

International Financial Crisis: government response

The perception that the market's self-regulation represents the most efficient way to manage resources has gained ground during the last decades, together with the increasing deregulation of the financial sector verified in the period. This environment, which does not incorporate some segments where failures have been recognized, translated in the unification of market niches, in the broad securitization of debts, in the agile development of financial innovations and in the major mobility of capital, therefore generating an expressive growth in the global credit markets.

In this outlook the sharp liquidity characterized by the unrestrained financial institutions' leveraging, utilizing complex financial instruments and the inadequate assessment of risks underlying credit operations, conditions were put in place to the crisis outbreak in the sub-prime market, in August 2007, and to its dissemination throughout the international financial markets and in the activity level of the main mature and emerging economies, since September 2008. Given this situation, in the recent G20 meeting, it became evident the need for introduction of a new regulatory framework, capable of minimizing dysfunctions such as the ones currently experienced by the market, and the adoption of emergency actions, being in mind the lagging effects of such measures and the proportion of the current crisis, which has been estimated to reach incentives valued at US\$3 trillion until the beginning of December.

The Central Banks' role in mature economies, aiming at restoring confidence in the banking system and at limiting the effects of global deleveraging upon the real economy, included the granting of currency supply by means of discount window facilities, intensification of loose monetary policies, and injection of resources

in order to unblock credit channels. The emerging economies of Asia and Europe, for instance China, South Korea, India and the Czech Republic, changed their monetary policy stance in response to the progressive impacts of the financial crisis on their respective economies, reflected in the depreciation of their currencies and in the effects of the recessive process on trade flows occurring in mature economies. It should be stressed that the monetary authorities of the Latin American major economies adopted a more conservative stance, in response to the persistent inflationary risks in the region.

In general, the attempts to adjust liquidity have been carried out through reduction of the basic¹ interest rate, of reserve requirements², in the easing of the rules for access to lending of last resort, a measure especially adopted by mature economies. A summary of the measures adopted by the governments and central banks of the main economies can be found in Table 1 – Chronological Interventions in the financial markets.

In the context of monetary measures, the Federal Reserve (FED) increased the supply of resources, by the progressive extension of the Term Auction Facility (TAF), by the launching of two auctions, totaling US\$40 Billion, in December 2007, to various other auctions, which now total US\$900 billion, and by the creation and expansion of dollar denominated credit lines offered in currency swap to monetary authorities considered relevant to the stability of financial systems³. Besides the increasing volume of dollars offered, there has been expansion of maturity terms of loans granted to commercial banks and the extension of the collateral panel accepted, representing a significant increase of the supply of funding to banks in the United States of America (USA) and one fundamental action in the recovery of the dollar financing conditions in the offshore markets. It should be noted that lines of swap similar to the ones included by the FED were set up between

1/ Since September, there has been a reduction on benchmark interest rates by the central banks of the USA (from 2% to 1%); Europe (from 4.25% to 2.50%); Sweden (from 4.5% to 2%); New Zealand (from 8% to 5%); Australia (from 7.25% to 4.25%); China (from 7.47% to 5.58%); South Korea (from 5.25% to 4%); India (from 9% to 7.5%); Hong Kong (from 3.5% to 1.5%), among others.

2/ In Russia (from 5.5% to 1.5%); in India (from 9% to 7.5%), and in China (from 17.5% to 14%).

3/ The central banks of Europe (ECB), England (BoE), Switzerland (SNB) and Japan (BoJ) have an unlimited supply of dollars while the central banks of Australia, New Zealand, Canada, Sweden, Denmark, Norway, Brazil, South Korea and Singapore were supplied with credit lines of US\$15 billion and US\$30 billion.

the European Central Bank (BCE) and the Central Banks of Hungary, Switzerland and Denmark, in line with the scarcity of Euro in the respective markets.

The aggravation and geographical extension of the global financial crisis, as expressed by the deterioration of expectations concerning the growth pace in 2009, led to the introduction countless plans aiming at the recovery of the solidity and stability of the financial systems. On the 3rd October, was approved, in the USA, the Troubled Asset Relief Program (TARP), an instrument that authorized the Treasury to purchase up to US\$700 billion of assets without underlying value from financial institutions, which begin to incorporate the Fed balance sheet, representing an effort to recapitalize the sector, lessening the concerns about the system's feasibility and encouraging it to resume its role as a lender. Also, TARP anticipates earnings over reserve requirements, the creation of a program for mitigating foreclosures, the lengthening of the deadlines for tax exemption, setting up restrictions on payments of benefits to bank's executives, limitless access of the Federal Deposit Insurance Corporation (FDIC) to resources of the Treasury, increase in banking account's insurance, from US\$100 thousand to US\$250 thousand, and the creation of a Council of Financial Stability to supervise the entire program.

Parallel to the implementation of the TARP, relevant complementary measures were created aiming at the normalization of the financial markets. It is noteworthy, in this sense, the extension of the non-recourse loans – loans in which payments are made with the profit obtained from investments – to depositing institutions and bank holdings aiming at financing the purchase of high quality assets backed by commercial papers money market mutual funds, the introduction of a credit line for the acquisition of commercial papers, the creation of programs of the Treasury Supplementary Financing programs, with the objective to help bringing equilibrium to the Fed's balance sheet, providing it with means to give continuity to the actions providing liquidity to the monetary markets; Hope for Homeowners – which enables the refinancing of mortgages for borrowers with one only residence; and for the financing of Monetary Markets' Investors – whereby the Fed grants warranties for the purchase of certificates of

deposit (CD) and commercial papers, with maximum maturity of 90 days, in which eligible investors are basically mutual funds.

To these set of measures adopted by the USA, similar initiatives followed in the United Kingdom, Japan, Germany, France, Spain, Holland, Sweden, Iceland, Russia, Australia Mexico, South Korea, Chile and China, among other nations.

The British Government announced on October 8th, that it will be placing up to £50 billion to reinforce the financial institutions' capital, through the purchase of preferred shares; that it will be providing guarantee to bonds issued by banks; it will supply with additional liquidity of £250 billion by means of a BoE Special Liquidity Line.

From the British initiative, plans to rescue banks and insurance companies, whose general principles were coordinated, in mid-October, to avoid distortions in the regional banking market, began to be announced by other member countries of the European Union (EU). These plans encompass temporary State financing originating in each country's budget, extension of deposit guarantees in the financial system, alterations in liquidity operations with an increase in the amount of resources, extended deadlines to settle the loans and the list of bonds which can be offered as collateral in rediscount window operations, expansion of the banking base having access to operations of fine overnight liquidity adjustments, possibility of replacing executives of banks facing problems, and restriction to payment of benefits to executives leaving financial institutions. This coordinated campaign to rescue the financial systems should represent an inflow of resources in the order of €1.7 trillion.

Aside from financial system rescue programs, many countries such as the United States of America, South Korea, China, Germany, France, Spain and Chile, have introduced fiscal measures aiming at attenuating recessive processes or a cutback in the activity level in their respective economies. In China, where the economic growth rate is slowing down, a domestic demand stimulus program of up to US\$586 billion was laid down.

Although the introduction of programs aiming at restoring the proper functioning of the financial markets have proved to be efficient to hold back the intensity of the crisis that has spread out in the global economy, the risks persist regarding the amount necessary to recover liquidity conditions and growth prospects of the major economies, both mature and emerging. Within this environment of uncertainties, which reflects the accentuated volatility registered in the markets and the increasing risk aversion by investors, and which defines the degree of contagion of the crisis that began in the US, over the emerging economies, already partially affected by the external credit channels and foreign trade, it is premature to draw conclusions about the global economy's dynamics in the short term, with remaining evidence that the channeling of resources will be insufficient to stop the process of recession in the mature economies and the deceleration in the emerging economies.

Table 1 – Chronological Interventions in the financial markets
(August/2007 to December/2008)

Date	Country Central Bank	Volume of Resources	Characteristics
9-10.8.2007	Fed, BCE, BoJ and RBA	US\$300 billion.	Global injection of resources via repurchase agreements.
8.17.2007	Fed	-	In an extraordinary meeting, reduction of the rate of rediscount to 5.75% and extension of operations to 30 days.
9.18.2007	Fed	-	Reduction of Fed funds and the rate of rediscount to 4.75% and 5.25%.
10.31.2007	Fed	-	Reduction of Fed funds and the rate of rediscount to 4.50% and 5.00%.
12.12.2007	Fed, BCE, BoE, BoC e BNS	US\$40 billion	Injection of resources by means of term auctions, which in the USA are known as TAF (Term Auction Facility). These auctions accepted a large range of collateral and extended their terms of maturity.
12.12.2007	Fed, BCE e BNS	US\$24 billions	Creation of lines of swap Fed-BCE (US\$20 billion) and Fed-BNS (US\$4 billion).
12.12.2007	Fed, BoC e BoE	-	Reduction of basic interest rates, in the case of BoE for the first time in two years.
1.4.2008	Fed	US\$20 billion	Extension of the TAF to US\$30 billion each.
1.22.2008	Fed	-	In an extraordinary meeting, cutback of Fed funds and the rate of rediscount by 75b.p. (3.5% and 4%).
1.22.2008	BoC	-	Reduction of the basic interest by 25 b.p.p. to 4%.
1.30.2008	Fed	-	Reduction of the Fed funds and the rate of rediscount to 3% and 3.5%.
2.7.2008	BoE	-	Reduction of the repo rate by 25 b.p.p. to 5.25%.
4.3.2008	BoC	-	Reduction by 50 b.p.p. of basic interest to 3.5%.
3.7.2008	Fed	US\$40 billion	Extension of the validity of TAF auctions (Sept/2008) and their value (US\$50 billion, each).
3.7.2008	Fed	US\$100 billion	Offer of including resources without agreement of re-purchase to the primary dealers, with acceptance of including mortgage bonds.
3.11.2008	Fed	US\$200 billion	Creation of the Term Securities Lending Facility (TSLF), an instrument that consists of term exchange papers to the primary dealers, with broad acceptance of bonds, including non-federal mortgage bonds.
3.11.2008	Fed, BCE e BNS	US 12 billion	Extension by 50% of the lines of swap (Fed-BCE – US\$30 billion and Fed-BNS – US\$6 billion) and extension of their term of validity until Sept/2008.

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Date	Country Central Bank	Volume of Resources	Characteristics
3.11.2008	BoE	£10 billion	Extension of the volume and the list of the collateral guaranties accepted in the three-month repo operations.
3.11.2008	BoC	C\$4 billion	Renewal of the Term Purchase and Resale Agreements (TPRA)
3.15.2008	Fed	-	Fed intervention in the acquisitions of the Bear Stearns by the JPMorgan
3.16.2008	Fed	-	Establishment of the Primary Dealer Credit Facility (PDCF), overnight loan facility to primary dealers.
3.16.2008	Fed	-	Extension of the maximum maturity term of rediscount. This time, from 30 to 90 days.
3.16.2008	Fed	-	In extraordinary session, Reduction of the spread between the rediscount and the fed funds to 25 b.p.
3.18.2008	Fed	-	New Reduction by 75 b.p in the basic rate and of rediscount (2.25% & 2.50%).
3.31.2008	EUA	-	Release of the Paulson plan in order to modernize and expand the regulatory functions of the FED.
March and April/2009	Fed	-	Active participation in the purchase of Bear Stearns by JP Morgan.
As of April	Fed	-	On-site monitoring of the financial conditions of the major investment banks.
4.10.2008	BoE	-	Reduction by 25 b.p. of the basic rates (repo rate) to 5%.
4.21.2008	BoE	£5 billion	Extension from £10 billion, value that prevailed since January/2008, to £15 billion with a three-month credit supply.
4.21.2008	BoE	£50 billion	Release of the Special Liquidity Scheme (Special Liquidity Scheme) by means of which the banks are able to change the Residential Mortgage-Backed Security (RMBS) triple A, effective until Dec/07, by new Treasury securities.
4.22.2008	BoC	-	Reduction by 50 b.p. of basic interest to 3.0%.
4.30.2008	Fed	-	Reduction by 25 b.p. in the basic rates and of rediscount (2% e 2.25%).
5.2.2008	Fed	US\$50 billion	Increase in the volume of TAF auctions to US\$75 billion, each.
5.2.2008	Fed	-	Inclusion of Asset Backed Security (ABS) triple A in the list of collateral accepted in the TSLF auctions.
5.2.2008	Fed, BCE e BNS	US\$26 billion	Extension of the lines of currency swap: Fed/BCE, from US\$30 billion to US\$50 bi, and Fed/BNS, from US\$6 billion to US\$12 billion.
5.7.2008	RBNZ	-	Extension from 1 to 30 days the term of bond repurchase operations and the extension of the set of collateral, which began to include those securities backed by residential mortgages.
7.9.2008	BCE	-	Increase by 25 b.p. of the basic interest to 4.25%
7.4.2008	RBNZ	-	Reduction by 25 b.p. of the basic interest to 8%.
7.30.2008	Fed	-	Extension to 1.30.2009 of the term of validity of the TSLF and PDCF.
7.30.2008	Fed	US\$50 billion	Creation of option auctions under the TSFL.
7.30.2008	Fed	-	Implementation of the 84-day term, with alternative to 28 days, of the TAF auctions.
7.30.2008	Fed, BCE and BNS	-	Extension to 1.30.2009 the validity term of the currency swaps.
7.30.2008	Fed and BCE	US\$5 billion	Temporary extension of US\$50 billion to US\$55 billion in the swap agreement.
9.2.2008	RBA	-	Reduction. of basic interests by 25 b.p to 7%.
9.11.2008	RBNZ	-	Reduction by 50 b.p. of basic interest to 7.5%.
9.14.2008	Fed	-	Extension of the collateral list accepted in the framework of the Primary Dealer Credit Facility (PDCF) program that is not limited to investment-grade debt securities, extending also to the ones accepted in the circuit of the three-party repo systems of the major clearing banks.
9.14.2008	Fed	-	Extension of the collateral list accepted in the framework of the line of Term Securities Lending Facility (TSLF), which now accepts any type of investment-grade debt securities, no longer only specific types of papers regarded as investment grade.
9.14.2008	Fed	US\$25 billion	Increase in both the total value of resources available in the sphere of TSLF, from US\$175 billion to US\$200 billion, and of the frequency in which the auctions are done every week, starting from now and no longer every two weeks.

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Date	Country Central Bank	Volume of Resources	Characteristics
9.14.2008	Fed	-	Creation of one temporary exception to the limitations imposed in the section 23A of the norm that governs its operations, the Federal Reserve Act. Till the end of January 2009, the depository institutions close to the FED could provide liquidity for their affiliate institutions, against collateral guarantees accepted by the tri-party repo market.
9.15.2008	Fed	US\$50 billion	Injection of resources in the short-term market, under strong stress (Effective Fed funds reached a 5.25% against 2%, FED's target value) after the petition for bankruptcy of Lehman Brothers and the purchase of the Merrill Lynch by the Bank of America.
9.15.2008	BCE, BoE, BNS and RBA	US\$44 billion	Coordinated injection of resources before the narrowing of the short-term credit: BCE (€30 billion= US\$42.6 bi); BoE (£5 billion= US\$9 bi); BNS (CHF 3 billion= US\$2.6 bi); and RBA (AUD 1.3 billion = US\$1 bi).
9.15.2008	CPB	-	Reduction of basic interest in 27 b.p. to 7.2% p.a., and Reduction of the interest reserve requirements by 100 b.p. to 16.5%. It is the first reduction of interests since 2002 and of the reserve requirements since 2006.
9.16.2008	Fed	US\$85 billion	Announcement of the liquidity supply to the insurance company AIG. The loans will be collateralized by all the insurance company's assets.
9.16.2008	Fed, BCE, BoE, BNS, BoJ and RBA	US\$209 billion	Aiming at reducing the effective overnight rate, occurrence of a new injection of resources in the short-term markets: Fed (US\$50 bi); ECB (€70 billion= US\$99 bi); BoE (£20 billion= US\$35); BoJ (¥ 2.5 trillion = US\$24 bi); RBA (AUD 1.3 billion= US\$1 bi), besides the BNS, that also continues monitoring the short-term market.
9.17.2008	BoJ, RBA	US\$33 billion	New inflow of resources in order to maintain the domestic liquidity before the shock coming from Wall Street: BoJ (¥ 3 trillion = US\$28.4 bi); e RBA (AUD 4.3 bi).
9.17.2008	BoE	-	Extension of the term to bank's access to the Special Liquidity Scheme, from 21/10/2008 to 30/01/2009.
9.17.2008	USA	-	Announcement of Supplementary Financing Program – SFP of the Treasury to adjust the balance of the FED and to provide cash on hand so that it may follow with their programs of expansion of the financial liquidity both locally and globally.
9.17.2008	Russian Central Bank	-	Announcement of the reduction of the rate of compulsory deposits in rubles from 5,5% to 1,5%.
9.18.2008	Fed, BoC, BoE, BCE, BoJ and BNS	US\$230 billion	Coordinated action of resource inflows in the global currency market. US\$50 billion in the US market and US\$180 billion in offshore markets. This resources, available till the end of January 2009, distributed through the extension of swap lines Fed/BCE (of US\$55 billion to US\$110 billion, of which US\$40 billion are channeled to the overnight) and Fed/BNS (of US\$12 billion to US\$27 billion, with US\$10 billion to overnight operations) and the creation of new lines of swap: Fed/BoJ (US\$60 billion); Fed/BoC (US\$10 billion); and Fed/BoE (US\$40 billion).
9.19.2008	Fed	-	Announcement of the plans for repurchase from the primary dealers of short-term obligations issued by the Freddie Mac, Fannie Mae agencies and the Federal Home Loan Banks from the primary dealers.
9.19.2008	Fed	US\$50 billion	Extension of the non-recourse loans (Loans without payment liability – the payment is done with the profitability arising from investments) for the depositing institutions and bank holdings aiming at financing the assets purchase of high quality assets backed by Asset-backed commercial papers (ABCP) with the mutual funds of the currency markets (money market mutual funds). The resources will have origin in the Exchange Stabilization Treasury Fund.
9.23.2008	Russia	US\$100 billion	Announcement of a bailout of the financial market that aims, through liquidity injections, at containing what appears to be the beginning of the financial turmoil in the country.
9.24.2008	Fed, SRB, RBA and Central Bank of Denmark, Norway	US\$30 billion	Creation of new currency swap lines US\$10 billion with both the Sveriges Riksbank (SRB) and with the Reserve Bank of Australia (RBA) and US\$5 billion to the Central Banks of Norway and Denmark.

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Date	Country Central Bank	Volume of Resources	Characteristics
9.26.2008	Fed, ECB and BNS	US\$13 billion	Increased resources available for both currency swap with the ECB (\$10 billion) and the SNB (US\$3 billion).
9.29.2008	Fed, ECB, BoE, BoJ, BoC, SNB, RBA, SRB and the Central Banks from Denmark and Norway	US\$330 billion	Increased volumes supplied by the lines of the currency swap with other central banks: over US\$120 billion to the ECB, US\$60 billion for the BoJ, US\$40 billion for the BoE, US\$30 billion to the SNB, US\$20 billion to BoC, SRB and RBA; each, and US\$10 billion to the BC's in Denmark and Norway each. With this new injection of funds, the Fed now has a total of \$620 billion made available on the swap: US\$240 billion with the ECB, US\$120 billion with the BoJ, US\$80 billion with the BoE, US\$60 billion with the SNB; US\$30 billion to the banks of Canada, Sweden and Australia, each, and US\$15 billion to the banks of Norway and Denmark each.
9.29.2008	Fed	US\$100 billion	Increased volumes supplied by TAF auctions. Auctions of 84-days passed from US\$25 billion to US\$75 billion.
9.29.2008	ECB	Not informed	Release of a special operation refinancing term of maturing for 07/11/2008.
9.29.2008	ECB and BoE	US\$40 billion	Employment of resources of the lines of currency swap with the FED to the injection of resources overnight: US\$30 billion (ECB) and US\$10 billion (BoE).
9.29.2008	BoE	£40 billion	First of the special and weekly operations of repurchase for three months.
9.29.2008	RBA	AUD6 billion	Injection of funds in the money market
9.29.2008	BoJ	¥1 trillion	Injection of funds in the money market
9.29.2008	Iceland	€0,6 billion	The government nationalized the Glitnir hf, the third major bank of the country when he acquired 75% of the participation in the bank.
10.1.2008	USA	-	Approval by the Senate of the Emergency Economic Stabilization Act, which includes a financial system rescue package (Trouble Asset Relief Program) – TARP. Among a series of details, the law allows the FED to pay interest on compulsory deposits, provides for the creation of a foreclosure relief program, extends the term for the tax cuts, imposes limits to the payment of Bank's executive benefits, permits unlimited access to the Treasury resources of the Federal Deposit Insurance Corporation (FDIC), increases till the end of 2009, from US\$100.000 to US\$250.000 the insurance for the banking accounts and creates a Council of Financial Stability in order to supervise the entire program.
10.1.2008	EUA	-	Creation of a 3-year program entitled Hope for Homeowners that enables the repurchase of mortgages to borrowers with a single residence, acquired before 2008, and for which the value of payment was more than 31% of the family gross income in March of the current year.
10.3.2008	EUA	US\$700 billion	With approval by the Chamber, comes into force the Emergency Economic Stabilization Act, a major intervention of the government to the financial sector since the 1929 crisis. The law allows the Treasury to buy up to US\$700 billion of "bad assets" through TARP. The first US\$250 billion should be made available immediately, meanwhile the US\$100 billion still depend on the presidential for its release. The other US\$350 billion remain dependent on the presidential requirement to the Congress. The Treasury may use the resources up to the end of 2009.
10.3.2008	United Kingdom	-	The Financial Services Authority (FSA) raised the £35.000 to £50.000 the guarantee value for deposits. The decision comes into force as of 7/10/2008.
10.3.2008	BoE	-	Extension of the list of collateral accepted in the three-month repo operations. The measure includes the acceptance of papers backed by triple A assets of certain companies, besides the papers backed by higher rated commercial papers.
10.3.2008	BCE	-	Extension of available access to fine tuning of overnight liquidity operations to smaller banks. Up to the end of September, only 140 banking institutions had this prerogative.
10.5.2008	Germany	Unlimited	Announcement of unlimited guarantee to the private savings deposits.

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Date	Country Central Bank	Volume of Resources	Characteristics
10.5.2008	Germany	€35 billion	Government guarantees €35 billion, meanwhile a pool of banks guarantees more €15 billion to make possible a rescue plan to the mortgage agency Hypo Real Estate Holding AG.
10.6.2008	USA/Fed	Unknown	In order to maintain Fed funds closer to the established goal Fed will remunerate the compulsory deposits. The rate paid must eliminate the opportunity cost of the withheld resources, will be the average during the period of reserve withholdings minus 10 b.p.
10.6.2008	USA/Fed	Extension of TAF to US\$600 billion	The four auctions, two of 28 days and two 84 days, are increased in volume to US\$150 billion each.
10.6.2008	USA/Fed	US\$300 billion	Announcement of two extraordinary auctions in November, under the TAF program worth US\$150 billion each. With this measure, TAF will reach US\$900 billion at the end of the year.
10.6.2008	RBI	US\$6 billion	Announcement of the Reduction of the compulsory deposits from 9% to 8,5%.
10.6.2008	Chile	US\$1 billion	Injection of government dollar resources to the major local banks (Banco del Estado, Banco de Chile, Banco Santander Chile, e BCI Bank).
10.6.2008	Sweden	-	The government doubles the value of the offered guarantees to bank deposits of US\$70.000 to US\$100.000.
10.7.2008	USA/Fed	Not released	To avoid malfunctioning of commercial papers markets, and under the financial support of the Treasury, the FED announced the establishment of a credit line for the acquisition of these papers. THE CPFF (Commercial Paper Funding Facility) allows the purchase of 3-month papers issued without guarantee, but with a tax retention, or backed by assets from the issuers.
10.7.2008	European Union		Increase in the level of guaranties for deposits of individuals from €20.000 to €100.000.
10.7.2008	ECB		Increase of the value offered in 28-day auctions, from €25 billion to €40 billion, and in the auctions of 84 days, from €15 billion to €20 billion.
10.7.2008	Fed, ECB, BoE, BoJ, BoC e SNB	Not released	Coordinated action of extension of swap lines for the supplying of dollars in the offshore markets during the four quarters in 2008.
10.7.2008	Russia	US\$36 billion	Announcement of the supply of resources to the country's major banks for a term of up to 5 years, between them the Sberbank, the Bank VTB and the Russian Agricultural Bank.
10.7.2008	Spain	€30 billion	Announcement of the creation of a support fund for banking loans, and the increase of €20.000 to €100.000 of guarantees for banking deposits.
10.7.2008	Belgium	-	Announcement of the increase of €20.000 to €100.000 of guarantees for banking deposits.
10.7.2008	RBA	-	Reduction of 100 b.p. in cash rate, the basic rate of interest to 6% a.a.
10.8.2008	Austria	-	The government announced the guarantee of 100% of the banking deposits.
10.8.2008	Iceland	Not released	The regulating body of the Icelandic financial system took control of the second biggest bank of the country, the Landsbanki Island Hf.
10.8.2008	BoE	£500 billion	Announcement of the recapitalization package of the banking system: £50 billion to purchase preferential shares. £25 billion will be invested in the Royal Bank of Scotland (RBS), Barclays, HBOS, Lloyds, Abbey, Nationwide Building Society, Standard Chartered and HSBC. The same amount is available for other institutions, if necessary. Besides this kind of aid, more £250 billion will be used to give guarantee to the middle-term bonds to be emitted by the banks to refinance maturing debts, and £200 billion to expand the Special Liquidity Scheme – SLS, that allows the exchange of mortgage-backed papers for Treasury bonds.
10.8.2008	United Kingdom	-	The government announced that it will guarantee the deposits in the Icelandic bank, Icesave, which is subsidiary of Landsbanki Islands, which in turn is a subsidiary of the Landsbanki Islands, under the control of the Icelandic Government since 7.10.2008, which had announced that the impediment of withdrawals from the United Kingdom account holders.

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Date	Country Central Bank	Volume of Resources	Characteristics
10.8.2008	Fed, BCE, BoE, BNS, BoC e SRB	-	Facing the downturn of the economic activity, announcement of an action coordinated of Reduction by 50b.p. in the respective basic rates of interest. The goal for the Fed funds retracted from 2% to 1.5%p.a., while the rediscount rate in the USA was reduced to 1.75%. The reference rate of the ECB dropped to 3.75%; the repo rate in the United Kingdom dropped to 4.5%p.a.; the rate in Switzerland moved to 2.5%; the Canadian rate decreased to 2.5%; and the Swedish basic rate dropped to 4.25%.
10.8.2008	BPC	-	Reduction of the basic rate of interest in 27 b.p., to 6.93%;
10.8.2008	Fed	US\$38 billion	Announcement of the additional supply of liquidity to the AIG insurance company.
10.8.2008	BPC (China)	-	Reduction of the rate of reserve requirement to 16%.
10.8.2008	Chile	-	Announcement of reserve repatriation to hold the rising value of the American dollar.
10.9.2008	Iceland	-	The regulating organ, of the Icelandic financial system took the control of the Kaupung bank, the biggest bank in the country, guaranteed the domestic deposits and announced the creation of a new bank which will even incorporate the credit portfolio of the Landsbanki Island.
Between 06 and 10.10.2009	Bank of Mexico	US\$6 billion	Extraordinary auctions of resources in dollars to alleviate the tensions on the exchange rate.
10.9.2008	Korea	-	Reduction of basic interest rate in 25 b.p. to 5% a.a.
10.10.2008	RBI (Índia)	US\$12 billion	Announcement of reduction in the reserve requirements from 8.5% to 7.5%.
10.10.2008	Belgium	Not released	Announcement of a temporary guarantee plan to support the refinancing in the inter-bank market.
10.10.2008	Denmark	€4 billion	The Parliament has approved the creation of a fund to back financial institutions and guarantee 100% of banking deposits.
10.13.2008	United Kingdom	£37 billion	Acquisition of a majority stake in the Royal Bank of Scotland (RBS) and approximately 40% of the merged group of Lloyds Trustee Savings Bank (TSB) and Halifax Bank of Scotland (HBOS).
10.13.2008	Norway	US\$55 billion	Government Bonds issue in exchange for the mortgage debt in the hands of the banks. Announcement that the Norwegian branch of the Icelandic Bank Kaupthing will have public administration, after its nationalization in Iceland.
10.13.2008	Spain	€100 billion	Lines to guarantee the issue of banking bonuses in 2008, expiring in up to 5 years, and to buy banks' assets.
10.13.2008	Portugal	€20 billion	Line of financing, up to the 12.31.2009, targeted to any credit institution based in the country.
10.13.2008	Germany	-	Announcement of a stimulus package to the interbank credit market and restore trust in the financial system, injection of up to €80 billion for recapitalization and up to €400 billion in guarantees for loans. Measures which are valid up to the end of 2009. The forecast is that the national budget be impacted until 2011.
10.13.2008	France	€360 billion	Announcement of a €320 billion package to government's guarantee of the inter-bank deposits contracted until the end of 2009 and with maturity of up to 5 years, and €40 billion for stockholdings purchase (recapitalization) in the banking system.
10.13.2008	Holland	€200 billion	Guaranties to interbank credit operations.
10.13.2008	Itály	Not released	State guaranties for banking debts of up to 5 years, issued till the end of 2009; swap of the central bank for bank refinancing, support for banks to finance private companies, and the publication of a decree that authorizes the governmental purchase of preferential assets of banks in difficulty.
10.13.2008	Austria	€100 billion	Government's guarantee to refinance likely capital inflows in the acquisition of bank equity holdings, besides the complete guarantee for individual's deposits.
10.13.2008	Russia	US\$50 billion	Law that allows local banks to borrow, without any guaranties for a 6-month period.
10.13.2008	Australia	US\$458 billion	3-year guaranty in banking deposits, against a premium of insurance to be paid by the banks. Guarantee to the international loans taken by the local banks. Duplicating of mortgage guaranty funds for a total amount of US\$5 billion.

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Date	Country Central Bank	Volume of Resources	Characteristics
10.13.2008	New Zealand	Not released	Guaranty of two years to banking deposits, to be agreed upon bilaterally between financial institutions involved and the government.
10.13.2008	Chile	US\$0.7 billion	Supply of resources via CDBs, which adds up to US\$1 billion placed in the banking system last month.
10.13.2008	Saudi Arabia	US\$40 billion	Resources supplied to the banking system.
10.13.2008	United Arab Emirates	Not released	Savings and deposits guaranteed by the National Banks, besides the supply of total guaranties in the interbank market.
10.13.2008	Fed, ECB, BoE and SNB	Unlimited	Unlimited financing in dollars to the European Banks by the terms of 7, 28 e 84 days. The collateral guaranties will be judged adequate in each jurisdiction. The validity of the lines of swap was extended until 4.30.2009.
10.13.2008	Qatar	-	Announcement of a likely acquisition of up to 20% of the local bank's capital.
10.14.2008	USA	-	The Treasury authorized the FDIC Federal Deposit Insurance Corp. to guarantee, exceptionally, the debts with priority payment (senior) of all the insured institutions, as well as the account deposits that do not earn interest.
10.14.2008	USA	US\$250 billion	With the assistance of TARP, the first US\$250 billion will be made available to the equity acquisition in nine institutions (Goldman Sachs Group; Morgan Stanley; JPMorgan Chase; Bank of America; Merrill Lynch; Citigroup; Wells Fargo; Bank of New York Mellon; e State Street). Other banks have up to 14/11/2008 to join the program that implies restrictions to the payment of salaries to their executives, but does not limit the distribution of dividends to shareholders.
10.14.2008	Fed and BoJ	Unlimited	Extension, up to 30/04/2009, of the currency-swap line for supplying dollars offshore.
10.14.2008	Japan	-	Announcement of a plan to reinforce the stock and money markets, including the easing of stock repurchase conditions and permission to the BoJ carry out injections of resources in regional banks.
10.14.2008	United Arab Emirates	US\$19 billion	Additional injection of AED70 billion dirhans (US\$19 billion), that add up to 50 billion dirhans of the credit line released last month that aims to expand the liquidity in the interbank market.
10.14.2008	Australia	AUD 10 billion	Announcement of an stimulus fiscal package mostly targeted to retired and low-income wage-earners. Through this measure, it is expected that resources will come quickly in circulation.
10.15.2008	BCE	-	Extension of the list of collateral accepted in refinancing operations, including the acceptance of syndicated loans, besides de acceptance of instruments of negotiable debt nominated in other currencies than the US dollar, Euro, Pound, and Yen, provided that they are issued in the Euro area, but with an additional discount of 8%. Also there will be a reduction in the minimum limit of assessment of the assets accepted, from A to BBB-, subject to an additional discount of 5%. The validity of these alterations expire at the end of 2009.
10.15.2008	Chile	US\$850 million	Disclosure of a package to provide credit to exporters and to smallbusinesses.
10.15.2008	BCE	Unlimited	Announcement that the long-term refinancing auctions will meet all the requests.
10.15.2008	BCE and BNS	Not released	Announcement of the creation of a swap line euro/Swiss franc, starting on 20/10/2008. The operations term is of 7 days and the agreement will be kept at least until the end of 2009.
10.15.2008	Greece	€28 billion	Announcement of a support package for local banks: guarantee of €15 billion in issue of 3-5 years bonds by the banks, injection of €3 billion injection of government bonds in the banks, and the possibility of purchase of €5 billion in hybrid securities from the banks.
10.16.2008	BCE and BC from Hungary	€5 billion	Announcement of the creation of a swap line euro/Hungarian forint.
10.16.2008	BoE	Not released	Announcement of the creation of a new line of overnight, starting on the10.22.2008, and a rediscount window, replacing the SLS that expires on January 2009. This will permit the exchange of illiquid assets for government bonds in a 30-day term.

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Date	Country Central Bank	Volume of Resources	Characteristics
10.16.2008	European Union	-	The European Parliament approved a set of new measures on the financial system structural reforms of the block aiming at the Reduction of the volatility in the value of the companies and the regulation of the bank executive's earnings, as well as their judicial responsibility in case of accounting and administrative mistakes. The new rules are already in use to the analysis of the balances from the third quarter of 2008.
10.16.2008	Bank of Italy	€2 billion	Availability of 1/5 of the available amount for the exchange of government bonds against illiquid assets with financial institutions. The operation implies a 1% rate p.a., but it permits the institutions to apply the federal bonds for refinancing at the BCE.
10.16.2008	Switzerland and SNB	CHF 6 billion	Injection of resources in UBS and the assumption of US\$60 billion of said "Toxic" assets against a 9% holdings in the respective bank.
10.16.2008	Poland Central Bank	-	The monetary authority informed that it will begin to carry out foreign exchange swaps as of 10.17.2010 to alleviate the financial tensions in the local market.
10.17.2008	Germany	€500 billion	The German Parliament approved a €480 billion plan announced on 10.13.2010 by the prime minister Merkel, to which was added more €20 billion in allowances for losses suffered by financial institutions.
10.19.2008	Korea	US\$100 billion	Government announces a package to guarantee up to US\$100 billion of banking debts incurred abroad, from this date up to 6.30.2009.
10.20.2008	Sweden	US\$206 billion US\$21 billion	Proposal of a financial stability plan in which resources are supplied as banking guarantees. The plan foresees the creation of a US\$21 billion fund to deal with solvency problems, where resources are supplied by the government and by the financial institutions.
10.20.2008	Holland	€10 billion	Announcement that the government will inject resources in the ING Group. However, the government will have two seats at the group's board, will receive interest of 8,5% p.a. and impose restrictions to the payment of dividends in 2008 and interdiction of bonus payment to the group's executives.
10.20.2008	Belgium	€1,5 billion	Announcement of the allocation of federal resources in the insured Ethias by means of the increase of capital.
10.20.2008	RBI	-	Cut of interest of 100 b.p. to 8%p.a.
10.21.2008	BoC	-	Cut of 25 b.p. of basic interest to 2,25%p.a.
10.21.2008	Fed	US\$540 billion	Announcement of the creation of the Money Market Investor Funding Facility – (MMIFF). By this instrument, the Fed starts to guarantee the purchase of deposits and commercial paper's certificate, with validity of 90 days maximum, issued by institutions with a higher risk classification. The eligible investors are basically the mutual funds.
10.22.2008	Fed	-	Announcement of the rise in interests paid on reserve requirements: basic interests minus 75 b.p. to basic interest minus 35 b.p.
10.23.2008	SRB	-	Cut of 50 b.p. Of basic interests to 3,75%p.a.
10.23.2008	RBNZ	-	Cut of 100 b.p. of basic interests to 6,5%p.a.
10.24.2008	Korea, China, Japan and	US\$80 billion	East Asian countries announced the creation of a fund, until mid 2009, to fight the crisis.
10.27.2008	China	US\$292 billion	Announcement of a stimulus fiscal package to the activity of rail construction.
10.27.2008	ECB e Central Bank of Denmark	€12 billion	Creation of a swap currency line between the respective central banks.
10.27.2008	BoK	-	The Central Bank of Korea, announced once again a cutback in the basic interest rate, of 5% a.a. to 4,25% a.a. The institution also announced that the purchase of bonds issued by local banks and, not only expanded the limits of loans to exporters, but also announced a grace period for businesses affected by the devaluation of the Won against the dollar and the Yen.
10.28.2008	Spain	€100 billion	Announcement that the government will guarantee up to €100 billion in the bonus issue by the country's banks in 2009, same quantity of 2008.
10.28.2008	Fed e RBNZ	US\$15 billion	Creation of a line of currency swap, valid until 4.30.2008.
10.29.2008	Fed	-	Reduction of the basic interest, the goal for the Fed funds, to 1% a.a.

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Date	Country Central Bank	Volume of Resources	Characteristics
10.29.2008	Fed, BCB, Banxico, BoK and Singapore Mon.Aut.	US\$120 billion	Announcement of the creation of lines of swap of currency in the value of US\$30 billion each with central banks from Brazil, Mexico and Korea and the Monetary Authority of Singapore. The lines are valid till 4.30.2009.
10.29.2008	BPC	-	Reduction by 27 b.p. In the annual basic interest, from 6.93% to 6.66%.
10.30.2008	Japan	¥ 27 trillion	Announcement of a new stimulus package to the economy that include the reduction of the income tax, exemption of taxes on capital earnings and dividends, aid to small businesses and resources for the recapitalization of banks.
10.31.2008	BoJ	-	Reduction by 20 b.p. In the annual basic interest, of 0.5% to 0.3%.
11.1.2008	RBI	-	Reduction by 25 b.p. In the yearly basic interest of 7.75% to 7.5%.
11.4.2008	RBA	-	Reduction by 75 b.p. In the yearly basic interest of 6% to 5,25%.
11.4.2008	Chile	US\$1,3 billion	Announcement of a package that aims the injection of US\$500 million in the State Financial Institution BancoEstado, to increase the granting of mortgages to families of low or middle income, and of US\$800 million by which the development agency Corfo, will facilitate the credit for small and medium businesses.
11.5.2008	Switzerland	-	Increase the government guarantee of deposits, CHF 30.000 to CHF 100.000.
11.5.2008	Fed	-	Announcement of a new alteration in the remuneration of the compulsory deposits. By the new formulas, for the obligatory deposits, the rate passes the media of Fed funds during the period in question minus 10 b.p. to the average of Fed funds during the period. For the excess reserves, the rate moves from the minor rate of the Fed Funds during the period less 35 base-points to a minor rate during the term.
11.6.2008	BoE	-	Reduction by 150 b.p. In the annual basic interest from 4.5% to 3%.
11.6.2008	BCE	-	Reduction by 50 b.p. In the annual basic interest from 3.75% to 3.25%.
11.6.2008	BNS	-	Reduction by 50 b.p. In the annual basic interest from 2.5% to 2%.
11.6.2008	Czech Central Bank.	-	Reduction by 75 b.p. In the annual basic interests from 3.5% to 2.75%.
11.6.2008	DNB	-	Reduction by 50 b.p. In the annual basic interests from 4.5% to 4%.
11.7.2008	BoK	-	Reduction by 25 b.p. In the annual basic interest from 4.25% to 4%.
11.10.2008	USA/Fed	US\$27 billion	Announcement of the restructuring of the aid agreement to the insurance American International Group (AIG). The Treasury will purchase US\$40 billion of preferential assets from AIG in the sphere of Trouble Asset Relief Program. Besides the financial resources AIG will count with two new Fed lines of credit that totaling more than US\$50 billion. In total values, the aid to AIG will surpass from US\$123 billion to US\$150 billion.
11.10.2008	China	US\$586 billion	Approval of a package of economic stimulus until 2010 to boost the domestic demand. The resources will be concentrated in investments of infrastructure and welfare state, besides the financing to small and medium businesses. The package also includes the reduction of taxes on businesses in 120 billion yuan per year.
11.11.2008	USA	-	Announcement by the Treasury and by the Federal Agency of Estate finances of a plan to aid the borrowers for renegotiation mortgage conditions in a trial to avoid more foreclosures.
11.11.2008	CBR	-	To protect the currency and reduce inflationary pressure, a new interest rate rise was announced. The benchmark rate raises from 11% to 12% p.a.
11.20.2008	SNB	-	Reduction by 100 b.p. the annual basic interests from 2% to 1%.
11.21.2008	USA	-	The FDIC announced alterations in its program of guarantees of the bank debts. The rule of single tax of 75 base-points was relaxed. Institutions will obey a scheduling of rates for short-term debts.
11.23.2008	USA	US\$306 billion	Announcement of a package of protection to large losses with assets kept in portfolio, including mortgage-backed securities, offered to the Citigroup that also received an injection of US\$20 billion, in the TARP framework.
11.24.2008	UK	US\$30 billion	Announced a fiscal stimulus package to boost domestic demand, once that the plan includes the Tax reduction for the middle-class and an increase in the tax for the wealthier and over business' profit. The package is about 1% the British GDP.

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Date	Country Central Bank	Volume of Resources	Characteristics
11.25.2008	Fed	US\$200 billion	Announcement of the creation of a program to boost the consumer credit and stimulate the level of economic activity, called Term Asset-Backed Securities Loan Facility (TALF). The Fed will grant loans of non-recourse (in case of default, the creditor is limited to receiving the collateral) for banks holding of AAA-ABS collateralized by student credits, credits for the acquisition of automobiles, credit for the holder of small businesses and credit provided via credit cards.
11.25.2008	USA	US\$20 billion	The Treasury will use TARP resources to allocate resources to the FED, as an aid to the TALF line.
11.25.2008	Fed	US\$600 billion	Aiming at the reduction of the cost and the extension of real estate credits, there was the announcement of a program for the direct purchase of GSE liabilities (Fannie Mae, Freddie Mac and Federal Home Loan Banks), US\$100 billion, and the purchase of mortgage-backed securities, MBS (US\$500 billion).
11.26.2008	PBC	-	Aiming at giving a new stimulus to the economic growth, the BPC made new reductions of the basic interest from 6,66% to 5,58% and the rate of reserve requirements, from 1% to major banks and of 2% for the others.
28.11.2008	Italy	€80 billion	Announcement of a fiscal package to fight recession. The package is proportionally more modest than the ones released in France and Germany due to the great Italian public debt. Among the measures taken are the financial aid to low income families, exemption of taxes to businesses and up to €12 billion to the Italian Banks, that will be distributed by means of the purchase of hybrid debts from the financial institutions by the government.
2.12.2008	RBA	-	Reduction by 100 b.p. in the annual basic interest of 5,25% to 4,25%.
3.12.2008	BoJ	-	Announcement of the reduction of A to BBB- of the minimum requirement for the acceptance of corporate bonus as collateral of loans.
4.12.2008	ECB	-	Reduction by 75 b.p. In the annual basic interests, from 3.25% to 2.5%.
4.11.2008	BoE	-	Reduction by 100 b.p. In the annual basic interests of 3% to 2%.
11/4/2008	SRB	-	Cut of 75 b.p. of basic interest to 2%p.a.
12/4/2008	RBNZ	-	Cut of 150 b.p. of basic interests to 5%p.a.
4.12.2008	Argentina	R\$9,6 billion	Announcement of a fiscal package to stimulate production, investments and consumption, with the reduction of taxes on exports (withholdings).