An overview on selected financial crises.

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1. Introduction

The world financial market is again facing serious problems with important financial institutions requesting bankruptcy protection from their creditors and other institutions. Many of these financial institutions are failing to meet their obligations toward third parties, forcing them to close their operations. Since the beginning of the mortgage crises[2] (mid-2007) in the United States, the first reaction of many financial institutions has been to write-off bad assets on their balance sheets to clean up and restore the remaining assets at a fair value. The second wave of consequences of the sub-prime mortgage market crisis is now moving up in the market where big international and important (investment) banks are collapsing. In September 2007, Northern Rock Bank, the United Kingdom's (UK) fifth largest bank, failed to honor its depositor's fund because a large part of its assets was invested in long-term mortgages; i.e., the classic case of term mismatch between assets and liabilities. Short-term funding was used to finance long-term loans. The bank customers were queuing up in front of the bank's offices to withdraw their deposits from the bank causing a *bank run*. The British government had to inject 25 billion pound ($51 billion) in bridging loans to safeguard the bank and avoid a disruption in the markets.

On September 15, 2008, Lehman Brothers, the fourth largest investment bank in the United States, went bankrupt. Another financial institution, JPMorgan-Chase, was provided with a $29 billion credit line from the Federal Reserve Bank (FED) discount window to purchase Bear Stearns, while the US treasury department seized control of two government-sponsored mortgage institutions, Fannie Mae and Freddie Mac, with $200 billion.[3] On September 16, 2008, the US treasury secretary, Mr. H. Paulson, arranged to provide the largest insurance company, American International Group, Inc. (AIG), another global player in the market, with an $85 billion two-year bridging loan to prevent the institution from collapsing and to give them time to dispose of billions of dollars of "bad" assets.

The crisis is now spreading to continental Europe. On September 30, 2008, Belgium, the Netherlands, and Luxemburg announced that each country would take a minority stake of 49% in Fortis bank,[4] costing 11.2 billion euros ($16.3 billion) to rescue this bank from bankruptcy.[5] However, on October 5, the Belgian/Luxemburg part of Fortis bank was taken over by BNP Paribas of France for $20 billion after the government in the

[1] Executive director of the Central Bank of the Netherlands Antilles.
[2] Also called sub-prime market problem.
[3] "Too Big to Fail versus Moral Hazard" by Henry C.K. Liu in "Global Financial Crisis," September 24, 2008.
[4] Fortis was originally formed in 1990 from a merger of the Dutch insurance company NV Amev, Belgian insurer AG Group, and the Dutch bank VSB.
[5] "Three Countries Injected $16.3 Billion to Rescue Fortis." Bloomberg/ Amsterdam September 30, 2008.

Netherlands announced nationalization of the Fortis business in the country on Friday October 3, 2008.[6] And Dexia Bank, the second largest Belgian bank, was bailed out by the Belgium government for $9.2 billion on September 30, 2008.

On October 12, 2008, the member countries of the European Union (EU) agreed on a plan to shore up troubled banks. That plan will refinance banks, inter-bank lending, guarantee inter-bank lending, and ensure that distressed banks will not fail. It also will protect and ease some regulations to give banks more flexibility. Euro zone countries and Great Britain have put up $2.3 trillion to guarantee banks' savings and deposits and to take shares in struggling banks.[7]

Meanwhile, the Swiss government (non EU member) announced that it had agreed on a package of measures to invest 6 billion Swiss francs ($5.3 billion) in banking giant UBS to strengthen its capital base. Another major Swiss bank, Credit Suisse, announced it had raised approximately 10 billion Swiss francs ($8.8 billion) from a group of major investors led by the Qatar Investment Authority.[8]

In Asia, the first victim of the financial crisis has also fallen. The Japanese authorities announced on October 10, 2008, that an insurance company, "Yamato Life," had filed for bankruptcy.

On October 20, 2008, the Dutch government agreed to inject 20 billion euros as fresh capital into ING bank.[9] Also the AEGON, a large Dutch insurance company, got a capital injection of 3 billion euros from the Dutch government. The company said it was "prudent at this time to reinforce its capital buffer" amid sharp declines in European stock markets and the turmoil in global economies.[10]

The history of financial crises has shown us that these crises tend to move together with the business cycles. A financial crisis is closely related to economic upswing and downswing. When production activity slows down, more companies get into trouble and experience serious difficulties in servicing the repayment and interest on their loans. Particularly, if these companies have financed past investments and growth by taking up large loans, i.e., *highly-leveraged* companies, a market downturn will affect the operations of these companies immediately.

Consequently, more financial firms will start experiencing problems with bad loans and reduction of the value of their assets. This starts with a crisis in the real economy and will spread further into the money deposit institutions in the world.

In this paper, we will examine and analyze the following issues:

- What causes a financial crisis (section 2)?

[6] "BNP takes control of Fortis in Euro 14.5 bn deal." Financial Times, October 6, 2008.
[7] "EU rallies to tackle economic crisis." CNN.com, October 16, 2008.
[8] "Swiss bailout for major banks." CNN.com, October 16, 2008.
[9] "Steun aan ING moet Nederlandse economie aanjagen." NRC Handelsblad.
[10] "Aegon gets 3 bn euro cash boost from the Dutch government". Telegraph.co.uk, October 28, 2008.

- Special cases of world financial crises: The Mexican debt problems (1982) and the "Peso crisis" in Mexico that was accompanied by the Tequila Effect (1994), the Venezuelan banking crisis (1994), the dotcom crisis (1995-2001), and the financial crisis (2008) (section 3).
- Will the current world financial crisis affect the Netherlands Antillean economy? (section 4).
- Financial crisis resolutions and lessons learned from the sub-prime market crisis (section 5).
- Concluding remarks (section 6).

2. Causes of a financial crisis

A financial crisis is a situation in which a significant group of financial institutions have liabilities exceeding the market value of their assets, leading to runs on banks, portfolio shifts in banks' balance sheets, collapse of some financial firms, and government intervention.[11] A financial crisis is also defined as a variety of situations in which some financial institutions or assets suddenly lose a large part of their value.[12]

Typical to a financial crisis is that the share of nonperforming loans to total outstanding loans in banks' balance sheets grows, and/or the value of investment in banks' balances drops dramatically, both resulting in solvency and liquidity problems in troubled and weak institutions. A financial crisis also affects the relationship between the bank and its customers through higher cost of credit, higher spreads and flight to investment in quality financial products. All these reactions result in changes in economic outcome, a deflationary process and, finally, an economic crisis.

In the economic literature, interest in explanations of financial crises resurged importantly in the 1980s after the Mexican crises and, subsequently, the debt problems of Latin American countries. Today with the sub-prime crisis in the United States, these issues are again becoming of dominant importance. The current crisis in the United States will definitely spread to other economies in the world (Europe, Asia, the Caribbean, and Latin America). This situation, commonly known as contagion, has added to the significance in studies about financial fragility in the financial industry.

In principle, four main theories exist on the causes of financial crises. One theory centers on the *business cycle approach* and puts the origin of a financial crisis in the business sector, i.e., the nonfinancial sector. A second group of academic studies focuses on the *factors affecting the demand and supply of credit*. The third approach centers around the *divergence between money demand and supply (monetary approach)*. The fourth group is related to a more *specific situation when a financial crisis manifests itself*. The more specific reasons can be related to fraud at an institution, cases of money laundering, technology problems resulting in discontinuation of the normal banking operation, or a demand "hype" driven by mass speculation in a certain market. Asset prices and financial

[11] "Issues in Recent Banking Crises" page 3, by V. Sundararajan and J.T. Baliño. Banking Crises: Cases and Issues, International Monetary Fund, 1991.
[12] Definition Wikepedia free encyclopedia. www.wikepedia.org/wiki/financial_crisis.

bubbles are seen here as the main reasons for a financial crisis.[13] The following sections of this paper will examine each of these theories.

2.1 Business cycle approach to financial crises

The classic business cycle analysis was contained in economic studies by Veblen (1904) and Mitchell (1941).[14] Business cycle is a term used in economics to describe periods of increases and decreases in economic production. The Gross Domestic Product (GDP) typically will increase in an expansionary phase of a business cycle creating more employment, higher profits, and demand for higher wages. Business firms exhibit optimism about the economic outlook and start investing heavily in facilities and equipment, thereby expanding their ability to produce more goods and services in the immediate future. Consumers will also become optimistic during an upswing of the economy and will start borrowing from financial institutions using these funds to buy more durable goods, such as cars and other luxury items (vacations, second homes, etc.). Credit conditions, such as interest rates, will rise and financial institutions will become more eager to lend funds to businesses as well as consumers, since this will add to their profitability.

After reaching the peak during the expansion phase of the business cycle, economic activities start to plummet, and the opposite happens. Businesses and consumers become pessimistic and start reducing spending while financial institutions start tightening their credit conditions.

The theory of financial crises stemming from the business cycle approach was further developed and refined by Minsky (1977), Kindleberger (1985), and Taylor, O'Connell and Wolfson (1986).[15] In their theory, the financial environment responds endogenously to the state of the business cycle or, more specifically, to "opportunities for profits." The crucial hypothesis is that financial fragility, i.e., the vulnerability to economic shocks, increases over the course of the business cycle expansion. In the expansion phase, businesses and consumers are optimistic and, therefore, expect profits and wages to rise. Hence, they expect to be able to spend more. They start taking more loans to finance consumption and investment because they anticipate they will be able to service the loans easily in the future. Under these circumstances, the risk being taken by the economic agents is moderate due to the positive economic outlook and is comparable to normal speculative financing. After the economy moves further to a higher speed where it reaches a peak, more risks will be taken as firms are becoming more leveraged. They accept extremely high risks, while they expect profits and income to continue growing at

[13] "Issues in Recent Banking Crises," page 5 by V. Sundararajan and J.T. Baliño. Banking Crises: Cases and Issues, International Monetary Fund, 1991.
[14] "The Theory of Business Enterprises" by Thorstein Veblen (1904) and "Business Cycles and Their Causes" by Wesley Mitchel (1941) of University of California.
[15] Reference, page 27.

a higher pace, and they move from speculative financing to what is called "Ponzi"[16] financing. In "Ponzi" financing, fragility in the economy is extremely high, and the financial sector runs the highest risk of default. Business enterprises will assume higher risks, which most of the time are not in line with the economic circumstances. The economic agents become overly optimistic, while nonperforming loans with financial institutions accelerate, thereby negatively influencing the quality of the assets on the balance sheet. Hence, at times, firms are taking such risks that the expected profits of the firms cannot guarantee a safe repayment of loans and interest. After this stage, the economy reaches its peak and starts to slow down. Firms and consumers become pessimistic and will take only little risks. Consequently, they return to a normal hedged financing where limited risks are undertaken.

2.2 Credit market conditions approach to financial crises

A second theory of financial crises centers on credit market conditions. Credit market theories[17] stem from the movements in demand for and supply of credit. Some advocates of this theory argue that the demand for credit is interest inelastic; thus, the consumer or business enterprises are willing to pay any interest. In combination with the inelastic demand for credit, the supply of credit is elastic in certain economic situations e.g., close to the peak of the business cycle. Allocation of credit to firms and consumers is determined through the availability of funds or through so-called credit rationing. Demand for credit under these circumstances (in the peak of the business cycle) reaches such a point that the demanders of funds are willing to get a loan at any conceivable interest. If the credit supply is then rationed through the financial (banking) sector, economic growth will start contracting. Hence, credit restriction triggers a business cycle downturn.

Academic studies by authors including Stiglitz and Weis (1981) and Mankiw (1986)[18] view credit rationing and credit market collapse as phenomena that reflect market failures of various sorts. At a certain level of interest rates or a certain default level, higher interest rates will simply not equilibrate demand and supply in the market because not all market participants have the same information on which to base their decisions. The

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[16] A Ponzi scheme is a fraudulent investment operation that involves promising or paying abnormally high returns ("profits") to investors out of the money paid in by subsequent investors, rather than from net revenues generated by any real business. The scheme is named after Charles Ponzi, who became notorious for using the technique after emigrating from Italy to the United States in 1903.

[17] "Issues in Recent Banking Crises," by V. Sundararajan and J.T. Baliño. Banking crises: cases and issues, International Monetary Fund, 1991.

[18] "Credit Rationing in Markets with Imperfect Information," by J.E. Stiglitz and A.Weis. American Economic Review, volume 71, June 1981.

"The Allocation of Credit and Financial Collapse," Mankiw, G.N. (1986).
The Quarterly Journal of Economics, v.101(3): 455-470.

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higher interest rates in this particular case reflect the highest risks that borrowers are willing to take even at the possible cost of reducing marginal profits. Thus, the credit process reaches a point that profit expectations do not cover the higher cost of credit. These highly risky (speculative and Ponzi) borrowers will induce "adverse selection"[19] and "moral hazard"[20] in the banking industry. Lending indiscriminately to the demanders of funds will then worsen the assets quality in the banks' balance sheet, and bad loans will surface immediately after that. Here, default risk is positively correlated with interest rates, debt/equity ratio of borrowers (degree of leverage), and the degree of uncertainty surrounding the markets.

2.3 Monetary approach to financial crises

The money approach theory "blames" the problem of financial crises on the growth of money stock and its variability vis-à-vis the demand for money. In this approach, a crisis does not arise in the real sector. Among the fiercest promoters of this theory, often called the monetarist school, are M. Friedman and A. Schwartz (1963), and Brummer and Meltzer (1988).[21] According to this theory, financial crises should be seen as a case where the central banks' control over the money supply or reserve money is erratic. This cause, e.g., excessive monetary tightening, at times results in higher interest rates, a dramatic fall in asset prices, and banking insolvencies.

According to this approach, a financial crisis can occur at every stage of the business cycle and is not associated with the peak of the business cycle, as described in the business cycle approach (sec. 2.1) and the credit market approach (sec. 2.2). Central banks should monitor closely developments in the real economy to assess and analyze the need for money (demand for money). Policies leading to tight money conditions are the cornerstone for financial crisis in the monetarist school.

2.4 Assets (price or financial) bubbles and financial crises

When asset prices drop suddenly and consistently after a period of continuous rise, it is said that the bubbles burst or a "crash" occurs. Under these circumstances, the wealth and income of those that have been investing heavily in these types of assets are reduced. Asset price bubbles occur when the prices of assets in a particular market deviate strongly from their intrinsic value. In the stock market, one would observe that price-earning

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[19] This refers to a market process in which "bad" results occur when buyers and sellers have asymmetric information (i.e., access to different information): the "bad" products or customers are more likely to be selected. (http://en.wikipedia.org/wiki/Adverse_selection)

[20] Moral hazard arises because an individual or institution does not bear the full consequences of its actions, and, therefore, has a tendency to act less carefully than it otherwise would, leaving another party to bear some responsibility for the consequences of those actions. http://en.wikipedia.org/wiki/Moral_hazard

[21] Monetary History of the United States, by Milton Friedman and Ana Schwartz, Princeton University Press, 1963.

"Money and Credit in the Monetary Transmission Process," by Karl Brunner and Allen H. Meltzer. American Economic Review, papers and proceedings, volume 78 (May 1988).

ratios are way out of line (over 30!) and do not support the fundamentals of that particular stock. The Great Depression of 1929 in the United States and the Japanese crisis in the 1990s are classic examples of a stock market crash or the bursting of an asset bubble. Another recent example of an asset price bubble is the crisis in the market for sub-prime mortgages, which showed similar patterns of unrealistic price rises for decades in the United States followed by a sudden drop in the market after mid-2007.

The explanation of this boom-bust cycle is that the economic agent will become increasingly optimistic about a certain asset and invest heavily in that asset, convinced that this will generate excessive profit opportunities through consistent price increases.

Other economists argue that the main cause of economic bubbles is excessive monetary liquidity in the financial system because of, e.g., inappropriate lending standard by banks, low interest rates, or faults in the credit process. This in turn will trigger excessive spending and prolong the problems of financial instability.

In section 3, we will go into more detail on some examples of world financial crises and discuss how these crises can be related to one of the theories discussed in this section.

3. History of financial crises in Latin America and the world

In section 2, we outlined how economic growth/recession and financial crises are related from a theoretical perspective. Here we will accentuate and highlight a few financial crises that beset the world economy and particularly our region in the last three decades. In this section, we want to analyze briefly the debt problem as one of the causes of the financial crises that hit the world economy in the 1980s. The debt problem can mainly be related to the theories of changes in credit conditions and the boom-bust cycles described in section 2.

One of the major and best known crises of recent decades is the debt crisis in Latin America and in many other developing countries that started in 1982. The external debt crisis that emerged can be associated with four main factors: (1) the higher oil prices in 1973-74 and 1980-82, (2) the high interest rates in 1980-82, (3) the declining export prices and volumes from the highly indebted countries, and (4) the global recession in 1981 and 1982.

Focusing only on the first determining factor, the high demand in the oil industry that led to higher oil prices in the early 1970s, produced different effects on the developing countries and Latin America. The effects depended on whether the country was an oil exporter or an oil importer. Many oil exporting countries like Colombia, Mexico, Nigeria, and Venezuela took up (short-term) loans with international banks to induce new investment projects and to strengthen mainly their industrial base. Other oil exporting countries used part of the higher oil revenues to improve the wealth of the population. The people used the extra income to spend more on luxury goods. The other group of countries, the oil importing developing countries, used (short-term) loans to finance the higher oil bills, to neutralize the balance of payments effects, or to stabilize their foreign exchange position. Hence, from a balance of payments perspective, the oil importing countries financed their higher import of oil through short-term capital inflows from loans originating from international banks.

During these years, international banks were eager to entertain the request for more loans from the emerging markets. This eagerness occurred because the oil exporting countries were generating billions of dollars with oil trading, and they had to deposit the oil revenues with the international (European) banks. The market for the *petro-dollar* and the *euro-dollar* was created around 1973-1974. The banks used these funds to re-lend to oil importing countries and strengthen their investments in specific industries and finance higher consumption.

We will next discuss the Mexican debt crisis of 1982 that further extended into other countries in Latin America in the early 80s and the beginning of the 90s. In the 1980s, most of Latin America experienced falling real GDP per capita of minus 0.6% per year on average.[22] Between 1994 and 2003, crises erupted in Latin American countries including Mexico, Brazil, Ecuador, Argentina, Uruguay, Paraguay, Colombia and Venezuela.

3.1 Mexican debt crisis of 1982 and the Peso crisis of 1995.

3.1.1. The Mexican debt crisis of 1982.

Economic activities in Mexico fluctuated widely during the period from 1970 until the crisis that erupted in 1982. During the administration of President Luis Echeverria-Alvarez (1970-1976), Mexico's GDP grew at about 6% per year. In 1976, a new President took office, José Lopéz-Portillo, and the Mexican economy continued to grow at rates of over 6% per year on average. The economic growth, however, fluctuated widely in that decade with economic upswings, followed by sharp depressions in 1976 and 1982.[23]

During the economic expansion phase of the business cycle, investments in the oil industry grew, widening the fiscal gap to 16 % of GDP; consequently, the public debt rose to an unmanageable level of 81.8% of GDP in 1982.[24] This situation made the economy vulnerable to external shocks. The growing public debt was being financed through short-term private capital flows (speculative capital flows).

[22] "The Difference is in Debt: Crisis Resolution in Latin America," by Anne O. Krueger, deputy managing director IMF. Speech delivered at Latin America Conference on Sector Reform. Stanford Center for International Development.
[23] "Mexico 1982 crisis and recovery." www. Geographic.org.
[24] Source: Central Bank of Mexico Annual Report 2007. Net non-financial public sector debt to GDP. Non-financial sector includes Federal government and non-financial public sector institutions.

As a consequence, Mexico was on the verge of defaulting on its foreign obligations[25] in August 1982. Mexico had accumulated a public debt during the period 1970-1982 (prosperous years) based on the good prospect of higher oil revenues. As a result, public debt to GDP exploded, leaving the country in one of its toughest crises.

The new president, Miguel de la Madrid, who took office in 1982, presented a plan with three important goals: (1) reduce public spending drastically; (2) stimulate export; and (3) stimulate economic growth.

During the period 1983-1988, the economic recovery in Mexico remained weak with GDP growing at a pace of 0.1% on average. The market at that time was not convinced that the government could achieve all three goals set by President de la Madrid.

International banks were more than willing to make loans for the Mexican economic programs in the 1980s based on projected higher government revenue and with the assurance and conviction that Mexico would be able to service its debt. Again the over-optimism in one country's ability to service its international financial commitments, together with the high risk that international banks took in concentration of investments in one single group of assets was in retrospect the major cause of the first crisis in Mexico. After 1982, the debt crisis that started in Mexico continued to spread to other major countries in Latin America (Brazil, Colombia and Argentina) all attributable to the same mistakes of over-concentration of investments in one type of assets.

3.1.2. Peso crisis and tequila effect in Mexico in 1994 -1995.

Triggered by a sudden devaluation of the peso, Mexico suffered its "peso crisis" in 1994-1995. The crisis had spillover effects to many South American and Asian economies. These spillover effects are known as the "Tequila-Effect" ("Efecto-Tequila"). The developments that led to the peso crisis, the main characteristics of this crisis, and the actions taken to rescue Mexico from the crisis are described below.

At the end of 1993, the outlook for the Mexican economy for 1994 appeared bright. After a major debt crisis in 1982, Mexico went through a process of macroeconomic stabilization and structural transformation from 1988 to 1993. These reforms were aimed at attaining external viability and laying the foundations for private-sector-driven growth, which included: (1) opening the economy to international competition; (2) privatization and deregulation; (3) introduction of the exchange rate as nominal anchor; (4) restrictive fiscal and monetary policies; and (5) restructuring the external debt.

The reform program resulted in a decline in the fiscal deficit. In addition, inflation was reduced from 160 percent in 1987 to 8 percent in 1993. Favorable expectations, abundant liquidity, low world interest rates, and an exchange-rate band led to large capital inflows that allowed a fast increase in credit extension. This increase in credit extension resulted

[25] "Mexico in Crisis, the US to the Rescue. Financial Assistance Packages of 1982 and 1995." Brookings Institutions. Development Global Economics by Nora Claudia Lustig, January 1997.

in higher consumption and investment, particularly in the non-tradable goods sector. Hence, economic growth recovered from an average rate of not much higher than zero from 1985 –1988 to 3 percent in the period from 1989 –1993.

At the same time, however, Mexico's economy still featured some fundamental weaknesses:

- Its balance of payments had a very large current account deficit, largely the result of a real appreciation of the peso. The deficit was financed mainly by short-term capital.
- Interest rates were inflexible as the government imposed caps on them in the primary auctions.
- Mexico's system of financial regulation and supervision was weak. As a consequence, the banking sector was fragile and not prepared to intermediate large capital inflows to the country.
- The country's fiscal position was deteriorating due mainly to a large expansion of credit from the development banks.

Furthermore, in the period of rapid credit extension, Mexico's banking sector accumulated some additional weaknesses:

- The banks' staffs were ill-prepared to assess credit or market risks.
- Low-risk firms had access to cheaper dollar financing from foreign banks, while domestic banks ended up with the riskier loan portfolio.

As a consequence, banks were taking excessive risks. This resulted in loan losses leading to a worsening of the banks' balance sheets.

Some domestic and external shocks led to Mexico's financial crisis in 1994. The political situation in the country was extremely unstable and uncertain during that year. It was an election year, and Mexico was plagued by disturbances and violence. One of the presidential candidates - Colosio - was assassinated, and there was an uprising in the Chiapas region. These political developments increased general uncertainty in Mexican financial markets and a stock market decline.

At the same time, world interest rates increased. As a consequence, international investors reassessed the share of their portfolios invested in emerging markets, including Mexico. These developments put the Mexican peso under pressure. The Mexican central bank responded by allowing the peso to depreciate within its band. This intervention resulted in a substantial loss of international reserves.

With the growing uncertainty in the foreign exchange market, the government found it harder to finance its debt with peso-denominated bonds and, therefore, significantly increased its dollar-indexed securities - the so-called "Tesobonos."

As a result of these developments, the current account deficit in Mexico widened from 6.5 percent of GDP in 1993 to 8 percent of GDP in 1994. The Mexican central bank intervened by raising interest rates sharply, but could not prevent a sharp decline of international reserves. As a consequence, the Mexican peso had to be devaluated on December 20, 1994.

The devaluation resulted in high inflationary pressures. Interest rates on the debt - denominated peso rose to over 100 percent on an annual basis. The Mexican stock market crashed. Furthermore, as many firms had debt denominated in dollars, the peso depreciation resulted in a sharp increase in their indebtedness in pesos, whereas the value of their assets remained unchanged. In addition, foreign lenders pulled their funds out of Mexico.

As a result, real GDP growth decreased from 4 percent in the second half of 1994 to minus 10 percent over the same period of 1995. The economic recession, combined with high inflation, greater volatility, and illiquidity of domestic financial markets further weakened the banking sector.

The banks suffered considerable loan losses, as firms and households were not able to pay off their debts. Moreover, due to the depreciation of the peso, the value of foreign currency-denominated liabilities of the Mexican banks rose sharply. Worth mentioning is that a substantial share of these foreign currency-denominated liabilities was short-term. As a consequence, Mexican banks were faced with a liquidity problem.

The crisis in Mexico began to have spillover effects to other economies. In the weeks following the eruption of the crisis, equity and currency markets came under pressure, most noticeably in Latin America, but also in a number of more distant emerging market economies, including Asia. The spillover effects were known as the "tequila effect."

The Mexican government implemented a set of measures to prevent the total collapse of the banking sector and to rescue Mexico from the crisis. The two main measures were:

1. Refinancing of short-term dollar-denominated debt.
   The government negotiated a large-scale international financial rescue package worth $51 billion with the US government and international financial institutions, including the IMF and the World Bank.

2. Restoration of macroeconomic stability.
   The reversal of capital flows implied a rapid correction of the current account deficit. Therefore, the exchange rate was immediately allowed to float.[26] This floating of the exchange rate was accompanied by fiscal, monetary, and wage policies focused on reducing the inflationary pressures.

Fiscal policy was oriented towards increasing public savings by, among other things, raising the value-added tax and cutting expenditures on the consolidated public sector.
The central bank implemented a restrictive monetary policy that induced a considerable rise in nominal and real interest rates. The interest rates were left to be determined by market forces, and strict reserve requirements were imposed. Furthermore, the central

[26] Before the crisis, Mexico had a crawling peg regime.

bank set a limit to the expansion of net domestic credit. Salary negotiations were liberalized.

Furthermore, the authorities implemented a reform program aimed at safeguarding the integrity of the financial system. The program included:

1. The introduction of a dollar liquidity facility to stop and eventually reverse the run on the external liabilities of commercial banks.
2. Undercapitalized banks were required to issue subordinated debt, convertible into equity, which was purchased by the government. Furthermore, to encourage banks' capitalization, restrictions on foreign investment in the domestic financial system were eliminated. Moreover, because the loan portfolio of banks was deteriorating significantly, the government provided an incentive to banks to remain sound by offering to acquire a fraction of their loan portfolios.

3.2 The Venezuelan banking crisis of 1994 [27]

On January 13, 1994, the central bank of Venezuela removed Banco Latino CA from the clearing system because the bank had an insufficient balance in its account with the central bank. In anticipation of the outcome of the presidential election, depositors had withdrawn substantial amounts of liquidity from the Venezuelan banking system. In this process, almost all banks were going through a major liquidity crisis. In addition, rumors were circulating about the financial instability of Banco Latino CA and the involvement of its management in irregularities. The Venezuelan banking crisis can be related mainly to the theory of asset prices and financial bubbles because the main trigger for the crisis was mismanagement and irregularities within the banking sector.

As Venezuela's second largest financial institution, Banco Latino CA, enjoyed an excellent relationship with the government at that time. This situation provided political and financial support as well as protection from competitors. FOGADE, the state deposit insurance agency, held one third of its funds in Banco Latino's vaults. Many Banco Latino depositors were unaware of the impending collapse. Others believed that the government, which had a solid record of 'bailouts,' would never allow such a large bank that was politically connected to fail. However, the new government that came into power in 1994 was slow to react.

The collapse of Banco Latino CA, whose account-holders made up more than 10 percent of Venezuela's adult population, would prove devastating. The loss of confidence immediately spread through the entire banking industry, sparking a contagion of runs on banks across the country. Hordes of citizens and businesses withdrew their bolivars from banks, converted them into dollars, and took them abroad. A long list of bankers fled the

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[27] "The need for corporate governance in averting banking crisis: Lessons from the Banco Latino crisis." Speech delivered by Drs. Alberto G. Romero; Executive Director Bank van de Nederlandse Antillen at the KPMG banking seminar in the Dominican Republic, October 2, 2003.

country fearing prosecution for fraud. The Venezuelan central bank estimates that capital flight drained more than $3.5 billion from its initial $12.7 billion foreign exchange reserves in the first half of 1994.

By the time the crisis abated, the government had taken over or bailed out more than half of all banks in Venezuela. The government appointed new members to the bank boards, who used funds from FOGADE to recapitalize the banks. When these funds ran out, the government seized and shut down numerous banks and issued arrest warrants for bank directors on charges of fraud. The $1.1 billion bailout plan would in the end amount to 13% of Venezuela's GDP and 74% of its total budget in 1994.

Eventually, by mid-1995, the disaster had run its course. In 1996, the government began selling off the banks it had taken over to raise funds. This sale led to a slew of privatizations. Within two years, 40% of the failed financial institutions had been purchased by foreign banks. Some observers credit the "internationalization" of the Venezuelan banking sector as the right course that resulted in cleaner books and improved corporate governance.

The central bank of the Netherlands Antilles was involved in the Banco Latino case mainly because the group also had an international bank operating under the name of Banco Latino NV in our jurisdiction.

Banco Latino NV, an affiliate of Banco Latino CA, had a substantial claim on Banco Latino CA of close to $170 million. Shortly before the removal of Banco Latino CA from the clearing system by the Venezuelan central bank, the amount of lending from Banco Latino NV to Banco Latino CA increased significantly. During the liquidity crisis, funds were being channeled to Banco Latino CA from Banco Latino NV to provide liquidity to pay its depositors during the run on the bank in Venezuela.

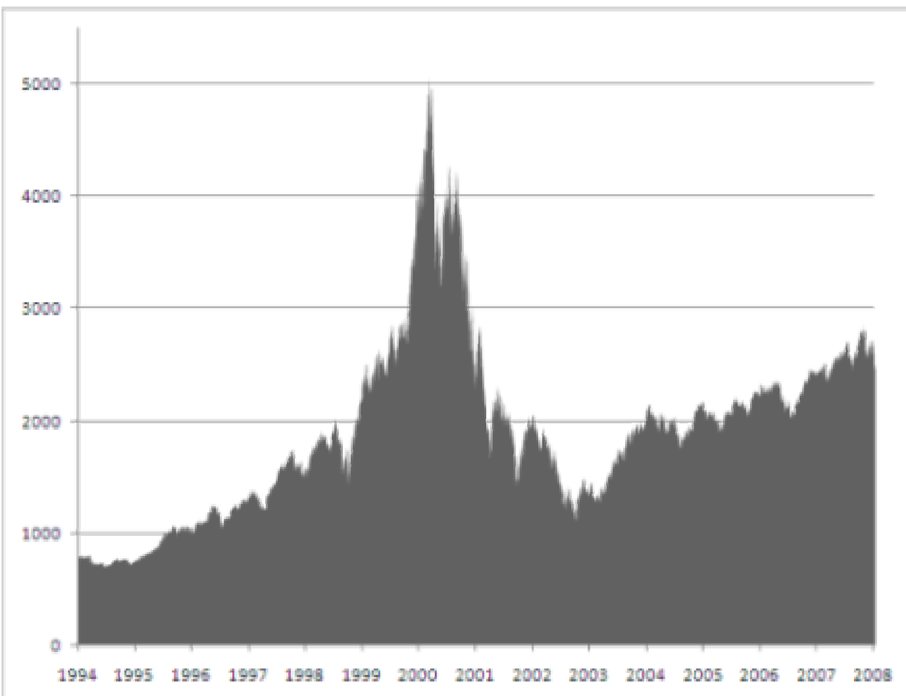
As a consequence, Banco Latino NV got into trouble because of its affiliation with Banco Latino CA in Venezuela. This is a typical case of 'contagion' that resulted from excessive inter-company receivables, insider transactions, and other unsound banking practices.

3.3 The dotcom crisis of 1995-2001

The IT or internet bubble that occurred between 1995 and 2001 is often referred to as the dotcom crisis. Numerous IT and internet-related companies saw their stock value increase sharply in a short period of time and then tumble back in just a few days. In the period 1995-2001, many speculators were drawn to the stock market and started investing heavily in stocks of IT and internet companies believing they could make quick money and build a fortune. The development of the crisis can best be observed by the movements in the NASDAQ (National Association of Security Dealers Automated Quotations) index.

The NASDAQ is that part of the American stock exchange where the largest screen-based electronic listings of stocks are handled. During 1995, the index of NASDAQ was trading just around 900 points and grew dramatically to reach a peak of over 5000 points in 2001 (see Figure 1). This period is also known as the speculative bubble that was driven by investment through venture capital funds in the stock market. Many entrepreneurs in the internet and IT technology driven businesses were attracted to venture capital funds to finance new projects. During the early years of the crisis, the US interest rates were relatively low[28] and, therefore, many investors with available funds were eager to entertain and finance venture capital projects in the dotcom sector because they were promising high yields with sharp increases in value in the stock market. In an environment of low interest rates, alternative investments in stocks that in time provided record enormous capital gains became very attractive. Between 1999 and 2000, the Federal Reserve Bank (FED) raised the interest rates six consecutive times, from 5% to 6.5 %, in only 12 months. This reversal of the interest rates can be seen as an important factor that contributed to the bursting of the dotcom bubble.

Figure 1. NASDAQ composite index quotations 1994-2008[29]



Source: www. NASDAQ.com.

[28] Federal Funds rate was 6% in February 1995, dropped to 4.75% in November 1998, and rose to 5.75% in February 2000.

[29] The technology-heavy NASDAQ Composite index peaked at 5,048 in March 2000, reflecting the high point of the dotcom bubble.

The dotcom crisis has many similarities with the current real estate crisis in the United States. During the dotcom crisis, many students/business starters were eager to set up dotcom companies in the hope of tapping into the millions of dollars being raised by venture capitalists in a very short time. Several factors contributed to the burst of the bubble in 2000. The turnover of the newly formed businesses in the sector grew dramatically, and the managers could not cope with this development due to lack of sound business practices. Financial control and financial planning were lacking, inappropriately high salaries were being paid, and inadequate control measures were in place to cope with the growth of the product. In addition to these factors, the financial risks involved in many of the products developed were not well understood by the promoters. These factors are similar to those that have contributed to the burst of the real estate bubble in mid-2007. Simple lack of control and in-depth risk assessment resulted in over concentration by financial institutions in the sub-prime market products.

3.4 The US financial crisis

The US banking crisis is spreading throughout the entire global financial system and may cause serious systemic risks in other areas of the economy. The impact and the intensity of the crisis are now being assessed. From past experiences with financial crises, we have learned that the crisis may go through three stages: (1) *financial contagion* spreads through the financial sector; (2) contagion leaks into the nonfinancial sector or the *real economy* causing *sectoral effects*; and (3) the crisis spreads to become a *global problem* with contagion spreading over major parts of the world economy.

Financial contagion occurs because, e.g., counterparties of the financial institutions that are in trouble will be dragged unwillingly into the crisis. In the current crisis of the sub-prime mortgage problems, we have seen that the crisis is dispersing through other institutions. Merill-Lynch reported losses in October 2007, followed by Citigroup reporting losses, and the collapse of Bear Stearns in March 2008.

Another sign of the problem with financial contagion is that the risk perception by economic agents in the market increases. Because of the significant uncertainty about how the risks are spread throughout the financial sector, no institutions in the market are willing to lend funds to each other. The current *credit crunch* is a case in point. The following quote from Bloomberg news serves to show the higher risk profile that is surging in the market.

"*Money-market rates climbed worldwide as banks hoarded cash on speculation the seizure in credit markets is deepening and may prompt more financial institutions to collapse. The London interbank offered rate, or Libor, that banks charge each other for overnight dollar loans raised 37 basis points to 2.37 percent today, the British Bankers' Association said. The three-month rate stayed near the highest level since January. Asian* *rates increased and the Libor-OIS (overnight indexed swap) spread, a gauge of cash scarcity among banks, held near a record."*[30]

Under these circumstances, the cost of capital rises to unprecedented numbers, making the price of taking risk in the capital market prohibitively high and negatively affecting the values of all classes of assets in a bank balance sheet.

In the second stage of the financial crisis, the uncertainty will start influencing the performance of other sectors of the economy (i.e., *sectoral effect of contagion*). Hence, the liquidity shortages will grow, forcing central banks and even treasuries to intervene in the market to thwart a liquidity crisis. This is a clear case of moral hazard as described in section 2.2 of the article. The following three quotes clearly show the actions being undertaken by central banks around the globe and US treasury.

- *"Several central banks around the world have launched a coordinated campaign to inject $180 billion worth of cash into the global money markets. The Federal Reserve is expanding its currency swaps with the European Central Bank, Bank of England, Bank of Japan and Swiss National Bank in an effort to address elevated pressures in US dollar short-term funding market."* [31]
- *"US Treasury approved the $700 billion bailout. They still have to work out the program's fine details. For instance, it needs to hire a team of consultants and managers to help figure out how to dole out the $700 billion that will be used to buy toxic assets from companies that can't sell them."* [32]
- *"The Federal Reserve announced Monday that it will increase by hundreds of billions of dollars the money it makes available to the nation's banks. The central bank said that its so-called term auction facility, which accepts financial instruments such as mortgage-backed securities as collateral, will be doubled immediately to $300 billion. The amounts available to banks will rise to $600 billion under the moves announced Monday. In addition, the FED signaled it could increase the amount available through those loans to $900 billion."* [33]

When the financial contagion becomes a sectoral contagion in the final stage, the contagion becomes a *global contagion (problem).* This is what we have been seeing in recent weeks, as the crisis has resulted in nationalization and the take over of banks in the United States, Netherlands, Belgium, Luxemburg, Iceland, Great Britain, and Germany. Subsequently, stock markets around the world are dropping dramatically because everybody wants to sell their shares not knowing exactly what the future share prices will be. This situation of lack of confidence is of pandemic proportions now.

In the introduction of this paper, we outlined various actions being undertaken to safeguard Fortis bank from collapsing by the Belgian-Netherlands-Luxemburg governments. Also, in Germany, the government, the country's banks, and insurers

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[30] Money Market News Bloomberg, October 6, 2008.
[31] "Fed's liquidity pump can't inflate stocks." Forbes.com, September 18, 2008.
[32] "Bailout bill passes; now for the hard part." Forbes.com, October 3, 2008.
[33] "Fed pumps billions more into banks." CNN Money.com, October 6, 2008.

agreed on a 50 billion euros ($68 billion) rescue for Hypo Real Estate after an earlier bailout faltered. In Iceland, the Prime Minister Geir Haarde announced that the government had nationalized all banks in the country, and at the same time the Iceland Kroon was pegged to the euro.[34]

In this section, we have analyzed how the financial crisis passed first from affecting the real sector, then spreading over to the financial industry, and finally becoming a real global economic problem. In the October 2008 issue of the World Economic Outlook,[35] the IMF chief economist, Dr. Oliver Blanchard, indicated that the current imbalances in the financial sector could have significant negative effects on world economic growth for 2009. In the July issue of the World Economic Outlook, the IMF predicted the world economy would grow at a pace of 3.9%, but the new projections for October were adjusted downward by 0.9% point. The present financial crisis is having a longer lasting negative impact on various regions, including the United States, Europe, Latin America, Asia, and Africa. For example, the projected GDP growth rate of the United States for 2008 and 2009 are now set at 1.6% and 0.1%, respectively. In the Euro area, the picture seems more or less the same with GPD growth rates of 1.3% for 2008 and 0.2% for 2009.

In a meeting of October 27, 2008 the Economic Commission for Latin America and the Caribbean (ECLAC) reduced the GDP forecast for the region for 2009 by 1% point to 3%.

An important question now is how the crisis will affect the Netherlands Antillean economy. In the next section, we will make clear the possible effects of the crisis for our country.

4. The US financial crisis and the effects on the Netherlands Antilles economy

The financial crisis is now spreading to the world, and the important question is: How will the current global imbalance affect the economy of the Netherlands Antilles? Past episodes of financial crises were not necessarily followed by a crisis in the global economy, but the current situation is seemingly different for a number of reasons.

First, the contagion effect of the financial crisis that started in the United States now has spread to Europe making the crisis important on both continents. Also, the first victim in Japan has fallen recently. Second, the crisis has also affected financial institutions in other parts of the world because of the links and the high degree of integration in the global money and capital markets. During the last three decades, we have seen that financial markets have integrated further, resulting in money and capital flowing faster and much easier from one institution to another, and from one continent to another.

[34] "IJsland koppelt kroon aan Euro." FEM Business, October 7, 2008.
[35] "IMF Predicts Major Global Slowdown amid Financial Crisis." World Economic Outlook, October 8, 2008, IMF.

In 2007, the GDP of the Netherlands Antilles expanded by 3.7%, one of the highest growths recorded in almost a decade. In its recent Article IV consultation[36] the IMF projected for the year 2008, a GDP growth of 3%, higher than the norm of the last decade. This promising economic performance on all islands of the Netherlands Antilles was due mainly to a positive outlook on investments in tourism-related projects and the completion of new hotels. Contrary to investments, the IMF is expecting consumption in 2008 to be affected by the higher inflation, suppressing growth in private consumption. The budget deficits are projected to decline in the coming years because of the higher revenues from taxes and larger dividend payments. In the medium term, the IMF is projecting an economic growth of 2.5% for the Netherlands Antilles over the period 2009 -2011.

These projections were made in July 2008, just before the worsening of the crisis of the international financial sector. Recently, the Bank has discussed in the parliament the updated GDP forecasts for the Netherlands Antilles and the risks associated with the current financial crisis.[37]

With this report and the discussion in the parliament, the Bank has given the first results of an investigation into the impact of the financial crisis on our financial sector and on the overall economy of the Netherlands Antilles.

The direct effect of the financial crisis for institutions under the supervision of the Bank seems to be limited, because the financial and nonfinancial sectors have not invested in the collateralized debt obligations (CDO) or in mortgage-backed securities (MBS) in the past. The current sharp drop in the stock market index will result in a temporary setback in the investment results of institutional investors with relatively high exposure in stock market investments as opposed to fixed income investments. Overall, the second set of analyses on the foreign exposure of the financial industry in the Netherlands Antilles reconfirmed that the financial industry investments are more focused on the local economies, which has some promising opportunities.

The financial crisis will affect the island economies indirectly, dampening the growth perspective for 2008 (2%) and 2009 (1.5%). However, the projected outcome for both years is still positive. In particular, the effects on the tourism industry will be short-term because our island economies are dependent on the consumer spending of the United States and Europe (i.e., the Netherlands). We foresee that the sector mostly affected will be tourism, followed by the transportation sector and the international financial services sector. In recent years, the consumer spending of the United States and Europe (our main trading partners) was fueled mainly by so-called “equity loans.” These “equity loans” were given by the banking sector based upon a relatively low “loan to value ratio” (LTV) in the mortgages, due to steady growth in real estate values until 2006. Since the break out of the sub-prime market, the LTV has increased steadily, reducing the possibilities for further excessive loan extension by the banking sector. “Equity loans” in particular will

[36] “Kingdom of the Netherlands- Netherlands Antilles: 2008 Article IV consultation Staff report,” August 2008, IMF.

[37] “Crisis financiële markten” Letter of October 1, 2008, to the Minister of Finance (NM/ab/2008-13.626).

suffer from this situation. In addition, the banking industry in the United States and Europe have tightened the credit conditions drastically, making it more difficult for consumers and companies to obtain loans quickly and easily. All these factors will have an impact on the tourism/transportation sector of our economy. With the stock market crisis, the international financial services sector that actively administers and provides wealth management for international clients will also experience a drop in its revenues.

To further assess the impact and intensity of the crisis in the local financial market, the Bank has instituted a crisis monitoring committee that follows the market continuously in order to report every possible perceived risk that might influence the solvency and liquidity in the financial sector of the Netherlands Antilles.

5. Financial crisis resolution and lessons learned from the sub-prime market

We can learn lessons from each of the financial crises in the past decades despite the negative effects they have had on consumers, businesses, investors, financial institutions, governments, and supra-national organizations. The positive side of the crises is that they have sharpened the authorities' risk control and risk management schemes to deal with specific circumstances. One of the important lessons is that in the more sophisticated and integrated markets of today, the authorities should at all times provide the liquidity needed to calm markets and remind economic agents that panic will only worsen the crisis. In addition, all efforts should be geared toward supervisory and government authorities working together to mitigate the cross-border effects. In the end, even the bailing out of institutions will have to be considered, despite the moral hazard problems caused.

The sub-prime market crisis specifically has taught us that adequate risk management and risk control schedules, meant to reduce risks in the future, are important at all levels in the financial institutions. The current risk control mechanisms have failed, and they will have to be intensified to avoid future problems. Bank's management should principally focus and stick to core banking principles. Adherence to basic banking principles will avoid serious troubles in the future. This is the first lesson we have learned from crises of the past and that of today. Here we name a few of these guiding principles for the financial sector:

- Avoid or limit concentration of investments in one or a group of products (lesson from the debt crisis of the 80s).
- Perform deep and thorough analysis of each investment project before entertaining these projects.
- Be sure that senior management has a good understanding of all the investment products in a bank's balance sheet (lesson in structured financial products; MBS, CDO, Credit Default SWAP, SWAP option, interest options, etc.).
- Avoid or limit the extreme mismatch between short-term funding of the banking operation and long-term asset allocation (North Rock bank in 2007).

- Adhere at all times to sound practices of governance in the management and boards (Banco Latino CA case and before that, Bank of Credit and Commerce International BCCI).
- Promote transparency in reporting and perform adequate risk management practices across the financial industry (Banking crises in Brazil and Argentina).
- Guarantee continuous meetings with supervisors and cross-border supervisory authorities to extensively discuss developments in the industry.

In April 2008, [38] six months prior to the full blown crisis, the IMF published some of the factors that may have contributed to the current financial turmoil as a consequence of the sub-prime market problems. In this IMF study, weaknesses surfaced in five areas of management control.

- Risk management practices of many financial institutions were deficient. *"Risk management failures in large and sophisticated financial institutions were a major cause of the current crisis and reflected shortcomings in both judgment and governance that were compounded by weaknesses in accounting and regulatory standards. There were failures in even the largest and most sophisticated financial institutions in managing risks, especially those related to investment in complex structured products such as ABS , CDO, that were largely built on sub-prime collateral."* [39]
- The role of credit rating agencies is critical because the currently used methodologies failed to capture the risks embodied in structured products. In addition, investors relied too heavily on rating agencies and sometimes based their judgment on structured financial products solely on these ratings. Rating agencies need to adapt their methodology to capture better the greater risks involved in structured products. National and international boards of regulators need to evaluate the methodologies used by the rating bureaus and also promote more transparency and disclosure of these methodologies. This will mitigate the risk associated with investment decisions.
- Weaknesses in the application of accounting standards. The weaknesses in the application of accounting standards and the valuation techniques associated with the financial reporting of structured products also contributed to the current crisis. Structured products are often classified in the categories that are subject to fair value accounting. In the upturn of the market for sub-prime, the valuation of the structured products boosted valuation of banks' profits and equity. When markets started to collapse, the valuation of the structured products evaporated and with that, the banks' profits and equity. Valuation of bank assets of particularly the structured products is thus pro-cyclical; rising within economic upturn and dropping again when the economy slows down. And this has to be captured better in financial reporting to the public.
- Central bank liquidity framework. The immediate actions undertaken by many central banks around the world were critical in avoiding possible severe

[38] "The recent financial turmoil- initial assessment, policy lessons, and implications for fund surveillance," April 2008, IMF.
[39] "The recent financial turmoil- initial assessment, policy lessons, and implications for fund surveillance," April 2008, IMF.

disruption in the inter-bank market. The crisis also exposed shortcoming in cross-border differences in liquidity management and supervisory rules. Many central banks have widened the range of acceptable collateral and also improved the cross- border cooperation.

- Supervisors did not adequately account for the risks associated with new financial instruments. The introduction of Basel II, where a more risk-weighted approach is being implemented for various asset categories, will surely reduce the financial risks in the near future, particularly, in markets where the trading for financial products becomes illiquid and where off balance sheet products are not well disclosed. A combination of these factors during crisis situations poses a risk for the financial institution when carrying these types of investment products on their balance sheets.

In addition to these areas of weaknesses, the term risk gained more deepness because the risk appetite of market participants has grown. Consequently, the risk tolerance of (certain) groups of institution was neglected thereby lowering risk premiums instead of raising the markup for taking risks. Furthermore, due to higher market liquidity in the last decades interest rates have gone down. The relaxation of various rules and regulations governing credit markets has forced also market participants to actively seek riskier investments with the only goal of boosting up profits and increase shareholders value of financial institutions. Higher profits and growing shareholders value meant also higher income and bonuses for the top-management in financial institutions resulting in adverse risk selection and in the end manifestation of moral hazard problems of today.

A second lesson that we have learned when we observe what is happening today is that during a crisis situation, closer cooperation between regional supervisors will induce an early warning system and reduce the risks associated with the banking industry and with the contagion of the crisis to other jurisdictions.

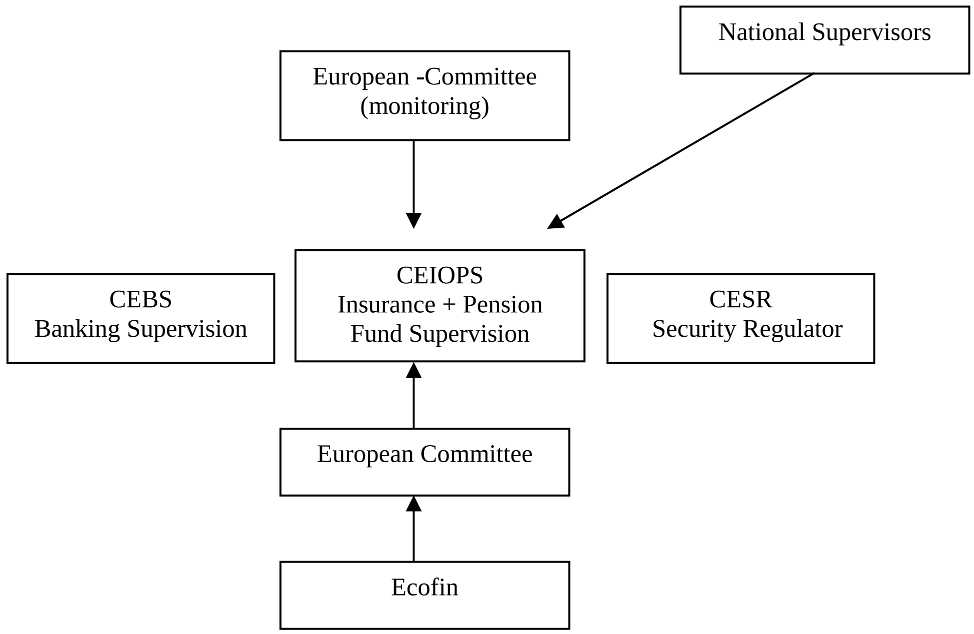
One of the solutions being sought in the medium term in, e.g., the European Union (EU), is the need for closer cooperation among the supervisors on the European continent. The supervision of financial institutions is currently done mainly through national supervisory bodies. To promote a standardized and more internationally acceptable cross-border supervisory regime, more countries in the EU are calling for the creation of a new supervisory structure. One the models being discussed is the so-called Lamfalussy-structure.[40]

In this model of cooperation (see Figure 2), the supervisory structure would be split into three major areas. The European Committee on Banking Supervisors (CEBS), the European Committee on Insurance and Occupational Pension Fund Supervisors (CEIOPS), and the European Committee on Security Regulators (CESR) are all supra-national bodies intended mainly to promote closer cooperation among the EU member national supervisors of the entire financial industry. National supervisors will work together in the various areas to set up, monitor, and cooperate within EU on all supervisory matters not only limited to the legal supervisory framework. It also includes

[40] "Lamfalussy Structuur." De Nederlandsche Bank Eurosysteem. Www.dnb.nl/openboek/extern/toezicht.

regulatory guidelines to mitigate differences in and consequences of various and different supervisory regimes in the EU (limit supervision arbitrage).

Figure 2. Future supervisory model of the European Union (EU)



A third lesson from previous crises is that monetary authorities around the world have played an important role in providing continuous liquidity to the markets whenever needed to calm down the market and assure the savers and depositors that their funds deposited with the banking industry are safe. That is and will have to be the focus of central banks when crisis knocks on their doors. In this regard, the following actions illustrate reactions to the current financial crisis.

The first and immediate action that, e.g., the FED and US Treasury did when the financial crisis started in the United States, was to provide the financial market, and specifically banks, with a plan to bail out failing institutions, opening up of the discount windows, lowering official rates, and providing other lending facilities so market participants were able to discount and/or sell ("bad") assets to the FED/Treasury.

Meanwhile, many governments in Europe raised the overall minimum deposit and savings guarantee to 50,000 euros. This minimum, previously 20,000 euros, was set across the EU on deposits, savings, and current accounts of the public with the banking industry. In the Netherlands and Germany, the guaranteed amount was raised to 100,000 euros. In Great Britain, the government announced they were making available $84 billion to rescue the British banks.[41]

On October 8, 2008, the FED, the European Central Bank (ECB), and the British Central Bank announced a cut in the official interest rates by 0.5% point to ease the money market and reassure the banking customers that the authorities are making a concerted effort to calm the market and stimulate the economy.

Finally central banks and supervisors around the world should be cautious and focus on the risk appetite of bankers and other financial institutions particularly when they aggressively seek expansion outside their jurisdiction. Financial institutions that spread their activities beyond their borders at times means taking extremely high risks because they might enter markets not well known to them. The case of the country Iceland in the current crisis is a good example in this regard. For decades all three major (international) banks operating from Iceland expanded their savings and deposits capturing activities to continental Europe while they continued to comply with all the rules on capitalization, liquidity and market risk from the Basel 2 accord. However, when these financial institutions were confronted with serious financial difficulties in the world market they had to be intervened and nationalized by the government of Iceland, with the aim of guaranteeing a smooth control over the savings and deposits of their customers. The reality is that the three major institutions exposure and obligations are a number of times of Iceland’s GDP resulting in a gigantic problem for the entire financial system and the country’s economy.

6. Concluding remarks

In this paper, we have analyzed the short-term impact of the current financial crisis on the world economy and on the Netherlands Antilles. In the first part of the paper (paragraph 2), we discussed various academic studies done on the causes and consequences of financial crises. One group of researchers has focused on the real sector as the major cause of crisis. According to these researchers, the business cycle or credit market conditions are specified as the determinant factors for the instability in the market economy. That is, a crisis runs from the real economy to the monetary sector. Another group of researchers has focused more on the disequilibrium between supply and demand for money as the main cause of financial crises. Here the monetary conditions set by the monetary authorities are principally linked to the financial crisis. Under this theory, it is important that monetary authorities have a good understanding of the factors determining the demand for money in order to supply the market with the necessary money to avoid a crisis. Other theories of financial crises focus on specific conditions or events, such as fraud, technology failures, operational problems and natural disasters, and public hype in certain markets that trigger a crisis.

In section 3, we outlined several financial crises that affected the economies of certain regions or the world economy during the last 30 years. We discussed the debt crisis of Mexico in 1982 that gradually spread to the rest of Latin America. Here the crux of the

[41] “Bruised Wall Street seeks market gains.” CNN.com, October 9, 2008.

problem was that excessive public debt resulted in a situation whereby some sovereigns in Latin America could not comply with their obligations to service interest and principal on loans. International banks were also eager to entertain these public loans and were forced in the end to restructure the loans to avoid an international banking crisis because the debtor failed to comply with its obligations.

Triggered by a sudden devaluation of the peso, Mexico suffered its “peso crisis” in 1994-1995. The crisis had spillover effects to many economies including those in South American and Asia. These spillover effects are known as the tequila effect (“Efecto-Tequila”).

A second situation of crisis in our region was the Venezuelan banking crisis in 1994. This crisis not only had an impact on the country itself, but also had ramifications for the Netherlands Antilles. Banco Latino SA was pushed out of the daily cash clearance by the central bank of Venezuela because the institution had insufficient funds to cover its day-clearing obligations in Venezuela. This crisis had an effect on the Netherlands Antilles since the international bank, Banco Latino NV, was a subsidiary operating in our jurisdiction. In the weeks before the crisis started, the parent bank in Venezuela withdrew substantial funds from their daughter operations in the Netherlands Antilles. These funds subsequently were transferred to Venezuela, making the problem a cross-border supervisory issue.

The last practical example of a financial crisis situation described in this article is the dotcom crisis of 1995-2001. During this hype, investors from high and low-income groups alike started investing heavily in this type of product directly or through the funding of venture capital schemes. These investors expected to generate capital gains quickly in the stock market through spectacular price increases in stocks of IT and internet-related businesses. After 2001, the stocks of these companies tumbled dramatically, leaving many investors with losses as the result of the bursting of the dotcom bubble.

In section 4, we outlined the possible consequences of the financial crisis for the world economy and, more specifically, for the Antillean economy. In the world economy, we noted that the sub-prime market crisis has spread, first, to the US financial institutions that invested heavily in mortgage-backed securities. Many institutions started having problems by mid-2007 as they reported increasing losses after writing off billions of dollars of assets in structured products. After this wave of re-balancing and re-assessing the new fair values on the institutional balance sheets, many banks remained with weakened capital positions. Some institutions in the end were forced to discontinue their operations, others were taken over by stronger institutions, while other groups were simply nationalized by their countries’ governments.

Because of the highly integrated financial markets, the problem that started in the United States has spread to other financial institutions in Europe and Asia with the consequence of a complete panic of the economic agents. Stock markets have plummeted all over the world, and the chaos seems to be taking pandemic proportions.

The IMF, in its recent World Economic Outlook, is projecting a slowdown of the world GDP to 3% in 2009. In the United States and the Euro area, the projections for the economy in 2009 are 0.1% and 0.2%, respectively. This is a standstill of the economic growth perspective.

For the Netherlands Antilles, the Bank is projecting a slowdown of the GDP by at least 1% point because of the current crisis. The industries most likely affected are tourism, transportation, and the international financial services. For 2009, GDP growth is now projected at 1.5%.

In a study done in 2008 by Laeven and Valencia[42], where the cost of various financial crises were studied, they concluded that the gross fiscal cost and output loss amounted on average 14% and 16.6% of GDP, respectively.

One thing is sure--crises will continue to strike the world economy in the coming years. As long as economic agents have the confidence that these crises can be resolved with decisive actions by the authorities, it is only a question of time before the economy is back on its historic trend. During a crisis of confidence, people have a tendency to overreact. Overreaction will only worsen the situation, creating more difficulties in finding a solution in the short-run. The Dutch saying typical for situations of a major crisis of confidence is: “Vertrouwen komt te voet en gaat te paard” Or the free English translation: “Trust comes on foot, but leaves on a horseback.”

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