

**GLOBALIZATION:  
PAST, PRESENT AND FUTURE**

**Manuscript of the lecture; Part IV**

**Financial Markets: Global Growth, Crises and  
their Aftermath**

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## **IV Financial Markets: Global Growth, Crises and their Aftermath**

### **1 Liberalization: The Washington Consensus**

By the early 1990s, the belief in the benefits of the free movement of capital across borders had become well-established among international policy circles. It was part of what later was called the “Washington Consensus” – named after the International Monetary Fund that evaluated and supervised the financial market policies of countries in crisis.

Apart from the political will of liberalization, technological innovations of the time also favoured open capital markets. After all, new information technology and the computerization of trading allowed for a more efficient working of stock and currency exchanges. And the so-called dot-com boom in the new technologies reached new heights in the 1990s and supported a generally optimistic mood – together with the fall of the iron curtain and worldwide liberalization of trade and direct investment.

### **2 Booming Markets until 2007**

The global financial crisis of 2007ff has roots that go a long way back, at least to the turn of the century. At that time, the so-called dot-com crisis hit the American economy. The boom in modern information technology came to a temporary halt, and the young industry, which had grown vigorously for a number of years, entered a serious adjustment crisis. Many young firms went insolvent, and even those that survived experienced a sharp downward correction of their stock market valuation. In the American economy, the danger of a severe recession seemed to be real. On top of this came the events of September 11, 2001, which further aggravated the fears of a slump.

As a consequence, monetary policy in the United States turned towards expansion. From 2002 to 2004, short-term interest rates reached an extreme low, with the federal fund rate standing at an annual average of 1.67 percent in 2002, 1.13 percent in 2003 and 1.35 percent in 2004 (FIGURE IV.1). Note that these expansionary steps were taken in a climate of more or less price stability (i.e. very moderate inflation), which had prevailed for a long period of time after the success of the tough stabilization policies of the 1980s. This is why they did not appear at all to be preposterous. Most observers – though not all – considered the monetary policy of the Federal Reserve System under its renowned Chairman Alan Greenspan as adequate and responsible.

At the same time, the American government began to pursue a deliberate policy of raising the share of home ownership in the United States. At about 65 percent, this rate stood already high by international standards, but the political goal was to raise it further to about 70 percent.

(Note that this was a kind of American-style social policy: traditionally, welfare state provisions to help lower-income individuals and families are rather limited in the United States – compared to Europe – so that home ownership is widely regarded as a substitute for supporting the poorer strata of society.) The policy was put into practice by largely by-passing the state-sponsored real estate banks Freddie Mac and Fannie Mae, which were traditionally responsible for the housing market and tended to have relatively conservative (i.e. risk-averse) standards. By putting pressure on investment banks to foster the real estate business, the political establishment tried to make sure that even those who normally would find it difficult to obtain real estate loans were able to do so. As a consequence, the loose monetary policy was accompanied by a major political initiative towards expansion in the housing market.

In fact, the policy worked: mortgage rates went down in tandem with short-term interest rates, and the housing market began to boom, with annual rates of increase of the American house price index of 8–10 percent from 2000 to 2003, 13,9 percent in 2004, 15,6 percent in 2005 and eventually 7,5 percent in 2006. All this amounted to nearly a doubling of house prices in six years, with an enormous expansionary impact on the book values of wealth and what may be called measured prosperity of the public at large. At the same time, the quality of housing and real estate loans worsened significantly: from 1996 to 2006, the incidence of fraud cases rose by a factor of 15. Cynics in the market were speaking of “teaser” rates that were offered to borrowers for NINJA-loans, with NINJA standing for: no income, no job, no assets.

Internationally, this process of expansion was strongly supported by a glut of liquidity, which stemmed from the large surpluses of current accounts that a number of notably Asian countries ran during that time – as a consequence of a prudent “mercantilist” policy following their own financial crises in the 1990s. Most notably, China ran huge surpluses, thus massively accumulated currency reserves and exported capital to indirectly finance the American real estate boom. A very large international imbalance emerged, with the United States saving little (if at all) and consuming heavily and eastern Asia doing the opposite. At the time, this situation was not seen as a major element of instability. To the contrary, there was a widespread discussion among academics about “the great moderation,” meaning a new era of benign macroeconomic circumstances all over the world, with fast growth, fast trade integration, low interest rates and also low price inflation.

To understand the causes of the later crisis, it is important to recognize the major mechanisms through which the expansion in real estate markets came about. In particular, the method of “securitization” deserves attention. “Securitization” (in German: “Verbriefung”) is a procedure of transforming actual loans into securities that can be traded in financial markets. The trend

towards securitization goes back to the liberalization of financial markets in the 1980s when new instruments were developed to distribute credit risks in an optimal form. The basic idea was that loans could be bundled (or “structured”) so as to create new “products” with specific risk characteristics. And in well-functioning financial markets, these products could be sold to agents who were apt to take these risks. E.g., one could imagine that life insurance companies with a particularly long time horizon of investment decisions were well suited to carry some short-term risks at high returns, given the fact that the liabilities in their balance sheet were very long-term and thus allowed them to hold on to whatever asset even in “bad” times of significant asset devaluations. Hence, at least in theory, securitization looked like an economically efficient procedure and was widely hailed as a major innovation to improve the allocation of capital.

Alas, reality did not quite follow the theoretical models. The so-called mortgage-backed securities, which were created by bundling loans to finance real estate and housing, did not typically land in the portfolios of investors with a long-term time horizon. To the contrary, it was American investment banks (bullied by the US-government!) that heavily invested in mortgage-backed securities and refinanced their investments in the capital markets by issuing commercial paper with short maturities, thus profiting from the high degree of market liquidity and low short-term interest rates that prevailed in world markets. At least with the benefit of hindsight, it is quite obvious that this constellation created serious risks: once the market would not be ready any more to provide an easy re-financing – say, due to a rise in short-term interest rates, a decline of real estate prices or a downgrading of debtors –, the process of leveraging may be rolled back and give rise to a major credit squeeze. This is exactly what finally happened. Note that the trading of mortgage-backed securities had an international dimension. E.g., German state-owned banks (“Landesbanken”) were also heavily engaged in the business of acquiring these seemingly profitable assets. In a state of very low short-term interest rates, all options to improve the rate of return of banking operations were welcome. After all, a kind of “yield panic” (Martin Hellwig) began to prevail in many financial institutions, which led them to create “special investment vehicles”, i.e. subsidiary firms that could carry out appropriate operations in financial markets without being subject to the strict regulations of the parent company. Thus, from the accounting standpoint of the bank, a whole branch of risky economic business could be done “off-balance” although appropriate liquidity guarantees had to be extended in case of illiquidity or insolvency. An extreme case of this sort eventually happened in Germany, with the Sächsische Landesbank coming very close to insolvency in 2007 because its liquidity guarantees to its Irish special investment vehicle by far outstripped the bank’s equity capital.

In 2006, the first strains in the market for mortgage-backed securities became visible as real estate prices in the United States stopped rising and, from 2007 on, began to fall sharply. At that time, it became increasingly clear to many market participants that there had indeed been a “bubble” in real estate markets. Still then, however, the real extent of the risks was vastly underestimated: as late as 2007, so-called stress tests of the International Monetary Fund basically led to the conclusion that the associated dangers for the world economy as a whole were limited. Generally, credit rating agencies continued to give very good ratings to mortgage-backed securities as financial products.

### **3 The Great Recession of 2008ff**

This changed only after the number of defaults on mortgages began to rise sharply in the course of 2007. Within a very short period of time in August 2007, the whole market including the rating agencies radically changed their views and downgraded the products substantially. That led, within a few weeks' time, to an almost complete breakdown of the inter-banking market for short-term loans. The reason was simple enough: basically all banks presumed that those in need of short-term credit were all those who had engaged in all too risky operations connected to the downgraded mortgage business (as possibly oneself had), nobody stood ready to provide credit to others. An economic standstill of mistrust was the consequence.

All in all, the situation in late summer 2007 began to take features of a very severe and unusual financial crisis. With the breakdown of the inter-bank short-term credit market, the major liquidity flows in the economy were stalled. The consequences might have been disastrous: even with a healthy economy, a short-run stop of liquidity flows might lead to major banking crises, a situation very much reminiscent of the early stages of the Great Depression 1930–32 when bank failures and bank runs massively deepened the crisis. In terms of the standard macroeconomic quantity equation  $MV=PY$ , which has been invoked a couple of times in this lecture, a massive decline of the velocity of circulation ( $V$ ) could have been in the making, and thus, at a given quantity of money ( $M$ ) and a naturally rigid price level ( $P$ ) in the short run, an equally massive decline of output  $Y$  might become the consequence. For the first time after more than 75 years, central banks and governments faced a situation that resembled the dramatic choices of policy makers in the Great Depression.

In view of the crisis, the major central banks reacted fast. Massive liquidity support was granted to banks from August 2007 on, thus attempting to support the interbank market and to avoid anything like a massive decline of the money supply in circulation. In Britain, the Bank of England met the first run on a bank since 1866 (!) when it bailed out Northern Rock, a bank that had heavily engaged in the mortgage business and was on the brink of becoming insolvent.

To avoid a panic of depositors, governments in Britain and also Germany proclaimed an unlimited guarantee for private banking deposits. All these short-term emergency measures helped to avoid a complete implosion of the credit system, but they did not restore anything like the prior confidence in the market.

In September 2008, the crisis reached a new apogee with the insolvency of Lehman Brothers, an important American investment bank. Apparently, the American government wanted to make clear to the market that a massive bailout of ailing investment banks was out of the question. The Lehman breakdown had immediate and massive consequences: interbank lending rates shot up again, and the largest insurance company in the world, the American International Group (AIG) also faced insolvency. There was widespread agreement that a breakdown of AIG would have disastrous worldwide consequences as AIG had been massively involved in providing insurance to exactly the type of business that was at the core of the crisis. Tearing away that insurance cushion from the balance sheets of a vast number of firms worldwide would be extremely dangerous and would massively speed up the de-leveraging of banks and other financial institutions. As a consequence, the Federal Reserve system stepped in to provide massive liquidity support; and the government stepped in as a shareholder to provide equity to endangered financial and insurance firms.

It is fair to say that, from this time on, the American government and virtually all other governments of industrial countries fully engaged in massive short-term emergency aid to minimize the macroeconomic effects of the crisis. The contrast to the Great Depression could not have been bigger: in 1930–32, governments and central banks basically watched their economies getting caught in a vicious circle of deflation; in 2008–09, they massively stepped in using all pragmatic instruments from extremely low discount rates to liquidity aid up to the outright nationalization of firms.

In the wake of the financial crisis, the world economy was pushed into a very severe recession, which threatened to become a genuine depression. In 2009, the aggregate output (Gross Domestic Product) in major industrial countries was expected to fall sharply: by almost 3 percent in the United States, by roughly 4 percent in Euroland and Britain, in strongly export-oriented economies like Germany and Japan even by 5 to 7 percent. The free fall of industrial production was anticipated to be even more dramatic: in the range of 20 percent in Germany and Euroland as whole, about 30 percent in Japan and more than 10 percent in Britain and the United States, which have more service-oriented economies.

Remarkably, the recovery after the crisis was relatively fast and swift, at least in the major advanced countries like the US, the UK and Germany. Apparently, the emergency measures did work, and it is hard to avoid the (positive) conclusion that the lesson of the Great Depression in the early 1930s had been learned. However, there remained difficult questions about whether and to what extent the regulation of the capital markets had been sufficient. This discussion started immediately after the worst was over and is still not finished today. Its complex content goes well above the limit of this lecture.

#### **4 The European Debt Crises of 2010ff**

The world financial crisis had originated in the United States and spread all over the world. With a lag of a few months, however, it sparked a particularly dramatic crisis in the Eurozone of the European Union. Recall that, following the Treaty of Maastricht of 1992, a common European currency, the Euro, had been introduced in 1999. Today, 19 countries of the EU use the Euro, but at the time of the crisis, the three Baltic states were not yet member of the Eurozone.

In its genesis, the European debt crisis had similarities to the bursting of the subprime bubble in the US. The story goes roughly like this: After the Euro had been introduced, its use massively lowered interest rates in countries, notably Mediterranean ones, that traditionally did not have a credit rating due to their unstable macroeconomic record. In a sense, they imported credibility from Germany, the Netherlands and other traditionally stable countries – and that initiated an internal expansion of their economies that led to price and wage inflation. FIGURE IV.2 shows the increase of unit labour costs in the eight years following the launch of the Euro. The picture is impressive: all the Southern-belt countries (plus Ireland) experienced massive rises of unit labour cost – in the range of 25 to 35 percent. Note that, at the same time, Germany had virtually price and wage stability due to overcapacity and high unemployment in the wake of German unification.

Beginning in 2009, in the middle of the global financial crisis, spreads between interest rates in Germany and the potential crisis countries began to re-emerge (FIGURE IV.3). Apparently, the capital markets became more sceptical with respect to the sustainability of the boom in Ireland, Portugal, Spain and Greece – and to a lesser extent in France and Italy as well. In spring 2010, the crisis became serious enough to call the EU in for a rescue package for the worst-hit country, which at the time was Greece. Heavily indebted Greece received conditional support from the IMF and the EU – with the legal question persisting even today whether or not the EU had the legitimacy to conduct a bailout. Further rescue packages followed: for Ireland, Portugal and Spain. Note that the national causes for the crisis were quite different ones: in the case of Greece, it was a long-standing huge government and current account deficit; in the other cases, it was mostly a banking crisis that spilled over into the national budgets due

to the need for publicly financed rescue packages (besides the support from IMF and EU). In July 2012, the crisis reached a peak so that the President of the European Central Bank (ECB) Mario Draghi stepped in and announced an unlimited support from the ECB if required by market disturbances.

Note that the support advanced to the different countries was granted on the basis of tight and strict conditions of fiscal consolidation and reform. In the end, the measures were successful in the sense that all countries involved returned to a more balanced macroeconomic constellation with low budget and current account deficits (or even surpluses) and eventually moderate growth. Unemployment rose sharply everywhere, but returned to lower levels in recent times. FIGURES IV.4-6 show some relevant numbers for the period 2006–15, with Greece, Ireland, Portugal and Spain juxtaposed to the US, the UK and Germany (all three recovered fast) and the Baltic States Estonia, Latvia and Lithuania, which had a similar boom-bust crisis, but in the early years were not yet members of the Eurozone.

All in all, the crisis was very serious and brought the Eurozone close to the brink of a breakdown. Nevertheless, it also led to some important reforms. Above all, the European Finance Stabilization Facility (EFSF) was established in an ad-hoc way in 2010 – to be finally replaced by the European Stability Mechanism (ESM) in 2012. With a capital of 700 Billion Euro, the ESM is a major instrument to allow a more effective – and foreseeable – stabilization in future crises.

## **5 Record Low Real Interest Rates**

After a turbulent 15-year-period of financial boom, crisis and recovery, it is very hard to speculate whether there will be crises of this kind in the future again. As of early 2019, no crisis appears to be in sight. What is remarkable, however, is that real interest rates have gone down over a long period and may stay low for quite long – even for many years after the crisis. This has led many economists to argue, that the low interest rates have their roots not in monetary policy, but in long-term changes in capital markets. These low interest rates are increasingly viewed as a reaction to demographic changes, which lead to higher savings as the national population ages virtually everywhere in the world, and a technological change away from the massive investment in physical capital due to modern information technology.