demand, output and employment, but also resulted in a widening of their external imbalances, as domestic savings fell and domestic investment rose.

The economies of the periphery were trapped in what can be termed a *Mundellian trap*. Operating under perfect capital mobility and a fixed exchange rate, their only stabilization policy instrument was fiscal policy. But fiscal policy implied a *conflict between internal and external balance*.

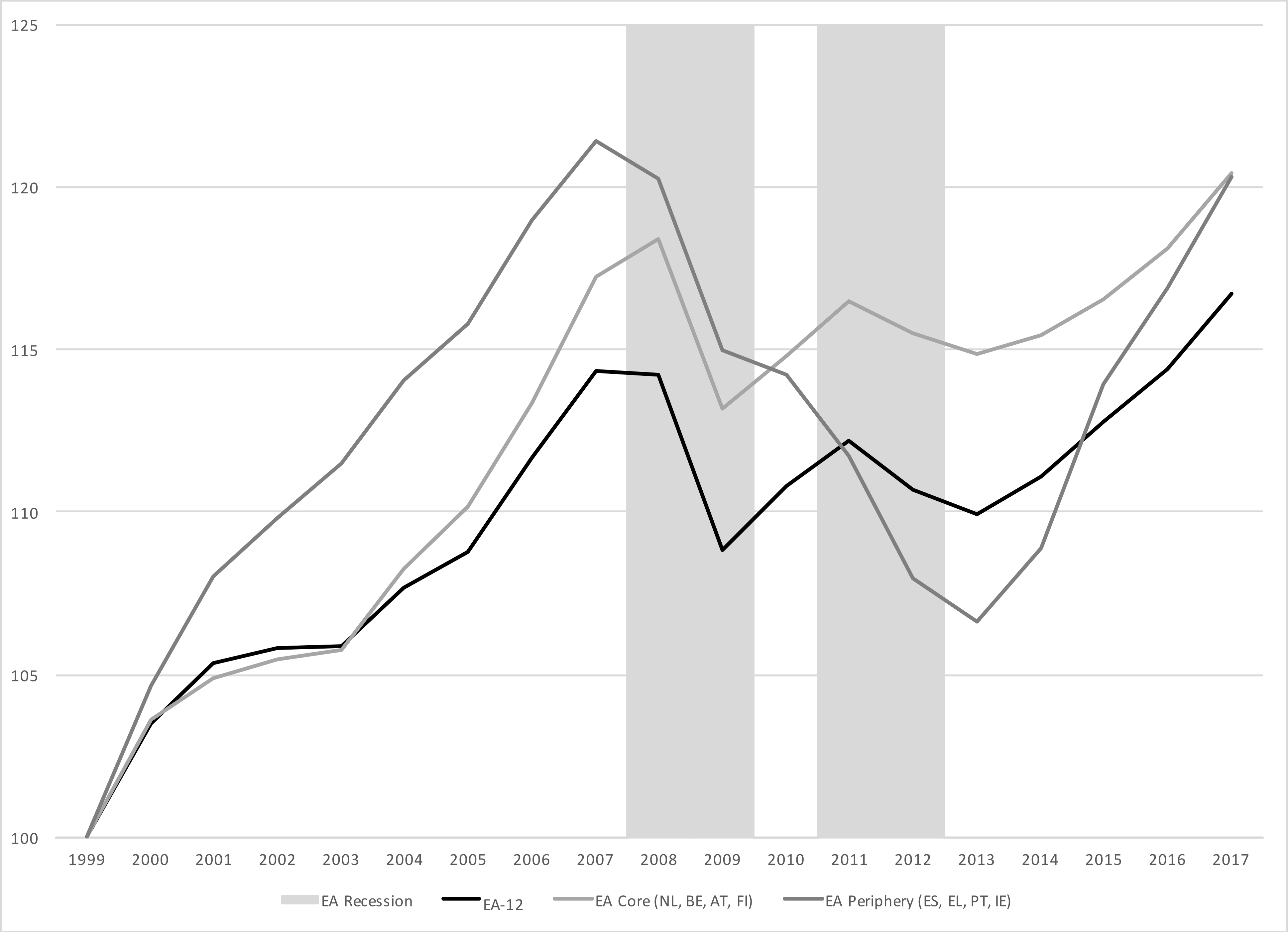
If they used a contractionary fiscal policy, in order to tackle their external imbalances, they would have created domestic recessions. If they did not, they would have enjoyed a boom, financed by cheap external borrowing as the external imbalances would persist.

Most of them chose, in different degrees, to ignore their widening current account deficits, hence the economies of the periphery boomed during the first few years of euro area participation. The bust came after the worsening of the international financial crisis in 2008, the international recession of 2008-09 and the "sudden stop" in international lending to the periphery.

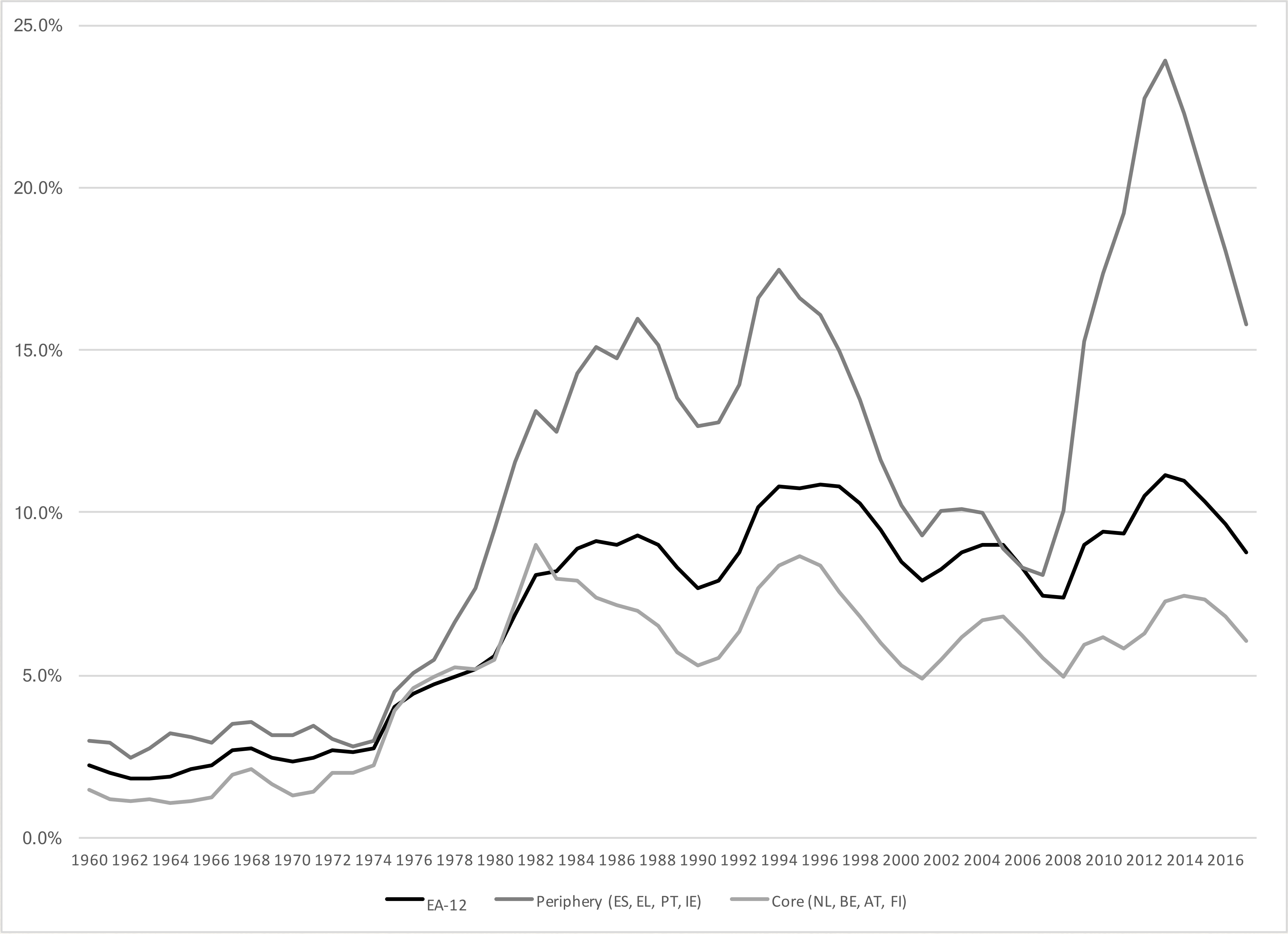
The excessive fiscal contraction that was used after the euro area crisis of 2010 resulted in a gradual tackling of their external imbalances, but at an exorbitant costs in terms of output loss and unemployment.

It is still not clear how the economies of the periphery will recover these losses without returning to renewed external imbalances.

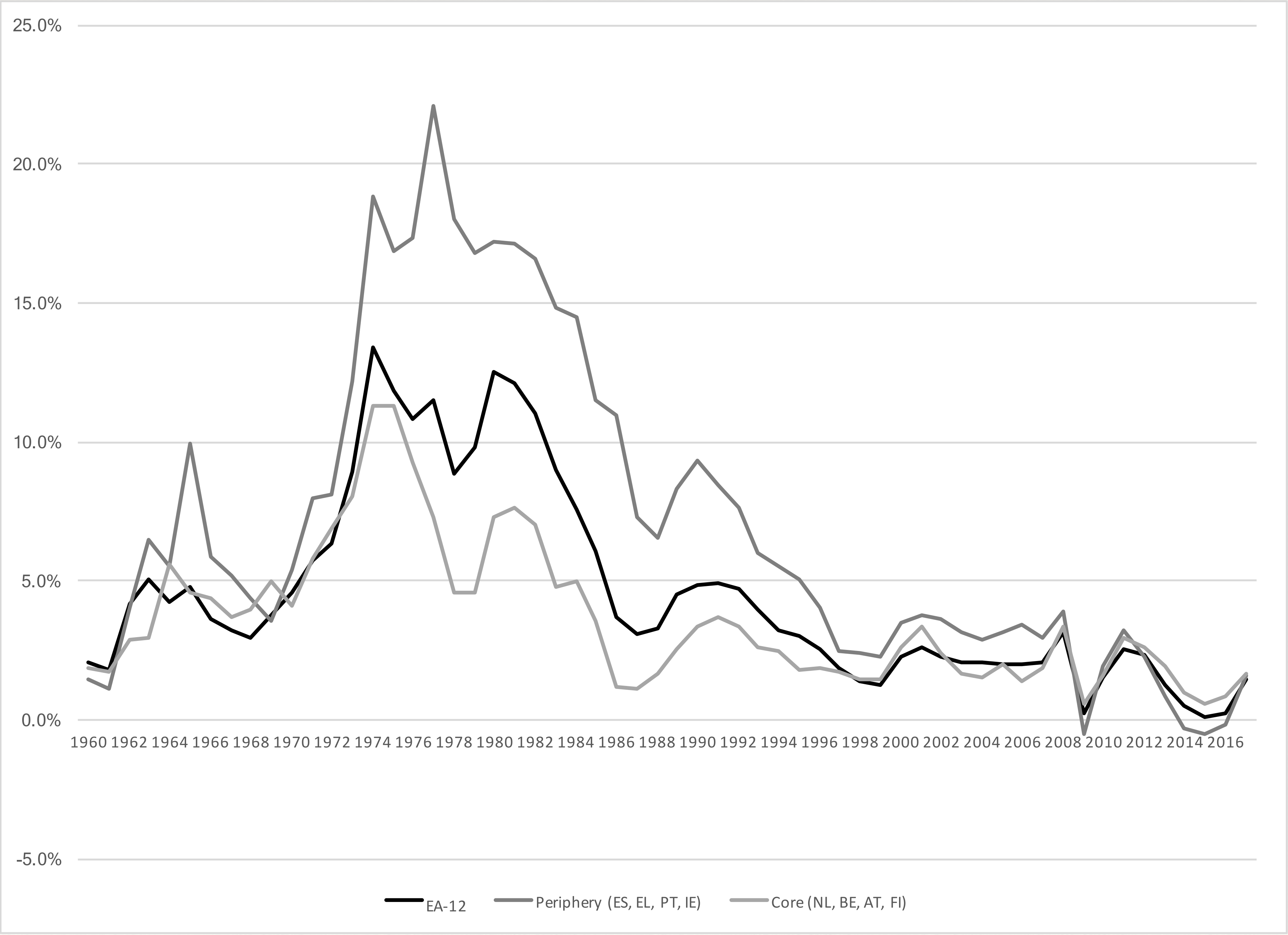
The Boom and Bust of the EA Periphery
The Path of GDP per Capita in the Core and the Periphery
(1999=100,



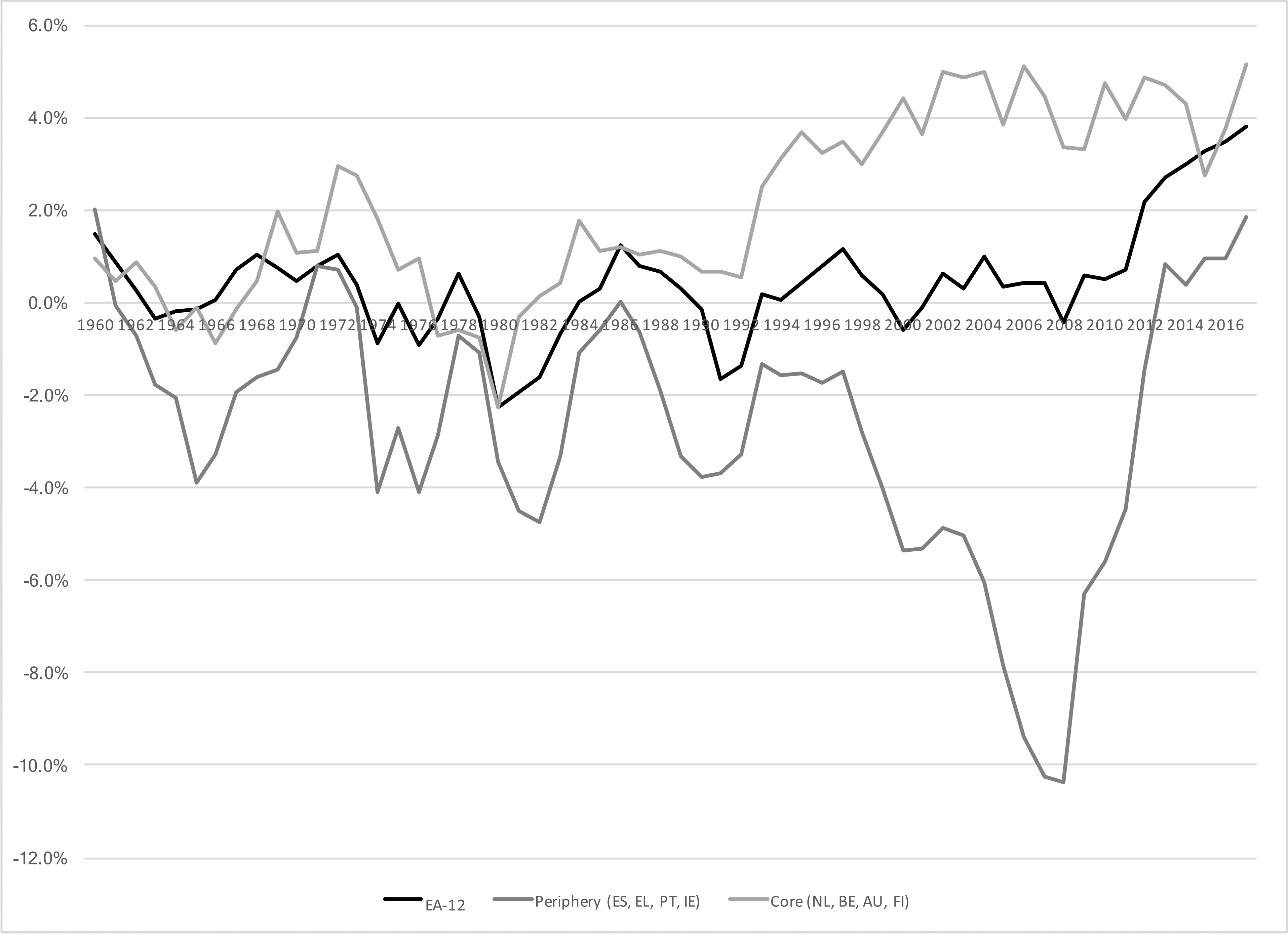
Unemployment Rates in the Euro area
(% of the Civilian Labor Force)



Inflation Rates in the Euro area
(% per annum)



Current Account Balances in the Euro area (% of GDP)



The First Ten Years: The Buildup to the Crisis

In the first ten years since the creation of the euro, real asymmetries between the periphery and the core resulted in the build up of significant external imbalances, and, eventually contributed to the eruption of the euro area crisis.

The main financial asymmetric shock appears to have been the creation of the euro itself, which initially brought about the convergence of nominal and real interest rates between the periphery and the core. This convergence resulted in a widening of savings and investment imbalances in the periphery, which up until then had relatively high nominal and real interest rates.

The convergence of interest rates brought about higher growth, the widening of current account deficits and the buildup of external debt by the countries of the periphery. Eventually this higher external debt was a key factor in the euro area crisis.

This process was exacerbated by the "home" bias of banks in the countries of the euro area, due to the fact that the euro area was not a banking union.

The euro area crisis was essentially an external debt crisis in an economic and monetary union with a single currency, but major asymmetries and economic and governance problem areas. As a result, the euro area crisis of the 2010s was, at the end of the day, no different that other regional financial crises involving indebted economies, such as the Latin American crisis of the 1980s and the Asian crisis of the 1990s.

The Asymmetric Evolution of Real Interest Rates

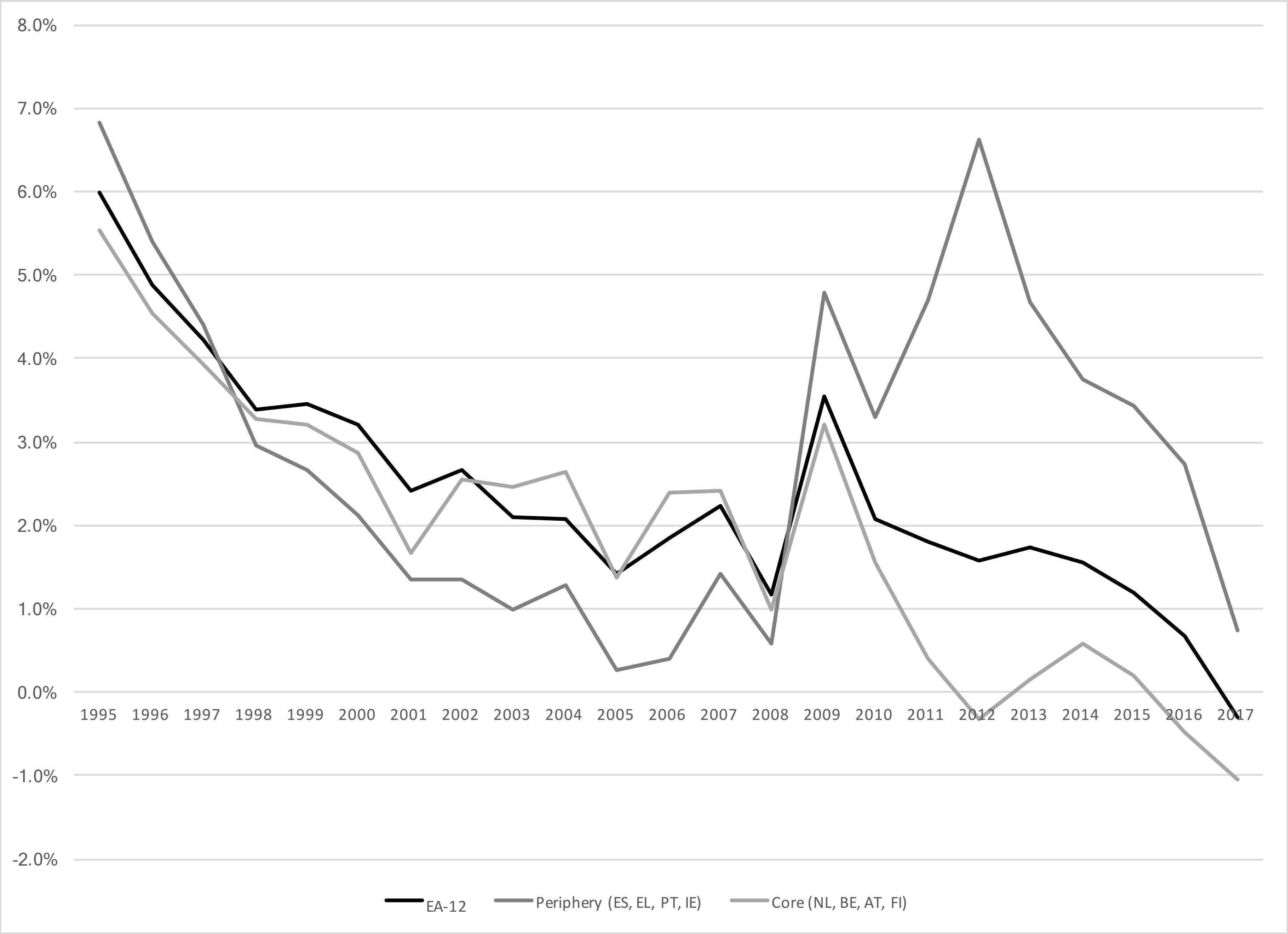
The creation of the euro resulted in a much more significant reduction of real interest rates in the periphery than in the core.

Real long term interest rates on government bonds in the periphery fell from 5.2% in the 1990s, to 1.1% in 2000-2007. This was mainly the result of the convergence of nominal interest rates following the elimination of the risk of currency devaluation for the economies of the periphery. Real interest rates in the core economies fell much less in the relevant period.

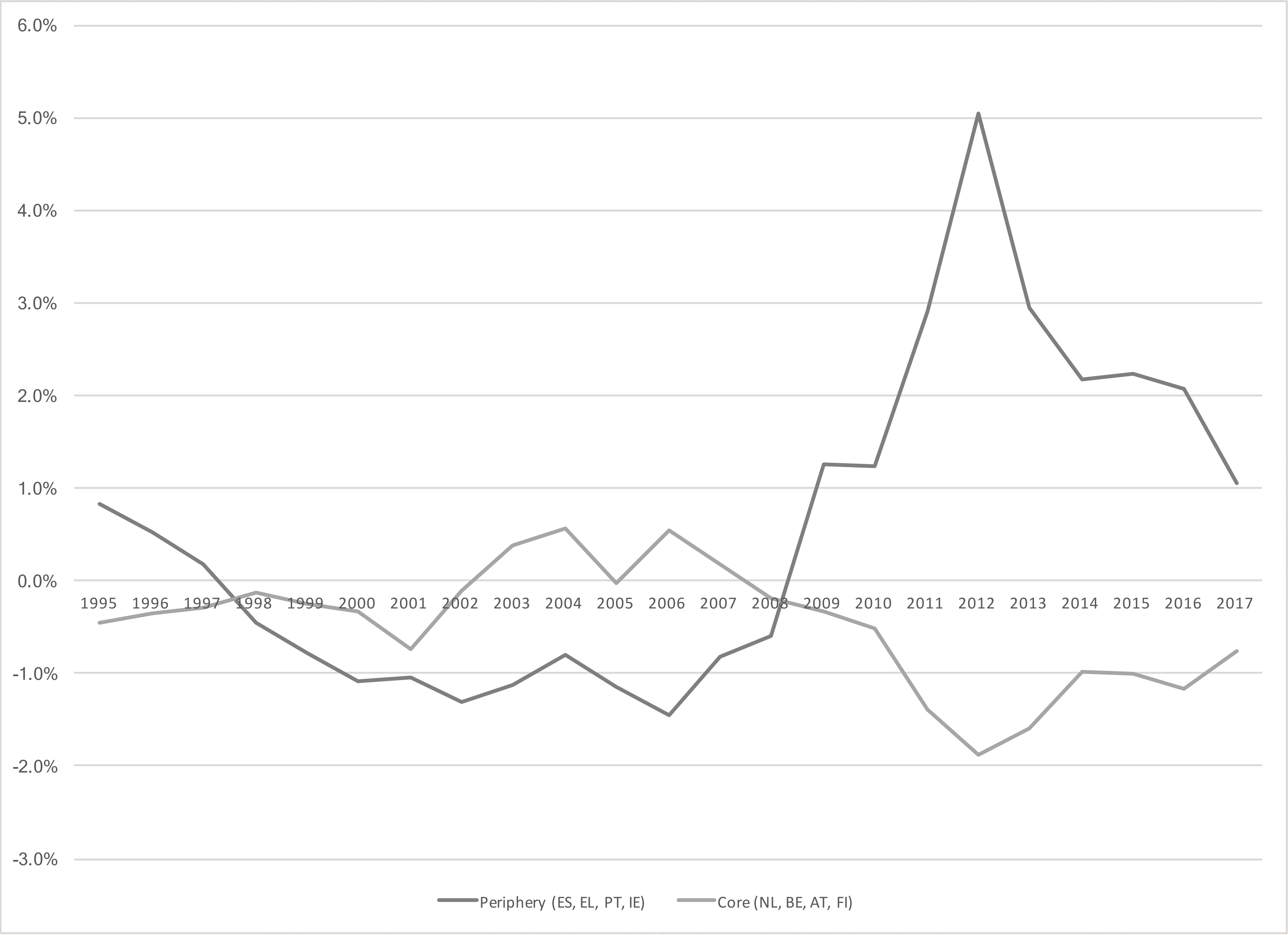
As a result, the reduction of private savings and the rise in investment in the periphery during the 2000-2007 period was higher, contributing to higher growth and the significant widening of current account deficits.

Since the crisis, interest rates have again moved asymmetrically. Long term interest rates also continued falling in the core EA economies, but they rose significantly in the periphery. External imbalances have been partly corrected, but at the cost of much deeper recessions in the periphery than in the core.

Real Long Term Interest Rates in the Euro Area (1995-2017)



10 year Real Bond Rate Differentials from the EA Average



The Asymmetric Evolution of Real Exchange Rates

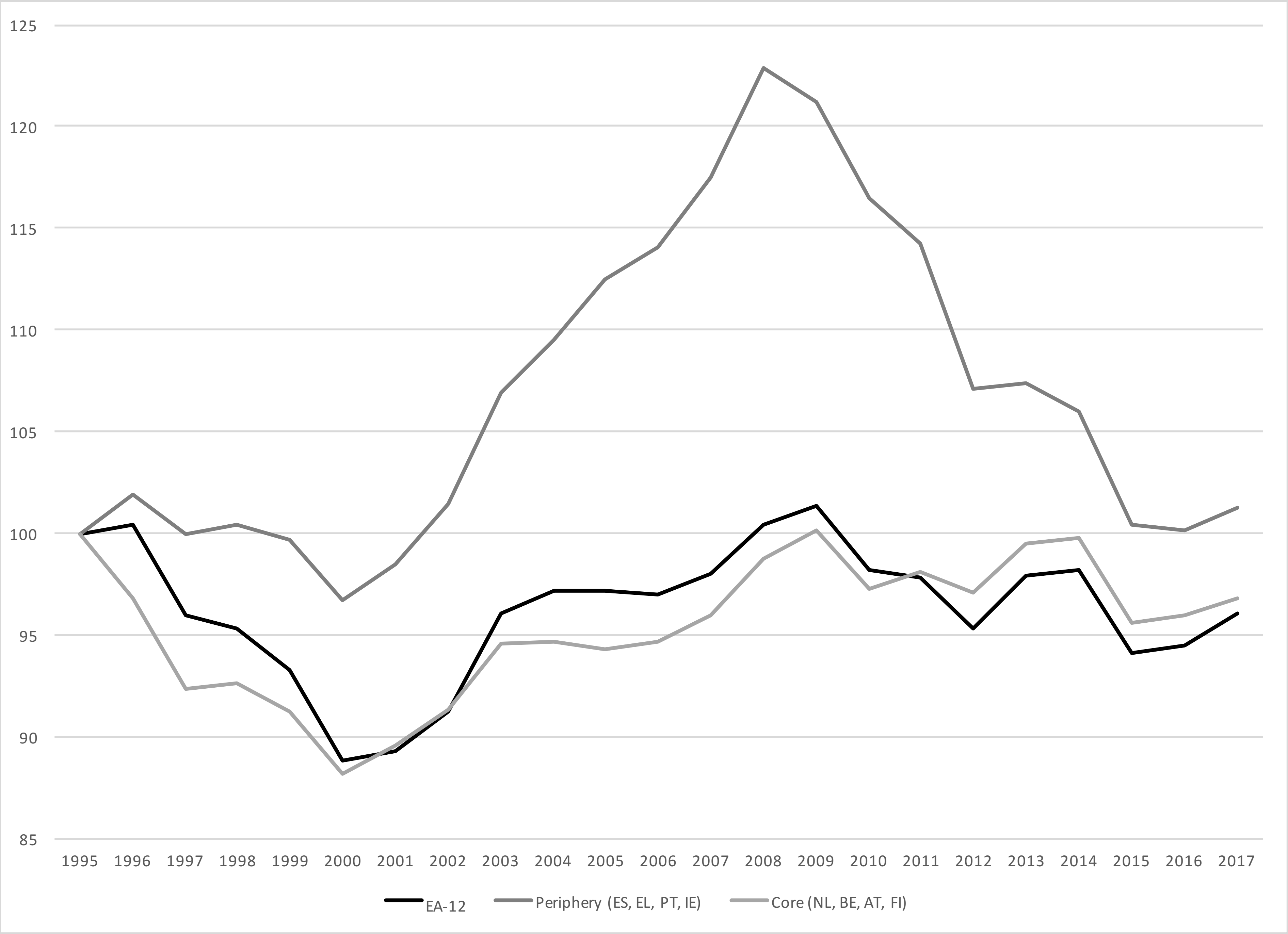
Real effective exchange rates rose by almost 16% in the periphery in the twenty years before the creation of the euro, while those in the core fell by almost 7% in the case of the large core economies, and 4% in the case of the smaller ones.

Furthermore, real effective exchange rates continued appreciating in the periphery during the 2000-2007 period.

The sustained loss of competitiveness of the economies of the periphery is another major asymmetry induced by the process of monetary integration in Europe, that has been strengthened since the early 1980s, and appears to be a significant determinant of the external imbalances that led to the euro area crisis.

Since the crisis, real exchange rates in the periphery have depreciated and are back to the levels of the mid-1990s.

Real Effective Exchange Rates in the Periphery and the Core
1995=100



Pre-Crisis versus Post-Crisis Fiscal Asymmetries

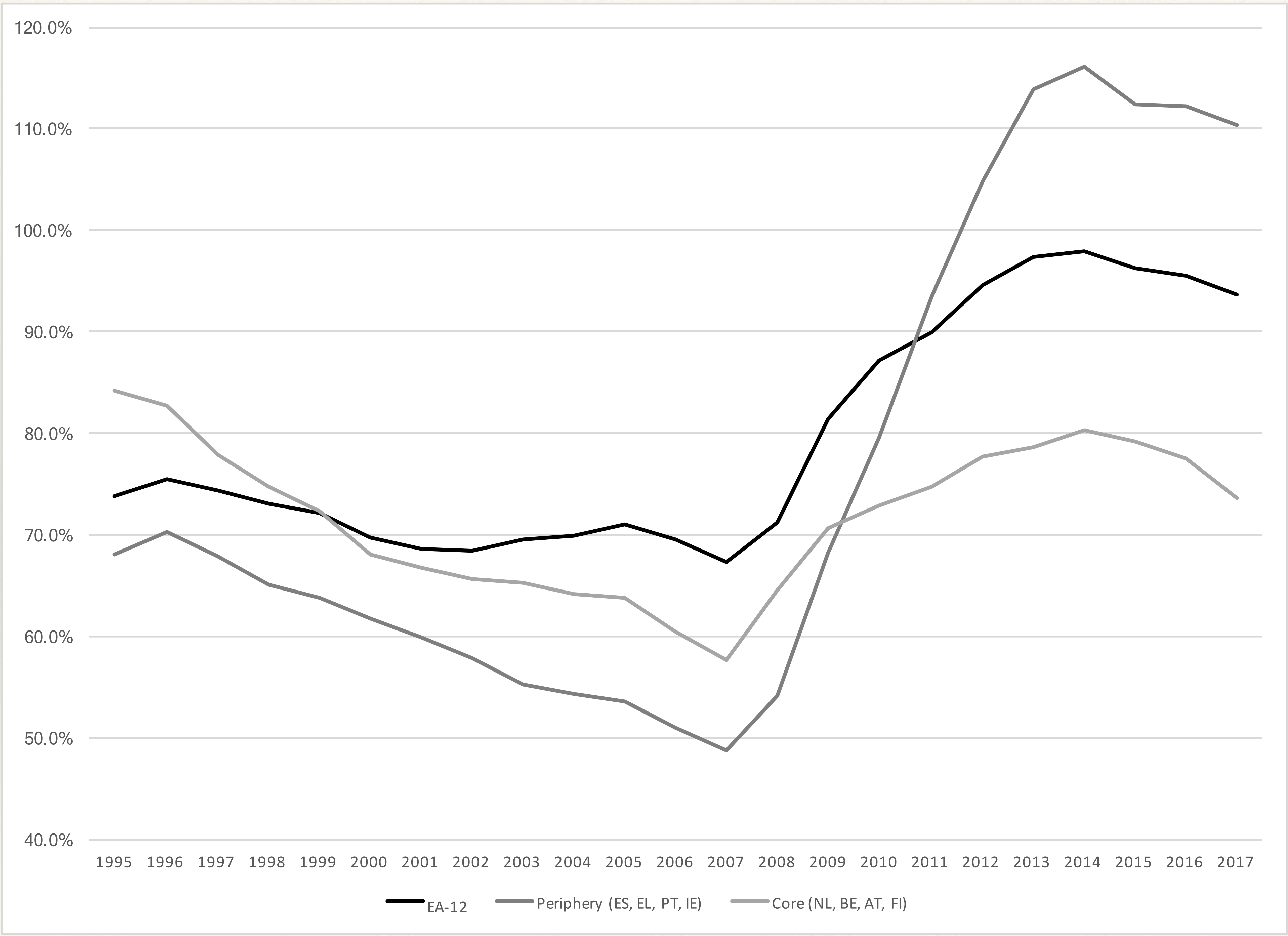
Fiscal asymmetries between the periphery and the core are less significant than usually thought.

The behavior of current government balances, or government debt was not that much different between the periphery and the core before the euro area crisis.

In fact, before the 2008 international financial crisis, as a percent of GDP, both government deficits and debts were lower on average in the periphery than the EA average and the small economies of the core. Greece is the only exception.

However, fiscal imbalances in the periphery widened significantly after the crisis, despite their fiscal consolidation efforts, due to the deeper and longer recessions that these economies had to go through.

Government Debt in the Periphery and the Core
% of GDP



Government Fiscal Balance in the Periphery and the Core
% of GDP

Proximate Causes of the Euro Area Crisis

The proximate cause of the EA crisis was the rapid unwinding of intra-EA lending/ borrowing imbalances that built up during the 2000s following the international financial crisis of 2008.

Some of this debt was to private borrowers (especially in Ireland and Spain) and some of it to public borrowers (especially in Greece and Portugal), but eventually debt mostly ended up in government hands.

Often private over-indebtedness ends up on governments' balance sheets, as governments bail out banks, so that the rise in public debt is more a consequence than a cause of a financial crisis.

The 'sudden stop' was a crisis rather than a problem since EA members could not devalue and the ECB could not bail out the governments of the periphery.

A confidence crisis thus erupted, first about the countries of the periphery, but later about some of the core countries, regarding their ability to service their public and private external debts. This was exacerbated by the unsuccessful efforts to address the debt problem.

Deeper Causes of the Crisis

The proximate causes of the crisis – imbalances and lack of crisis management mechanisms –tell us that there are really three sorts of underlying causes:

1. Design and policy failures that allowed the imbalances to develop and get so large
2. Lack of institutions to absorb shocks at the EA level following the international financial crisis of 2008
3. Crisis mismanagement

Some of these failures involved unanticipated events. Others were systemic and others were due to a failure to implement the provisions of the European treaties.

Optimum Currency Area Considerations

In retrospect, these developments were not surprising. The Euro Area does not satisfy any of the criteria suggested by optimum currency area considerations.

It does not satisfy the main criterion, namely the absence of asymmetries and asymmetric shocks,

Furthermore, it does not satisfy the other two main criteria for macroeconomic stabilization, namely integrated labor markets and a federal budget that would act as an automatic stabilizer in the case of asymmetric macroeconomic developments.

Finally, its response to major financial crises is hampered by the lack of an effective lender of last resort, the creation of the European Stability Mechanism (ESM) notwithstanding.

The EA and the USA as Optimum Currency Areas

The United States is much closer to the optimum currency area criteria than the euro area (O' Rourke and Taylor 2013).

1. US markets are much more closely integrated that EA markets, as cross border inter-state trade amounts to 66% of US GDP, whereas cross border inter-country trade amounts to only 17% of EA GDP.
2. With regard to the asymmetric impact of shocks, there do not seem to major differences between the US and the EA. The average correlation coefficient of GDP growth rates across US states in 0.46 and across EA countries it is 0.50. Macroeconomic asymmetries seem to impact the EA and the US in roughly the same degree.
3. The US is far ahead of the EA with regard to the labor mobility criterion. The average share of people in a US state born outside that state is 42%, while the equivalent share in a EA country is only 14%. On the basis of this criterion, labor mobility is four times larger in the USA than in the EA.
4. The US is far ahead on the fiscal federalism criterion, which is related to fiscal transfers and the effectiveness of automatic stabilizers in the presence of shocks that affect states and countries asymmetrically. In the US about 30% of a state income shock is offset through federal fiscal transfers. In the EA, the relevant percentage is only 0.5%. Thus, the low level of the EA federal budget relative to the US has major implications for the ability of the EA to address shocks with an asymmetric impact through transfers from countries not affected by the relevant shock.

The Fundamental Systemic Weaknesses of the Euro Area

Which were the major systemic problem areas:

1. Major differences in the product mix between the core and the periphery
2. Fragmented national labor markets and low cross border labor mobility
3. Widely different fiscal systems
4. Imperfect financial integration and lack of effective cross border financial regulation
5. An extremely low EA common budget that could act as an automatic stabilizer through transfers from booming economies to economies suffering from recession
6. Lack of a credible lender of last resort to banks and sovereign governments it times of crisis.

A result of the major asymmetries and other economic and governance problems of the euro area is the fact that adjustment efforts since the crisis have shifted the burden exclusively towards the weaker economies in the periphery of the euro area, which suffered deep recessions, a significant rise in unemployment, continuous tax rises and exorbitant social costs for young workers and old age pensioners, and rises in government debt to GDP ratios.

Reforming the Euro Area

Financial market integration and effective regulation of financial markets have taken a priority since the 2010 crisis. However, most of the systemic weaknesses of the euro are remain.

Since the crisis, there have been scores of proposals for reforming the euro area. However, there has been very little progress towards reform of the euro area.

The heads of the European institutions issued a blueprint for the future, the *Four Presidents' Report* in June 2012. In a statement on 29 June 2012 the euro area heads of state agreed on breaking the vicious circle between banks and sovereigns by establishing a banking union. The agenda, which was endorsed by the European Council, has not been completed and the roadmap for the future remains a matter of fierce controversy. At the June 2018 summit, despite the prior Franco- German rapprochement and the joint 'Meseberg Declaration' by President Macron and Chancellor Merkel, the euro area heads of state could only agree to call for further work on a series of still-divisive issues.

The "Battle of Interests" versus the "Battle of Ideas"

There are essentially two possible theories for the stalemate in euro area reform: the 'battle of interests' and the 'battle of ideas'.

The first posits that problems are fundamentally distributional and decisions are controversial because they pit creditors against debtors, high-debt against low-debt states, stable against crisis-prone coun- tries, or global banks against local banks.

The second emphasizes cognitive issues. According to this reading, a major factor behind the stalemate is disagreements in the interpretation of the facts, as different actors work with different implicit or explicit models of the workings of the euro area.

The 7+7 Assessment

An attempt to reach a consensus in the battle of ideas was made recently by a group of 7 French and 7 German economists, in Benassy-Quere et al. (2018). They suggest that the euro area 'remains vulnerable, underperform- ing and divided'. (p. 2). They highlight three main weaknesses for the euro area:

First, the euro area continues to face significant financial fragility and limited institutional capacity to deal with a new crisis. Stabilisation and recovery have relied mainly on monetary easing by the ECB.

Second, the euro area lacks adequate institutional conditions and incentives for long-term prosperity. Incomplete banking union and fragmented capital markets prevent it from achieving full monetary and financial integration, which would boost both growth and stability.

Third, and perhaps most worrisome, the flaws of the euro area's fiscal architecture have given rise to political problems. This has to do partly with the poor design and complexity of the EU's fiscal rules and partly with the euro area's inability to deal with insolvent countries other than through crisis loans conditioned on harsh fiscal adjustment.

The 7+7 Proposals

Benassy-Quere et al. (2018) make a set of proposals aiming to reconcile risk sharing with market discipline. They concentrate on four main areas:

1. *Reform of fiscal rules, including of the enforcement device*: Introduction of a debt-corrected expenditure rule (acyclical discretionary spending), the ditching of EU sanctions, and the assignment of more individual respon- sibility to countries

2. *More and better risk sharing*: Reduction of home bias in bank sovereign portfolios through concentration charges, introduction of common deposit insurance with national compartments, the promotion of a 'safe asset' based on diversified sovereign debt portfolio (e.g. ESBies), the creation of low- conditionality access to ESM liquidity for pre-qualified countries, and the creation of an unemployment/employment reinsurance fund

3. *A targeted role for market discipline*: They suggest the enforcement of the fiscal rule via mandating the issuance of subordinated (junior) bonds for the financing of excess spending, and making sovereign debt restructuring a credible last resort when debt is clearly unsustainable.

4. *Clarification of the role of institutions*: Separation of the roles of 'prosecutor' (watchdog) and 'judge' (political), the upgrade of the ESM to an IMF-like institution, the introduction of political accountability and the strengthening of national fiscal councils.

Two Additional Proposals

However, we would go beyond those proposals in two directions. First the need for a common euro area budget, and, second, the need to strengthen the role of the ECB as a lender of last resort in times of crisis.

We would argue for the introduction of a moderate and appropriately targeted *common EA budget* that would help smooth out the asymmetric impact of macroeconomic shocks through the operation of automatic fiscal stabilizers. It would also help countries in recession face smaller national fiscal and financial consequences of such recessions, and would also partly address labor market fragmentation. A significant part of the fragmentation of labor markets in Europe is the result of the lack of a cross border system of unemployment and health insurance. This could be addressed in a reform that would allow for a separate EA budget, targeted to unemployment in- surance. A EA unemployment insurance scheme would have common rules, such as common replacement ratio and eligibility rules, and would reduce the divergence the national fiscal balances in the case of asymmetric cyclical shocks.

We would also argue for an explicit recognition of the responsibility of the ECB to act as *lender of last resort to banks and sovereigns in times of crisis*. This would help avert 'sudden stops' and the market disruptions associated with sovereign debt crises much better that an upgrade of the ESM to an IMF-like institution, due to the higher capacity of central banks to create liquidity.

At the same time, the banking union should proceed as planned and national reform efforts that enhance international competitiveness should be strengthened, especially in the periphery.

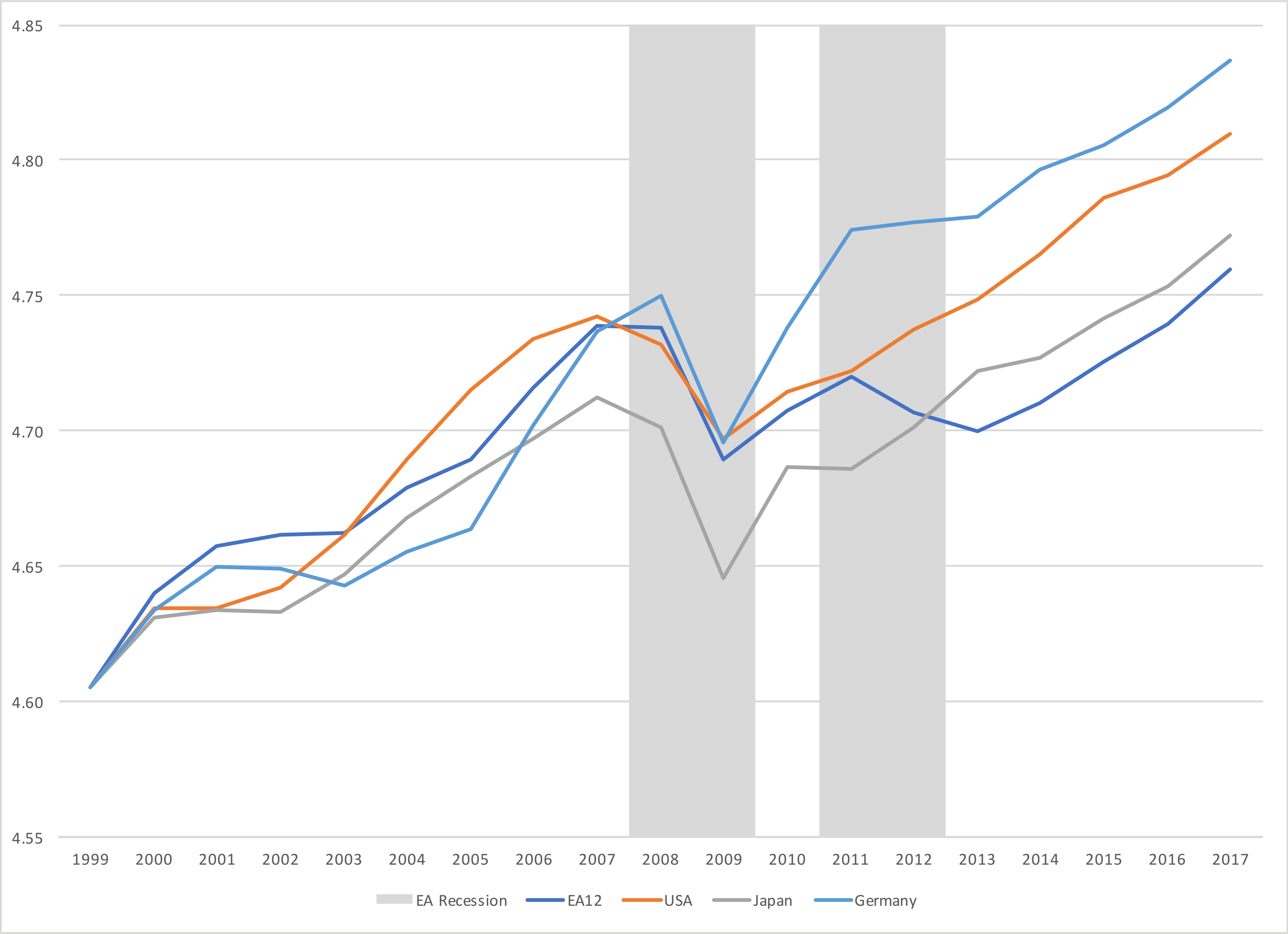
Transfer Union Arguments against a EA Budget

All proposals for a common EA budget go against the arguments of those opposing a transfer union, chiefly the countries that are net contributors to the EU budget. We feel that these objections are misplaced. The EU and, in particular, the EA are already transfer unions, through the operation of the single market and the monetary union. They encourage significant economic transfers from weaker and less competitive sectors and economies in the periphery, to stronger and more competitive ones, as suggested by the disparate macroeconomic performance of the core and the periphery following the creation of the Euro area.

A fiscal transfer union, which would partly correct the effects of such transfers through fiscal redistribution is a logical counterpart of the single market and the monetary union. The transfers we suggest are modest, but certainly higher than the current EU ceiling of 1% of GDP. They could be concentrated in key cyclically sensitive areas such as unemployment insur- ance.

The objections of net contributors to a moderate increase in the EU budget could in principle be overcome by an appropriate rules based fiscal reform that would address moral hazard and other coordination problems and ensure an appropriate balance between risk sharing and market discipline, as is also the case with the Benassy-Quere et al. (2018) proposals.

Path of GDP per Capita in the Euro area, Germany, the USA and Japan (1999=100, log scale)



Core and Periphery in the Euro area 12

Core L	Core S	Periphery
Germany (28.3%)	**The Netherlands (6.0%)**	**Spain (11.1%)**
France (20.1%)	**Belgium (3.6%)**	**Greece (2.5%)**
Italy (19.5%)	**Austria (3.0%)**	**Portugal (2.4%)**
	Finland (1.7%)	**Ireland (1.5%)**
	Luxembourg (0.3%)	
Core L (67.9%)	**Core S (14.6%)**	**Periphery (17.5%)**

Source: The weights are the ones used in the Area Wide Model (AWM) database of the European Central Bank. They are GDP based, adjusted for PPP, and reflect the PPP adjusted real GDP of each particular economy as a share of the Euro area economy GDP in 2001. See Fagan et al (2005) for more details.