Fletcher School, Tufts University

15. International Borrowing and Lending and External Debt Crises

E212 Macroeconomics

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International Borrowing and Lending and the Developing Economies

- A key feature of developing economies is that their domestic savings are often not sufficient to finance the investment opportunities that arise in them.
- Therefore, developing economies, like some developed economies too, often resort to borrowing from international money and capital markets to finance investment and promote economic growth.
- However, unlike the developed economies, the international debt of developing economies is usually in foreign currency, and not in their own currency.

The Dangers from External Debt Crises

- The high external borrowing in foreign currency makes an economy vulnerable if conditions change, or even expectations change in international markets.
- If international investor start to believe that a country may not be able to continue to service its foreign debt, i.e that it may declare bankruptcy, they will stop financing the country bringing about a foreign debt crisis, even if the country is not in fact bankrupt. It is the same process that brings about crises in fixed exchange rate regimes.
- Loans in foreign currency or bonds in foreign currency that are maturing are not renewed, or international investors demand higher returns, causing a rise in the debt service cost of a country in foreign currency.

Banks, External Debt and the Use of Leverage

- The vulnerability of banks and countries with high external debt to confidence crises arise because of *leverage*.
- Banks leverage their deposits, which are short term obligations, by lending long term. At any given time, they only have a small percentage of their deposits in the form of liquid reserves that can be used to repay depositors.
- On the other hand, developing countries borrow in order to finance investment in the expectation that the rate of return of the investent will exceed their borrowing costs, and that they will be better off borrowing to invest than non borrowing and non investing.
- However, the rate of return of investment has to be measured in foreign currency, as their borrowing obligations are in foreign currency too. Thus, at any given time, their foreign exchange reserves and earnings in foreign exchange do not suffice to repay their external debt.
- It is leverage that is responsible for both banking and external debt crises, as typically debt obligations of both banks and sovereign states are multiples of their reserves and current earnings.

Banking and External Debt Crises

- Banking and External debt crises may be due to fundamental factors, such as the inability of a bank to repay all its depositors at any given time or a country to repay its debt at any given time, or continue servicing its debt, but, almost always, they have an element of self-fulfilling prophecy, because of leverage.
- When deposits are a large multiple of a bank's reserves, the bank will be unable to repay all its depositors if they sought to withdraw their deposits at the same time. Thus, a banking crisis would ensue.
- Similarly, when external debt is a large multiple of exchange rate reserves and current earnings in foreign exchange, a country will be unable to service its foreign debt if all international lenders wanted their loans back. Thus, an external debt crisis would follow.
- When a banking or debt crisis erupts, very often a bank or a country is obliged to renege on its obligations and cease to repay deposits or service its loans, even if it is otherwise solvent.
- A loan is in default status (state of default) if the borrower without the consent of the lender does not pay one or more installments in accordance with the terms of the loan agreement.
- The history of lending to developing economies has plenty of examples of such external debt crises that have led to countries defaulting in their debt obligations.

Contagion in Bank and External Debt Crises

- Bank and foreign debt crises are rarely limited to a single bank or a single developing economy.
- Such crises often spread to other banks or other developing economies with similar characteristics.
- This phenomenon is called *contagion*, and is a key characteristic of banking and external debt crises.

Differences between Debt and Equity in the Financing of Current Account Deficits

- Bonds, bank loans and official lending are form of external debt for developing economies, while foreign direct investment and portfolio investment are not external debt.
- The difference between the two types of financing is that in debt financing the borrower agrees to pay certain installments (interest and amortization) to the lender, regardless of economic conditions, while in the case of foreign direct investment and investment in securities such as shares, the investor participates in the profits of the business, if they exist, but also in potential losses.
- Debt is often referred to as a non-contingent liability of a country, while equity is a contingent liability.
- Leverage does not matter for contingent liabilities, because the investor assumes the investment risk.

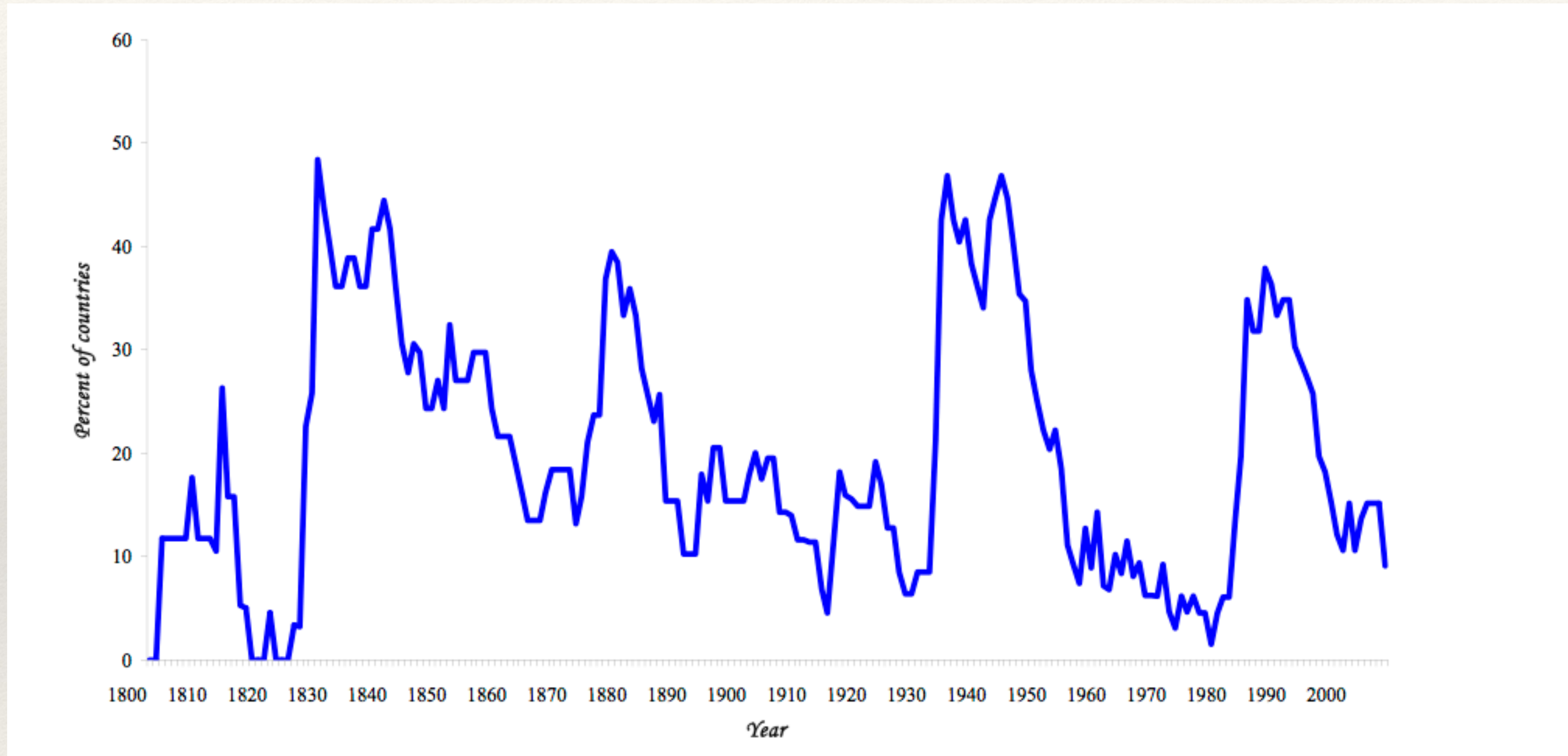
Differences between Developed and Developing Economies

- The reason that leverage matters for developing economies, but not for developed economies, is that developed economies finance their current account deficits mainly through direct and portfolio investment, and debt in their own currency rather than foreign currency.
- The major developed economies, the currencies of which are widely traded internationally, almost always borrow in their own currency. The US in dollars, Eurozone countries in euros, Japan in Japanese yen, Britain in sterling. Even Switzerland, if it needs to borrow borrows in its own currency, due to the international acceptance of the Swiss franc.
- The problem with developing economies is that a large part of the financing of their current account deficits is through debt, and in particular foreign currency debt. International investors refrain from taking the currency risk from an investment denominated in a minor currency.
- A country that can borrow in its own currency has significant advantages over countries that cannot do this. Leverage does not matter, as they can continue to service their debt in any case, by issuing money in order to pay its creditors. So they don’t run the risk of default and external debt crises do not affect them. This option is not available to developing economies.

The Original Sin of Developing Economies

- The inability of developing economies to borrow in their own currency, is often called the *original sin* of developing economies. Conversely, the ability of the US to borrow in dollars, and in this way to reduce the real value of its international obligations, is often referred to as the exorbitant privilege of the US.
- It is also worth noting that, as shown by the post-2010 crisis in the economies of the European periphery, participation in a single currency area like the euro area does not ultimately absolve a developing economy from the original sin.
- The government of a small economy that participates in the eurozone cannot expect that the European Central Bank (ECB) will lend it euros to service its external debt, or the debt of its banks, because of the ECB's political independence and the prohibition of monetary financing of budget deficits of euro area Member States. In essence, because of its Statutes, the ECB cannot function effectively as a lender of last resort (lender of last resort) to either EU banks or EU governments. This is in contrast to the central banks in the US, Britain or Japan.

Percentage of Countries in a State of Default or Restructuring, 1800-2006



Source: Reinhart C. and Rogoff K. (2009), *This Time is Different: Eight Centuries of Financial Folly*, Princeton N.J., Princeton University Press

External Debt and Debt Crises in the 19th Century

- There were four periods of widespread defaults in the 19th century (Reinhart and Rogoff 2009).

1. The Napoleonic Wars (1803-1815). A number of European countries involved in the wars defaulted in this period (Austria Hungary, France, Prussia, German states, the Netherlands, Spain, Sweden)
2. From the mid-1820s to the 1840s. Most newly independent Latin American countries, Spain, Portugal, Russia, newly independent Greece.
3. From 1850 to 1875. Portugal, Spain, Greece, Latin Americal states.
4. From the mid 1870s to the 1890s. Portugal, Russia, Spain, Turkey, Greece, the whole of Latin America

- At times, almost 50% of states that had external debt were in a state of default.
- In the early 19th century, a number of US states defaulted on the loans they had contracted in order to finance the construction of channels.

International Borrowing and Debt Crises until 1970

- In 1915 Turkey defaulted on its external debt following the Balkan Wars, the coup of the Neo Turks and its siding with Germany in World War I. In 1917 the revolutionary (communist) government in Russia defaulted on the country's external debt.
- The most serious external debt crises of the first half of the 20th century emerged in the 1930s, when, during the Great Depression, a number of developing economies were forced into default as the developed economies excluded them from their markets with high tariffs and other barriers to trade. These included Germany, Hungary, Poland, Turkey, Greece, Romania and almost the whole of Latin America. In addition Austria, Germany, China, Japan, Turkey, Hungary, Poland defaulted in 1939-40 before World War II.
- On that account, in the post-War period international private lending to developing economies dried up until the early 1970s.

The Recovery of International Borrowing and Lending since the 1970s

- Since the early 1970s, international lending to developing economies rebounded, as the surpluses of developed countries and the countries of the Organization of Petroleum Exporting Countries (OPEC) were gradually channeled through the international banking system towards developing economies.
- However, external debt crises were not avoided. In fact, there was a resurgence of international debt crises since the end of the 1970s.

Prerequisites for an External Debt Crisis

- First, high international capital mobility at the global level
- Second, a period of protracted deficits in the current account and a large increase in foreign currency denominated external debt.
- Third, an event changing conditions or expectations in the international money and capital markets. Such an event may be a global recession that reduces demand for exports of the country concerned, an increase in international interest rates, a political change in the country, or all of these factors.
- Fourth, limited foreign exchange reserves and a fixed exchange rate regime.

The Outbreak of an External Debt Crisis and its Follow Up

- The first stage of a debt crisis is for international investors (the "markets") to begin to doubt whether the country concerned will be able to continue servicing its foreign debt. This leads to a reduction in international lending to the country, or worse, a capital flight abroad that reduces foreign exchange reserves and causes interest rates to rise.
- An external debt crisis leads an economy in a recession, since it will have to reduce its current account deficit by reducing investment and increasing savings. This is the only way to balance the current account and return to external equilibrium. A crisis often leads to a rapid currency depreciation, inflation and collapse of the banking system, particularly if banks are also leveraged in foreign currency.
- Often, after a debt crisis a country is forced to resort to official lending through a program of the International Monetary Fund (IMF), which requires it to follow an adjustment program which usually includes a devaluation of the currency and a reduction of domestic demand in order to balance the current account.
- All the above have featured in the periodic debt crises that affected the world economy since the early 1980s.

The Latin American Debt Crisis

- The first large external debt crisis that broke out after the recovery of international lending to developing economies in the 1970s, was the debt crisis in Latin America in the early 1980s.
- Its roots lied in the significant accumulation of external debt by a number of Latin American countries during the 1970s. In the early 1980s, with the adoption of an anti-inflationary policy by the United States, there was rise in real interest rates, a global recession and a real appreciation of the dollar.
- The rise in real interest rates and the real exchange rate of the dollar led to an increase in servicing costs of the external debt of the Latin American economies, as well as other developing economies. The global recession led to a drop in exports and a deterioration in their terms of trade, as the prices of raw materials and agricultural products also fell.
- The crisis began in 1982 in Mexico and spread quickly to Argentina, Brazil and Chile. The crisis lasted until 1992, when gradually the American banks that had lent to the Latin American countries, under pressure from the US government, agreed to a major restructuring program for the external debt of these countries, starting with Mexico in 1990, continuing with the Philippines, Costa Rica, Venezuela and Uruguay in 1991 and concluding with Argentina and Brazil in 1992.

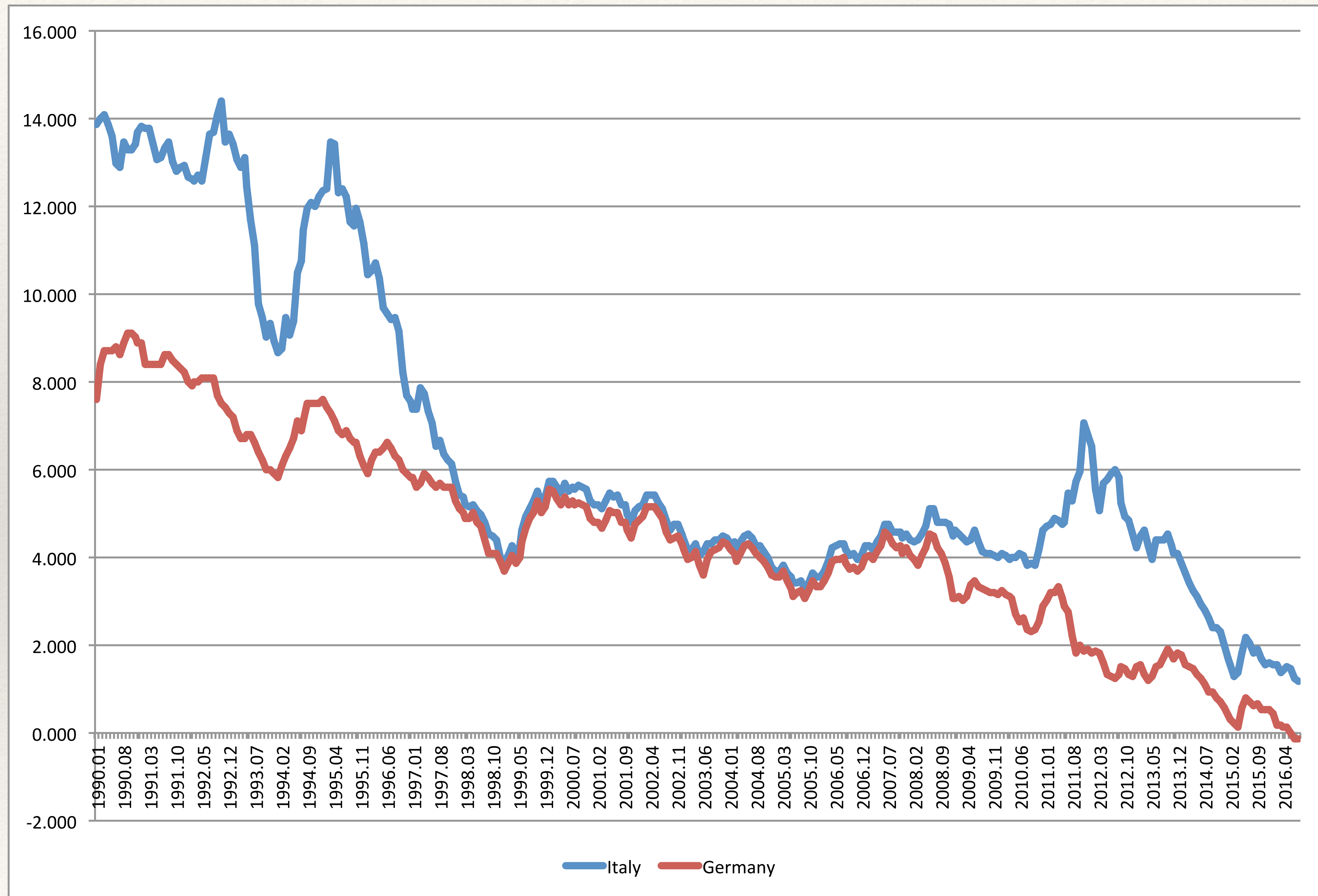
The Asian Crisis

- Since the early 1990s, a number of fast growing Asian economies began to have deficits in their current account, due to the drop in international interest rates, which led to even greater increase in their investment relative to their savings. The additional investment was mainly investment in real estate projects. Moreover, due to the liberalization of capital movements, fixed exchange rate regimes and inadequate supervision of the domestic banking system, many Asian companies borrowed in foreign currency rather than in their local currency.
- The Asian debt crisis occurred in July 1997, with the devaluation of the baht, the Thai currency. Very quickly the crisis spread to Malaysia and Indonesia. A much larger economy, South Korea, followed. Since the private sector and the banking sector in all these Asian economies had borrowed in dollars, the dilemma between a devaluation and high interest rates were particularly painful. The devaluations destabilized the banking system, causing banking crises, and burdened businesses that had borrowed in foreign exchange to invest in the domestic real estate sector.
- Eventually all countries were forced to adopt IMF programs, with the exception of Malaysia, which in 1998 resorted to restrictions on capital movements. IMF programs included higher interest rates to limit the devaluation that would create problems in the banking sector, budget cuts and structural reforms to improve competitiveness.

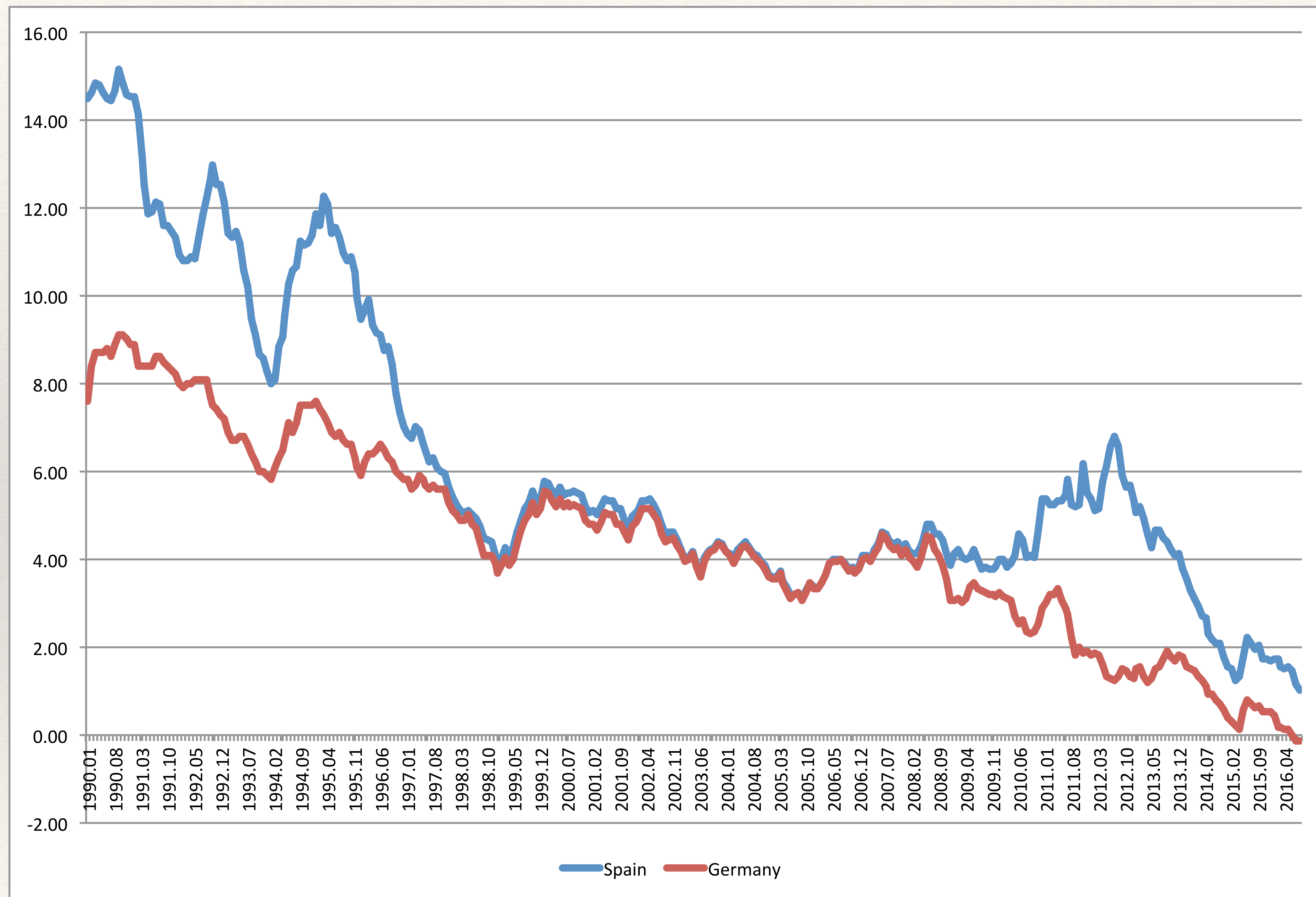
The Eurozone Crisis

- The developing economies of the European periphery (Ireland, Spain, Greece and Portugal) joined the euro area between 1998 and 2000. This led to significant drops in their interest rates, due to the elimination of foreign exchange risk that kept their rates high. Falling interest rates resulted in increased investment, lower savings and a substantial widening of the deficits of the current account in all four countries.
- They also resulted in a large expansion of bank lending.
- The entry into the euro zone internationalized both public and private debt of the countries, and for a series of years the countries financed the increasing deficits in the current account balance at low interest rates from the international money and capital markets.
- The international financial crisis of 2008, the collapse of the investment bank Lehmann Brothers and the international recession that followed, led to an increase in their interest rates relative to German rates and a destabilization of their banking systems, as international markets began to revise their estimates about the ability of these economies to service their external debt.
- The global recession also led to the deterioration of their budgetary deficits and an increase in public debt, due to the operation of automatic stabilizers and the problems of the public and the banking sector. Their external imbalances worsened, and they were led into a typical external debt crisis.

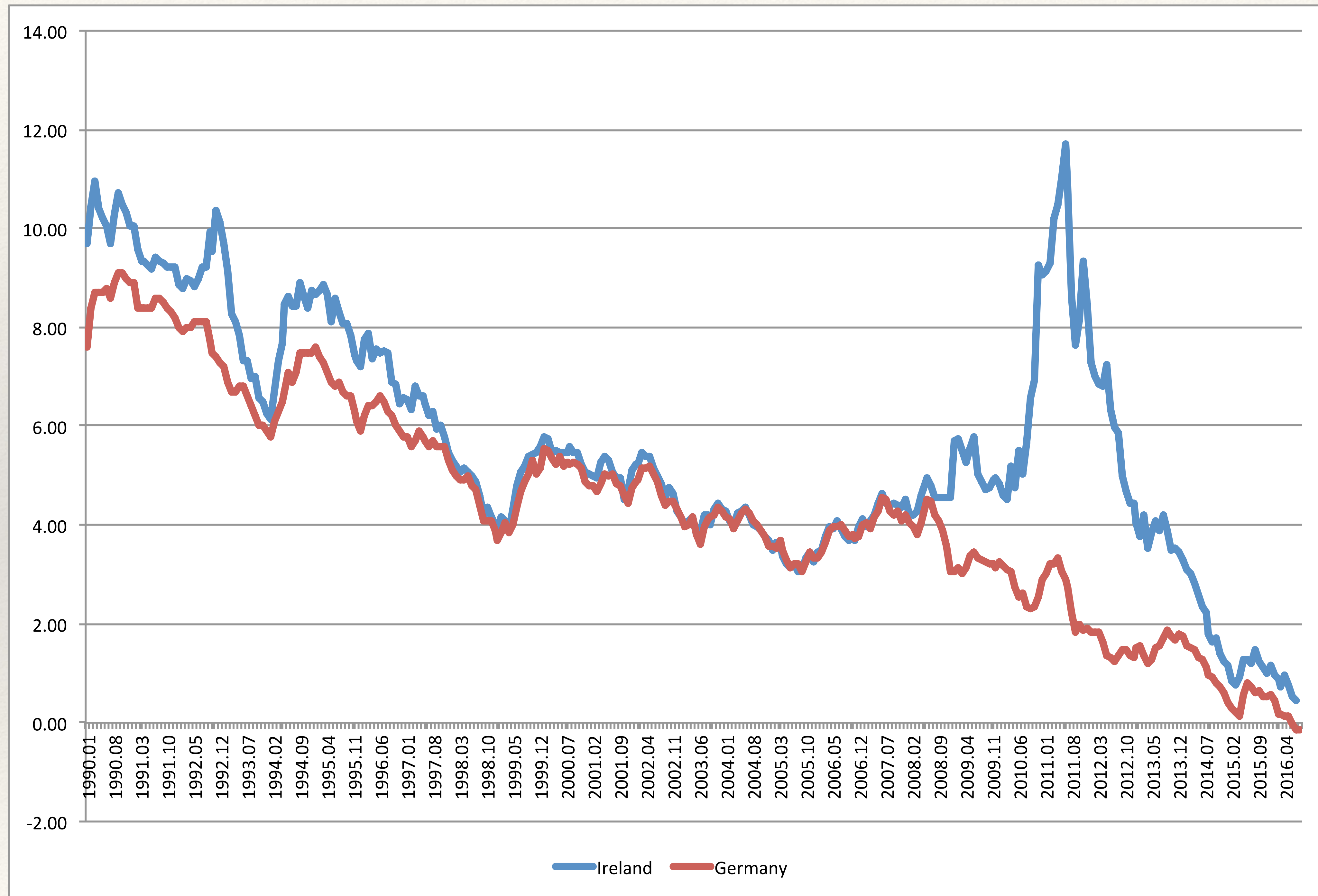
Yield of 10 year Government Bonds in Germany and Italy



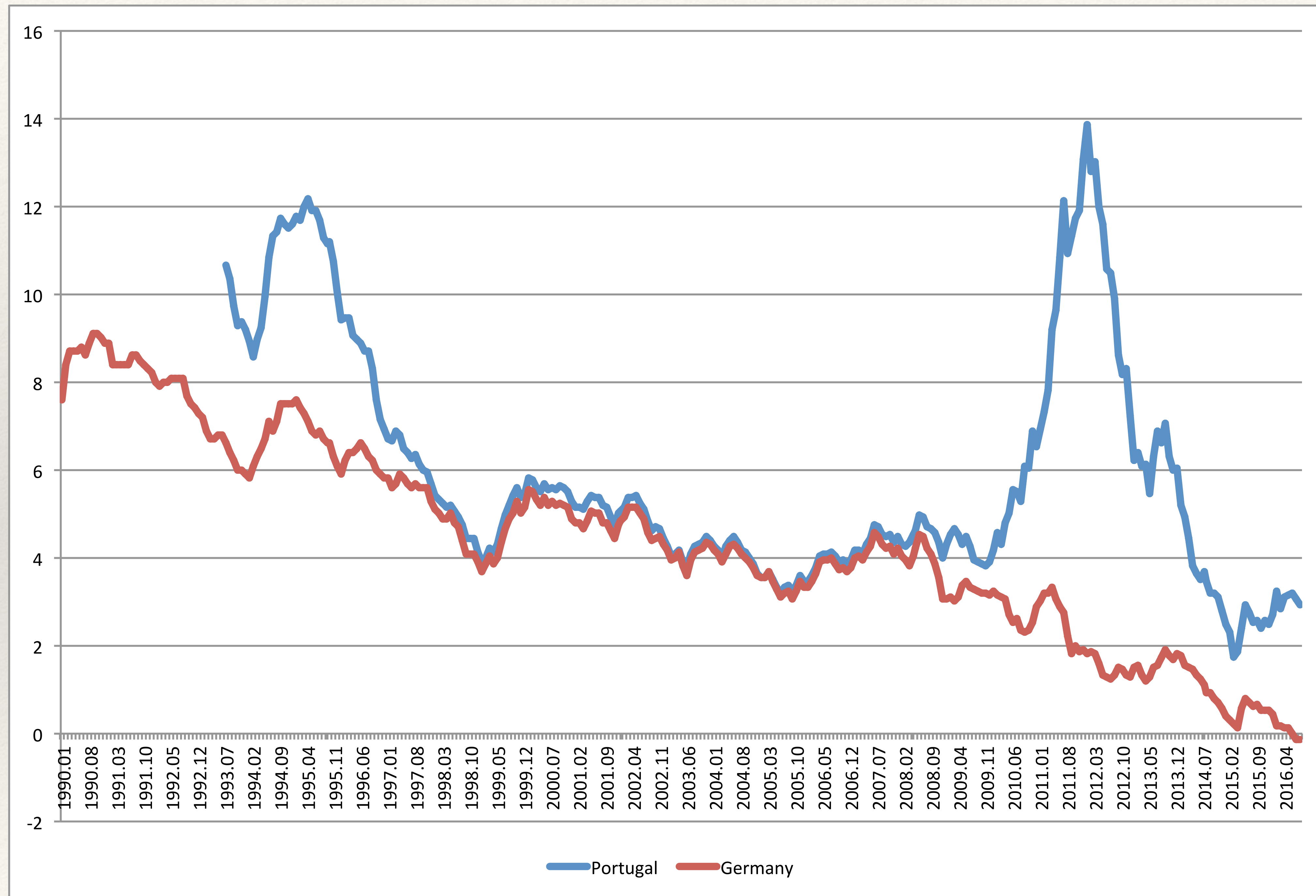
Yield of 10 year Government Bonds in Germany and Spain



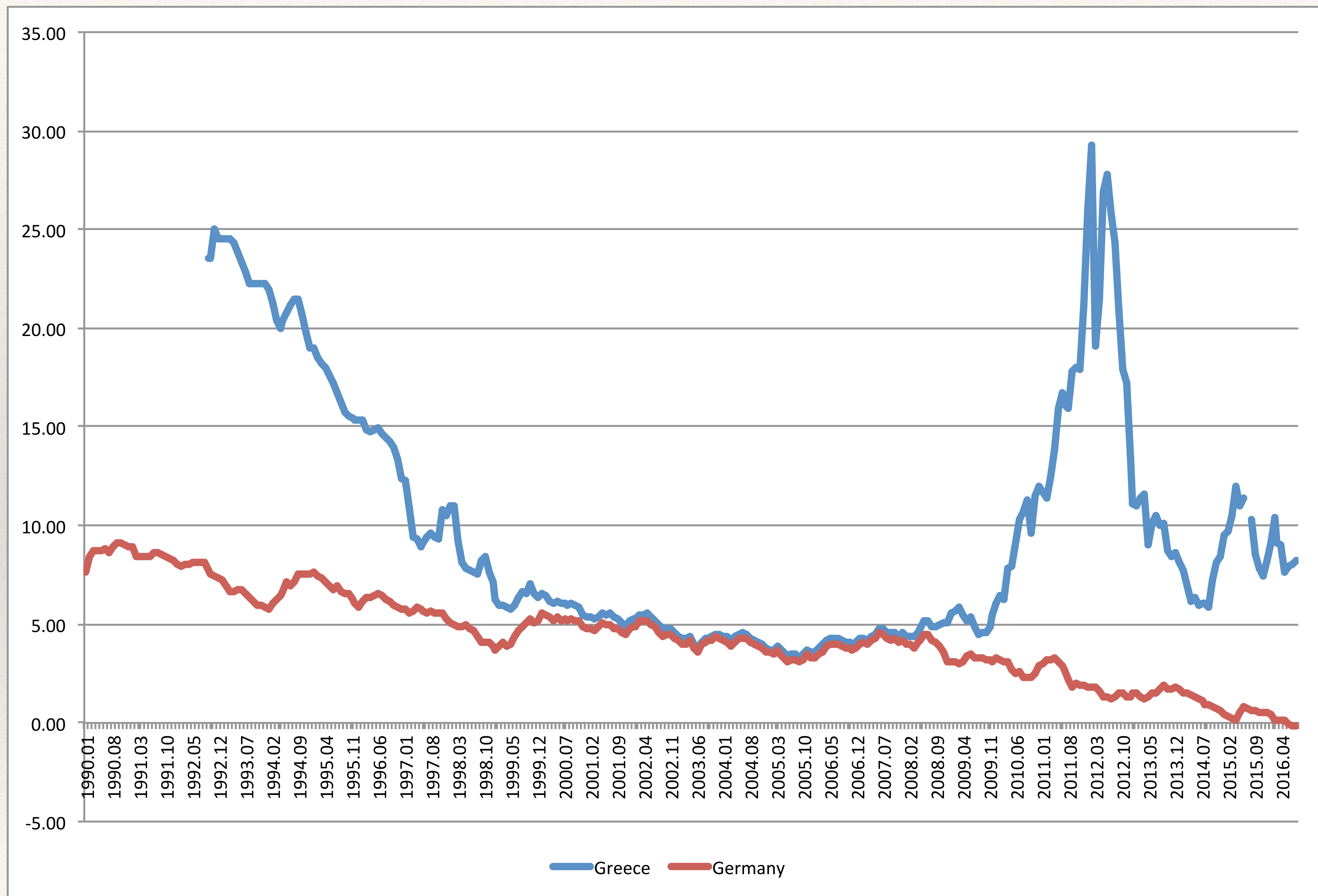
Yield of 10 year Government Bonds in Germany and Ireland



Yield of 10 year Government Bonds in Germany and Portugal



Yield of 10 year Government Bonds in Germany and Greece



The Outbreak and the Transmission of the Eurozone Crisis

- The confidence crisis first broke out in Greece, the country with the largest fiscal and external imbalances, followed by Ireland and Portugal, for different reasons each. Greece was bailed out in April 2010 through a special support mechanism, managed by the European Commission, the European Central Bank and the IMF. The same happened later with Ireland, which had significant problems in the banking sector, and Portugal which also had considerable fiscal problems. The crisis was transmitted to Spain and Italy, but due to the interventions of the European Central Bank the effects were restricted.
- The adjustment programs followed by the countries of the Eurozone periphery, with or without the participation of the IMF, do not include the instrument of devaluation, which had both positive and negative effects in the crises of Latin America and Asia. Despite the predictions of many analysts, no country is obliged as of now to leave the euro. However, the costs of adjustment are enormous.Recession in countries such as Greece and Portugal continued for six consecutive years or more, and were extremely deep, especially in the case of Greece. Unemployment rates have tripled and have exceeded 25% both in Greece and Spain for a number of years.

Similarities of the Eurozone Crisis with the Latin American and Asian Crises

- Like the previous crises, the Eurozone crisis involved a group of developing economies, and was preceded by a period of accumulation of significant current account deficits and accumulation of external debt.
- The trigger of the crisis was one unfavorable change in international conditions, the international financial crisis of 2008 and the global recession of 2009, which caused a deterioration of the debt and deficit position of these countries, led to doubts regarding their ability to continue to service their external deb, and eventually limited their access to international financial and capital markets.
- As in the case of the Latin American and Asian crises, the countries affected were characterized by fiscal imbalances and an overextended financial sector, in conditions of insufficient government regulation. Lending to households, firms and governments led to a rise in investment mainly in the real estate sector and not in export oriented industries. When the crisis and rising interest rates led to a fall of real estate prices, this created problems for banks, households and many banks.

Differences of the Eurozone Crisis from the Latin American and Asian Crises

- The lack of option of using a devaluation caused increased difficulties in countering the recession, fiscal imbalances and the adjustment of the current account of these countries. On the other hand it made it easier to stabilize the banking sector and balance sheets of firms which had borrowed in euros. It addition, inflation did not rise as would have happened in the case exchange rate depreciations had occurred.
- Although there was a flight of capital from the countries affected, this was relatively small, and was mainly associated with the fear of a country being forced to abandon the euro and adopt its own national currency. As this possibility did not materialize, the collapse of the financial sector that occurred in some of the economies of Latin America (especially Argentina) and Asia (notably in Indonesia) did not happen in the Eurozone, especially as recapitalization initiatives were undertaken in the banking sector.

The Recurrence of the Latin American Crisis

- Since the early 1990s, and after the Latin American economies had lost one decade of growth, reform programs were adopted, with mixed results. However, due to the high international liquidity of the 1990s, and the fall in real interest rates, international banks returned to lending to Latin America.
- The Chilean reform program was perhaps the most successful and has transformed the country into a model for all of Latin America.
- Mexico was driven into a second crisis in 1994, which was tackled through a colossal $ 50 billion loan from the US and the IMF and the free floating of the peso. Since then the situation has improved.

The Case of Argentina

- In April 1991 Argentina introduced a policy of a "new" fully convertible hard peso, fixing its exchange rate at one to one with the US dollar. This policy, supported by significant reforms was maintained for nearly a decade.
- However, due to the accumulation of new fiscal and external imbalances and the global recession of 2001, a new debt crisis broke out in December 2001.
- The hard peso policy was abandoned in early 2002, there was a huge depreciation and stagflation, a financial meltdown because banks businesses and households had borrowed in dollars, and a generalized economic and social crisis that continued for more than a decade.
- Argentina defaulted on a large chunk of its external debt, was excluded from international financial and capital markets, and adopted capital controls.
- It was only in 2016 that the peso became convertible again, and Argentina staged a limited return to international capital markets.

The Case of Brazil

- The situation in Brazil evolved better than in Argentina.
- In 1994 a new currency, the “real”, was introduced which was linked to the US dollar. However, the link with the dollar was less rigid compared to the Argentine peso. Instead of a rigid peg to the dollar, Brazil followed a crawling per policy of allowing the “real” to depreciate against the dollar.
- In 1999 the “real” depreciated 8% and thereafter floated. This resulted in the fall in interest rates and the improved economic performance of Brazil until relatively recently, when economic problems seem to return.

The Aftermath of the Asian Crisis

- Like the Latin American crisis, the Asian crisis spread across most of East Asia. It affected countries that did not have the serious external debt problems of Thailand, Malaysia or Indonesia, such as Hong Kong and Singapore, New Zealand, and even Japan. Only China and Taiwan, which had restrictions on the movement of capital and a current account surplus avoided the crisis. The Asian crisis also spread to other emerging economies, the main countries affected being former Soviet Union republics, and especially Russia.
- The Asian crisis was deep but it proved short-lived and in 1999 the economies returned to growth. Exchange rates stabilized relatively quickly after the initial devaluations, interest rates fell, the external balances moved again into surplus, and the Asian economies rebounded.
- However, the recovery rate was not particularly strong, it differed from country to country, and, even today, the decision of Malaysia to resort to capital controls is considered controversial.

Conclusions from the External Debt Crises of Less Developed Economies

- The question is how can a country be shielded against a possible external debt crisis. The experience of recent crises suggests that it is important to maintain low fiscal deficits and debts, transparency and effective supervision of the banking sector, and to avoid persistent deficits in the current account through appropriate macroeconomic policies.
- If a country wants to combine the free mobility of capital with a fixed exchange rate, it should ensure the macroeconomic conditions for the sustainability of such a policy, with sufficient foreign reserves, alternative sources of funding in cases of disturbances and a greater reliance on foreign direct investment or portfolio investment in relation to external borrowing.
- However, ensuring the absolute immunity of an economy is not always possible, because sometimes crises arise because of shifts in the expectations of international investors, either because of unrelated events or because of the transmission of an external debt crisis of other economies.