



# E - NEWS LETTER



Tuticorin Branch of Southern India Regional Council of The Institute of Chartered Accountants of India  
(Set up by an Act of Parliament)

November 2008

## Voice of the Chairman



**Dearest esteemed members & students**

**Greetings for peace and prosperity**

We are in the month of November – a season of rains and water loggings and winter is on the avail. The people of USA have created history by electing Mr.Barack Obama an African – America as their President amidst of the gloomy economic condition the global village is going through. In the global village that we are living the happenings in USA will certain have a big impact on all of us.

The recent downswing and turmoil in the international and national financial circuits and severe downturns in business cycle have thrown up unfathomable challenges and threats. The recent financial failures of huge Banks and Industrial and Auto majors have raised questions regarding the relevance of present accounting concepts and auditing practices. Let us encounter these challenges and threats that we face as opportunities.

At the branch level, the computer awareness programme for the senior members and tele-conference held during the month had good response from the members. Fourteen members of our branch have already registered for attending the regional conference to be held in Chennai on 28<sup>th</sup> & 29<sup>th</sup> Nov.

Friends, we shall continue to make this Diamond Jubilee year a sparkling on by our resolve and commitments and we seek you support in the nation building process.

With warm regards

**CA.G. Xavier Fernando**

# Global Financial Crisis

It is nearly two months since the global recession has hit the headlines and it seems that the bad news is not going away. We are hearing about multi-national bank closures, government bailouts, a revaluation of the capitalist economic system the world over, and scary forecasts about local unemployment in India. Along with the jargon being thrown at us from every so called 'expert', there seems to be a base ignorance or an unwillingness to name the underlying reasons behind the gloom at the heart of the financial crisis.

The United States of America has been the only superpower in the world for the last 15 years – after the collapse of the Soviet Union in the early 1990's. This event resulted in a radical shift of economic policy in almost every country in the world – on both sides of the Cold War fence. The few countries that refused to switch to the Capitalist system and free trade have been almost completely marginalized and are arguably much worse-off today as a result. In our own country the economic liberalization was not so much a choice as a necessity.

The 'with-us or against-us' strategy of the U.S has been an accepted form of their foreign policy, both economic and military, for most of the last two decades. And this is the major reason that their current economic crisis is now affecting almost the entire world.

What exactly happened? How did this financial crisis come about?

Every aspect of economic activity is dependent on the laws of supply and demand. If I create a product or service is dependent on how many people need it. When they buy what they think they need they are called consumers. These people are labeled consumers. Consumers, who can very well do without it a product, can be led to believe that they absolutely need it – that they can't do without it. In the U.S local consumers were led to believe that they absolutely needed bigger and better houses. It was not important that most of these consumers would not be able to afford the high mortgages that came with the decision to buy a house. Big banks lent vast sums of money to small banks, and the small banks lent vast sums of money to millions of people, at 'competitive rates' of course, without worrying if they would be able to repay the loans at their current levels of income. The banks hoped that these people would work harder to able to afford to pay back the loans. This was termed 'the encouragement of progress'.

American consumers, like their counterparts in other regions of the world, believed wholeheartedly that it is not necessary to assume that you cannot possess a thing that you cannot afford – you can always buy things on credit. 'Get a loan and buy whatever you want. You can pay back the loan later.

Because of globalization, this 'housing bubble' – artificially created demand for houses – led to raw materials being sourced from thousands of small, medium and big industries across the world. This provided employment to millions of workers in countries as far as China.

So houses were built for people who couldn't afford them but brought them on credit. The well-oiled wheels of 'progress' were churning on, until it was time to pay back the loans – the mortgage. Naturally the plumbers, electricians, teachers, small businessmen etc who had brought homes on credit, could not pay their large mortgages back to the small banks. The small banks could not pay the big banks back, and the big banks became bankrupt and so had to close down.

You might ask, at this point, why all at once? These sorts of things happen all the time, don't they? And the answer is that this is the definition of a 'bubble'. Bubbles occur in every industry – the valuation of a product or service is some time inflated to many times its value, and then the inevitable correction to its real value arrives. But the issue in this case is that a house is the largest purchase that most people, even Americans, make in their lifetimes. And the ancillary industries that depend on the building of houses are varied and spread out across a range of industries – e.g. steel, cement, timber etc. When houses have to be vacated or 'foreclosed', because who bought them on credit are unable to pay their mortgages, a lot of these subsidiary industries suffer. And in today's world, the subsidiary industries are located in various other countries in the world, all with their own companies and local workers. When you put such a large amount of money into one particular industry such as housing, which is experiencing a bubble, and you do not get repair when the correction comes, then all the other areas or industries that you have been putting money into at a lesser level become liabilities. And because you do not have the money anymore to be functional you declare bankruptcy. And a hole is now created.

A major fact in this system is that the big banking institutions get their money from the stock market, or more accurately, from investors who invest in them. Investors, of course, expect to be paid back. When a company cannot afford to pay such a large amount of money back to so many investors, there is a knock-on effect in all the other industries that investors have put their money in. The worried investors tend to withdraw from the stock market, which leaves all the other companies in the stock market without the money to conduct their own business in other areas of industry. So they too are forced to close up.

The fear now spreads to banking institutions that are not in any way connected with the housing industry. Can we lend money now to people to buy a car, they ask. Suppose they don't pay back? And they start to re-evaluate the potential of consumers to pay back their car loans. If they don't lend the money needed to buy a car, the demand for cars diminishes. This leads to less production by the car companies, because they are dependent on financial institutions to lend them money to make their cars. Because they make fewer cars, they begin to lay-off workers. And the workers now cannot afford to be the consumers they once were, because they have now lost their jobs. Those who bought homes or cars on credit can't pay their mortgages and so have to abandon their homes or cars to the bank or financial institution that gave them credit. And the knock-on effect goes on until it permeates the life of every individual dependent on his salary, making him unable to spend or buy as he did before.

This is the crisis.

We have already seen how a crisis in one large industry, such as housing, can lead to crisis in other industries as well. What we tend to ignore is the power of the American consumer to dictate the fortunes of individuals in other areas of the world. China's industries are already suffering because of the credit crisis in the U.S. The demand from American consumers, who make up their biggest customer base, is now dropping for the many products that the innumerable Chinese factories churn out.

China's factories came into existence in the first place to supply what the American consumers thought were necessities. But now suddenly with less money to indulge in things that they earlier thought were necessities, American consumers come to perceive them as unnecessary luxuries that they can't

afford. Consequently thousands of Chinese factory workers, working for comparatively much lower wages than their American counterparts – and without a similar access to credit – are, or will soon be, suddenly without jobs. The same applied to workers in India – in the I.T manufacturing and other industries. The all-pervasive American demand for their work is now gone, or is much less. And many families who did not depend on loans but on their hard-earned salaries to invest in their children’s education or their basic upkeep now find that the means to realize their plans or fulfill their dreams have evaporated.

We now know – some knew a long time ago – that the whole system of Western capitalism is flawed, in a very fundamental way. We also know that there is really no alternative to it since the collapse of communism, even in a quasi-socialist system with its evident inequities. What the world need now is a revamp of what the people of the U.S call’ the American Dream’. Americans- like people every where – need to be realistic about their goals and aspirations and question the diktats of what they are told by their captains of industry or political leasers with a healthy skepticism. We need to realize that buying and enjoying luxuries we can’t really afford on credit is a highly risky business.

The dependence of other countries’ economies on the largest, richest and most powerful customer base in the United States of America will not lessen for another 25 years. Or at least until the local demand and purchasing powering other emerging economies like China and India with their large populations – a substantial percentage of whom are still mired in poverty – outstrip those of the vast U.S. consumer base.

Hence the consequences of the American financial crisis will hit almost all countries in varying degrees. This is why they call it the global financial crisis.

**Courtesy: The New Leader Nov.08 issue**

**Let us Ponder and reflect:**

We are amused when we hear moulvis, priests, pandits and sadhus declare that their religion does not allow killing of innocent people. They claim that true Hindus, true Muslims and true Christians do not indulge in acts of terror. But all those arrested or found guilty of such acts claim to be devout persons. They justify their acts saying they were revenge killings. Thus the Malgaon attack is meant to avenge the Mumbai train blasts which, in turn were meant to avenge the Gujarat riots which were a “reaction” to the Godhra killings and the reaction go on and on. The question is: when and how will this cycle of reactions end? Will it not be proper for people and leaders from all walks of life to appeal to these men to stop the revenge hysteria?.

**CA.G.Xavier Fernando**

## **ARTICLES**

***This article is about the details of the severe credit, banking, currency, and trade crisis which emerged in September 2008. For background financial market events dating from July, 2007 chronicling the credit crisis which resulted from the subprime mortgage crisis, see financial crisis of 2007–2008***

The **global financial crisis of 2008** is a major financial crisis, the worst of its kind since the Great Depression which is ongoing as of mid-November 2008. It became prominently visible in September 2008 with the failure, merger or conservatorship of several large United States-based financial firms. The underlying causes leading to the crisis had been reported in business journals for many months before

September, with commentary about the financial stability of leading U.S. and European investment banks, insurance firms and mortgage banks consequent to the subprime mortgage crisis.

Beginning with failures of large financial institutions in the United States, it rapidly evolved into a global crisis resulting in a number of European bank failures and declines in various stock indexes, and large reductions in the market value of equities (stock) and commodities worldwide. The crisis has led to a liquidity problem and the de-leveraging of financial institutions especially in the United States and Europe, which further accelerated the liquidity crisis. World political leaders and national ministers of finance and central bank directors have coordinated their efforts to reduce fears but the crisis is ongoing and continues to change, evolving at the close of October into a currency crisis with investors transferring vast capital resources into stronger currencies such as the yen, the dollar and the Swiss franc, leading many emergent economies to seek aid from the International Monetary Fund. The crisis was triggered by the subprime mortgage crisis and is an acute phase of the financial crisis of 2007–2008.

### **Week of September 7, 2008**

#### *Main article: Federal takeover of Fannie Mae and Freddie Mac*

The United States director of the Federal Housing Finance Agency (FHFA), James B. Lockhart III, on September 7, 2008 announced his decision to place two United States Government sponsored enterprises (GSEs), Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), into conservatorship run by FHFA. United States Treasury Secretary Henry Paulson, at the same press conference stated that placing the two GSEs into conservatorship was a decision he fully supported, and said that he advised "that conservatorship was the only form in which I would commit taxpayer money to the GSEs." He further said that "I attribute the need for today's action primarily to the inherent conflict and flawed business model embedded in the GSE structure, and to the ongoing housing correction." The same day, Federal Reserve Bank Chairman Ben Bernanke stated in support: "I strongly endorse both the decision by FHFA Director Lockhart to place Fannie Mae and Freddie Mac into conservatorship and the actions taken by Treasury Secretary Paulson to ensure the financial soundness of those two companies."

### **Week of September 14, 2008**

#### **Major financial firm crisis**

On Sunday, September 14, it was announced that Lehman Brothers would file for bankruptcy after the Federal Reserve Bank declined to participate in creating a financial support facility for Lehman Brothers. The significance of the Lehman Brothers bankruptcy is disputed with some assigning it a pivotal role in the unfolding of subsequent events. The principals involved, Ben Bernanke and Henry Paulson, dispute this view, citing a volume of toxic assets at Lehman which made a rescue impossible. Immediately following the bankruptcy, J.P. Morgan provided the broker dealer unit of Lehman Brothers with \$138 billion to "settle securities transactions with customers of Lehman and its clearance parties" according to a statement made in a New York City Bankruptcy court filing.

The same day, the sale of Merrill Lynch to Bank of America was announced. The beginning of the week was marked by extreme instability in global stock markets, with dramatic drops in market values on Monday, September 15, and Wednesday, September 17. On September 16, the large insurer American International Group (AIG), a significant participant in the credit default swaps markets suffered a liquidity crisis following the downgrade of its credit rating. The Federal Reserve, at AIG's request, and after AIG has shown that it could not find lenders willing to save it from insolvency, created a credit facility for up to US\$85 billion in exchange for an 79.9% equity interest, and the right to suspend dividends to previously issued common and preferred stock.

#### **Money market funds insurance and short sales prohibitions**

On September 16, the Reserve Primary Fund, a large money market mutual fund, lowered its share price below \$1 because of exposure to Lehman debt securities. This resulted in demands from investors to return their funds as the financial crisis mounted. By the morning of September 18, money market sell orders from

institutional investors totalled \$0.5 trillion, out of a total market capitalization of \$4 trillion, but a \$105 billion liquidity injection from the Federal Reserve averted an immediate collapse. On September 19 the U.S. Treasury offered temporary insurance (akin to FDIC insurance of bank accounts) to money market funds. Toward the end of the week, short selling of financial stocks was suspended by the Financial Services Authority in the United Kingdom and by the Securities and Exchange Commission in the United States. Similar measures were taken by authorities in other countries. Some restoration of market confidence occurred with the publicity surrounding efforts of the Treasury and the Securities Exchange Commission.

### **Troubled Asset Relief Program**

*Main articles: Emergency Economic Stabilization Act of 2008 and Troubled Asset Relief Program*

On September 19, 2008, a plan intended to ameliorate the difficulties caused by the subprime mortgage crisis was proposed by the Secretary of the Treasury, Henry Paulson. He proposed a Troubled Asset Relief Program, later incorporated into the Emergency Economic Stabilization Act of 2008, which would permit for the United States government to purchase illiquid assets, also termed *toxic assets*, from financial institutions. The value of the securities is extremely difficult to determine.

Consultations between the Secretary of the Treasury, the Chairman of the Federal Reserve, and the Chairman of the U.S. Securities and Exchange Commission, Congressional leaders and the President of the United States moved forward plans to advance a comprehensive solution to the problems created by illiquid mortgage-backed securities. At the close of the week the Secretary of the Treasury and President Bush announced a proposal for the federal government to buy up to US\$700 billion of illiquid mortgage backed securities with the intent to increase the liquidity of the secondary mortgage markets and reduce potential losses encountered by financial institutions owning the securities. The draft proposal of the plan was received favorably by investors in the stock market. Details of the bailout remained to be acted upon by Congress.

### **Week of September 21, 2008**

On Sunday, September 21, the two remaining investment banks, Goldman Sachs and Morgan Stanley, with the approval of the Federal Reserve, converted to bank holding companies, a status subject to more regulation, but with readier access to capital. On September 21, Treasury Secretary Henry Paulson announced that the original proposal, which would have excluded foreign banks, had been widened to include foreign financial institutions with a presence in the US. The US administration was pressuring other countries to set up similar bailout plans.

On Monday and Tuesday during the week of September 22, appearances were made by the Secretary of the Treasury and the Chairman of the Board of Governors of the Federal Reserve before Congressional committees and on Wednesday a prime time presidential address was delivered by the President of the United States on television. Behind the scenes, negotiations were held refining the proposal which had grown to 42 pages from its original 3 and was reported to include both an oversight structure and limitations on executive salaries, with other provisions under consideration.

On September 25, agreement was reported by congressional leaders on the basics of the package; however, general and vocal opposition to the proposal was voiced by the public. On Thursday afternoon at a White House meeting attended by congressional leaders and the presidential candidates, John McCain and Barack Obama, it became clear that there was no congressional consensus, with Republican representatives and the ranking member of the Senate Banking Committee, Richard C. Shelby, strongly opposing the proposal. The alternative advanced by conservative House Republicans was to create a system of mortgage insurance funded by fees on those holding mortgages; as the working week ended, negotiations continued on the plan, which had grown to 102 pages and included mortgage insurance as an option. On Thursday evening Washington Mutual, the nation's largest savings and loan, was seized by the Federal Deposit Insurance Corporation and most of its assets transferred to JPMorgan Chase. Wachovia, one of the largest US banks, was reported to be in negotiations with Citigroup and other financial institutions.

## **Week of September 28, 2008**

Early into Sunday morning an announcement was made by the United States Secretary of the Treasury and congressional leaders that agreement had been reached on all major issues: the total amount of \$700 billion remained with provision for the option of creating a scheme of mortgage insurance.

It was reported on Sunday, September 28, that a rescue plan had been crafted for the British mortgage lender Bradford & Bingley. Grupo Santander, the largest bank in Spain, was slated to take over the offices and savings accounts while the mortgage and loans business would be nationalized.

Fortis, a huge Benelux banking and finance company was partially nationalized on September 28, 2008, with Belgium, the Netherlands and Luxembourg investing a total of €11.2 billion (US\$16.3 billion) in the bank. Belgium will purchase 49% of Fortis's Belgian division, with the Netherlands doing the same for the Dutch division. Luxembourg has agreed to a loan convertible into a 49% share of Fortis's Luxembourg division.

It was reported on Monday morning, September 29, that Wachovia, the 4th largest bank in the United States, would be acquired by Citigroup.

On Monday the German finance minister announced a rescue of Hypo Real Estate, a Munich-based holding company comprised of a number of real estate financing banks, but the deal collapsed on Saturday, 4 October.

The same day the government of Iceland nationalized Glitnir, Iceland's third largest lender.

Stocks fell dramatically Monday in Europe and the US despite infusion of funds into the market for short term credit. In the US the Dow dropped 777 points (6.98%), the largest one-day point-drop in history (but only the 17th largest percentage drop).

The U.S. bailout plan, now named the Emergency Economic Stabilization Act of 2008 and expanded to 110 pages was slated for consideration in the House of Representatives on Monday, September 29 as HR 3997 and in the Senate later in the week. The plan failed after the vote being held open for 40 minutes in the House of Representatives, 205 for the plan, 228 against. Meanwhile US stock markets suffered steep declines, the Dow losing 300 points in a matter of minutes, ending down 777.68, the Nasdaq losing 199.61, falling below the 2000 point mark, and the S.&P. 500 off 8.77% for the day.<sup>1</sup> By the end of the day, the Dow suffered the largest drop in the history of the index. The S&P 500 Banking Index fell 14% on September 29 with drops in the stock value of a number of US banks generally considered sound, including Bank of New York Mellon, State Street and Northern Trust; three Ohio banks, National City, Fifth Third, and KeyBank were down dramatically.

On Tuesday, September 30, stocks rebounded but credit markets remained tight with the London Interbank Offered Rate (overnight dollar Libor) rising 4.7% to 6.88%.

On Tuesday, September 30, 9 billion was made available by the French, Belgian and Luxembourg governments to the French-Belgian bank Dexia.

After Irish banks came under pressure on Monday, September 29, the Irish government undertook a two year "guarantee arrangement to safeguard all deposits (retail, commercial, institutional and inter-bank), covered bonds, senior debt and dated subordinated debt (lower tier II)" of 6 Irish banks: Allied Irish Banks, Bank of Ireland, Anglo Irish Bank, Irish Life and Permanent, Irish Nationwide and the EBS Building Society; the potential liability involved is about 400 billion dollars.

The United States Senate's version of the \$700 billion bailout plan, HR1424, modified to expand bank deposit guarantees to \$250,000 and to include \$100 billion in tax breaks for businesses and alternative energy, passed with bi-partisan support 74-25 on October 1st. Reaction in the House was mixed, but in a vote on Friday the House of Representatives passed the Emergency Economic Stabilization Act of 2008, as refashioned by the Senate, 263-171 in a bipartisan vote.

Discussions were ongoing in Europe regarding possible remedies for financial instability in Europe leading up to a conference Saturday afternoon in Paris hosted by Nicolas Sarkozy, president of France. UniCredit of Italy was reported to be the latest bank to come under pressure. During the night of October 2 Greece followed Ireland's lead and guaranteed all bank deposits.

On October 3 it was reported that Wachovia had rejected the previous offer from Citigroup in favor of acquisition by Wells Fargo, resulting in a legal dispute with Citigroup.

In Britain, the Financial Services Authority announced on October 3 that effective Tuesday, October 7, the amount of the guarantee of bank deposits would be raised to £50,000 from £35,000. On Friday, October 3, the government of the Netherlands took over the Dutch operations of Fortis, replacing the bailout plan of September 28.

### **Week of October 5**

Over the weekend and on Monday a major banking and financial crisis emerged in Iceland with its currency the krona, dropping 30% against the euro. At a meeting on Monday night emergency legislation was passed granting broad powers to the government to seize and regulate banks. The Landsbanki and Glitnir were seized, while Kaupthing was subjected to a rescue plan.

On October 6, the Icelandic Financial Supervisory Authority decided temporarily to suspend from trading on regulated markets all financial instruments issued by Glitnir banki hf., Kaupþing banki hf., Landsbanki Íslands hf., Straumur-Burðarás fjárfestingarbanki hf., Spron hf., and Exista hf.

Before the opening of the business day, October 6. BNP Paribas, the French bank, assumed control of the remaining assets of Fortis following Dutch nationalization of the operations of the bank in The Netherlands. Denmark, Austria, and possibly Germany clarify, joined Ireland and Greece in guaranteeing bank deposits on Monday, October 6. Following this, the FTSE100 index of leading British shares took its worst one-day hit in history. A banking Bill easing rescues is slated for introduction in the British Parliament on Tuesday, October 7. On 6 October German chancellor Angela Merkel pledged that the government would guarantee all German private bank savings. The government also announced a revised bailout plan for German mortgage lender Hypo Real Estate (HRE). On Monday, October 6, the Dow Jones Industrial Average closed below 10,000, a drop of 30% from its high above 14,000 a year earlier on October 9, 2007. In Brazil and Russia trading was suspended on Monday following dramatic drops in their markets.

On October 7, the Icelandic Financial Supervisory Authority took control of Landsbanki. On the same day, the Central Bank of Iceland announced that Russia had agreed to provide a €4 billion loan, however this was soon denied by Russian authorities, and the Icelandic Finance Minister had to correct the earlier announcement and now stated that discussions had been initiated with Russia on providing a loan to Iceland. This was also denied by Russian Deputy Finance Minister Dmitry Pankin. Late in the evening, however, Russia's Finance Minister Alexei Kudrin did concede that a request had been received, to which Russia was positive, and that discussions on financial matters would be conducted later in the week when an Icelandic delegation was expected to arrive in Moscow. Standard & Poor's also cut Iceland's foreign-currency sovereign credit rating from A-/A-2 to BBB/A-3 and local-currency sovereign credit rating from A+/A-1 to BBB+/A-2. S&P also lowered Iceland's banking industry country risk assessment from group 5 to group 8, worrying that "In a severe recession scenario, the cumulative amount of nonperforming and restructured loans could reach 35% to 50% of total outstanding loans in Iceland.

On October 7 the Federal reserve announced formation of a Commercial Paper Funding Facility (CPFF) which will serve as a funding backstop to facilitate the issuance of term commercial paper by eligible issuers. Several countries announced new or increased deposit guarantees: Taiwan outlined plans to double the guarantee to NT\$3 million (\$92,000) and the European Union agreed to increase guarantees across the EU to at least €50,000 per saver. Several EU states then announced increases on top of this minimum: Netherlands, Spain, Belgium, and Greece each announced they would guarantee up to €100,000.

The government of Britain announced on the morning of Wednesday, October 8 that it would make £25 billion available as "Tier 1 capital" (preference share capital or "PIBS" [Permanent Interest-Bearing Securities]) to the following financial institutions: Abbey, Barclays, HBOS, HSBC Bank plc, Lloyds TSB, Nationwide Building Society, Royal Bank of Scotland, and Standard Chartered as part of a bank rescue package. An additional £25 billion was scheduled to be made available to other financial institutions, including British subsidiaries of foreign banks. "In reviewing these applications the Government will give due regard to an institution's role in the UK banking system and the overall economy". The plan included increased ability to borrow from the government, offered assistance in raising equity, and a statement of support for international efforts. The plan has been characterized as partial nationalization.

On Wednesday, October 8, the European Central Bank, Bank of England, Federal Reserve, Bank of Canada, Swedish Riksbank and Swiss National Bank all announced simultaneous cuts of 0.5% to their base rates at 11:00 UTC. Shortly afterwards, the Central Bank of the People's Republic of China also cut interest rates. On October 8 there were sharp losses on stock markets worldwide with a loss of over 9% in Japan. Trading was suspended in Russia and Indonesia after steep morning losses. In the United States, following the funds cut by the Federal Reserve, stocks were volatile, finishing down. On October 8 the Federal Reserve loaned AIG \$37.8 billion, in addition to the previous loan of \$85 billion.

On Wednesday night, October 8, the Central Bank of Iceland abandoned its attempt to peg the Icelandic króna at 131 króna to the euro after trying to set this peg on Monday, October 6. By Thursday October 9, the Icelandic króna was trading at 340 to the euro when the government suspended all trade in the currency.

On Thursday, October 9, the Icelandic Financial Supervisory Authority took control of the country's biggest bank Kaupþing banki hf.. This occurred when the Kaupthing Board resigned and asked the national authorities to take control. This came about when "Britain transferred control of the business of Kaupthing Edge, its Internet bank, to ING Direct and put Kaupthing's UK operations into administration" placing Kaupthing in technical default according to loan agreements. This marked an escalating row between Iceland and the United Kingdom over the growing crisis. All trade was also suspended on the Iceland Stock Exchange until Monday October 13.

On Thursday, October 9, the one-year anniversary of the Dow's peak, the cost of short term credit rose while there were heavy losses in the United States stock market; the Dow dropped below 8600, reaching a five year low. It was the first time since August 2003 that the Dow closed below 9000; losses were moderate in Europe. The following day, Friday, October 10, there were large losses in Asian and European markets Yamato Life filed for bankruptcy. Beset by falling commodities prices, Russia's stock markets remained closed on October 10. The Russian Parliament passed a plan authorizing lending of \$36 billion gained from global oil sales to banks which met creditworthiness requirements. Special attention is being paid to shoring up Rosselkhozbank, the bank which provides credit to the reviving agricultural sector. The amount of funds available is limited due to falling oil prices. The government of the United States, as authorized by the Emergency Economic Stabilization Act, announced plans to infuse funds into banks by purchasing equity interests in them, in effect, partial nationalization, as done in Britain. The Treasury secretary Henry M. Paulson Jr. met Friday in Washington with world financial leaders. A meeting of international financial leaders hosted by President Bush at the White House in Washington is planned on Saturday to attempt to coordinate global response to the financial crisis. The annual meetings of both the International Monetary Fund and World Bank was scheduled to be held in Washington over that weekend.

On Friday, October 10th, stock markets crashed across Europe and Asia. London, Paris and Frankfurt dropped 10% within an hour of trading and again when Wall Street opened for trading. Global markets have experienced their worst weeks since 1987 and some indices, S&P 500, since the Wall Street Crash of 1929.

On October 10th, within the first five minutes of the trading session on Wall Street, the Dow Jones Industrial Average plunged 697 points, falling below 7900 to its lowest level since March 17, 2003. Later in the afternoon, the Dow made violent swings back and forth across the breakeven line, toppling as much as 600 points and rising 322 points. The Dow ended the day losing only 128 points, or 1.49%. Trading on New York Stock Exchange closed for the week with the Dow at 8,451, down 1,874 points, or 18% for the week, and after 8 days of losses, 40% down from its record high October 9, 2007. Trading on Friday was

marked by extreme volatility with a steep loss in the first few minutes followed by a rise into positive territory, closing down at the end of the day. In S&P100 some financial corporate showing signals upwards also. President George W. Bush reassured investors that the government will solve the financial crisis gripping world economies.

The bonds of the bankrupt Lehman Brothers were auctioned on Friday, October 10. They sold for a little over 8 cents on the dollar. Many of the bonds of Lehman Brothers were insured with credit default swaps. Apprehension that payments to the holders of Lehman bonds might severely damage the firms or hedge funds which issued the swaps proved unfounded, despite anticipated claims estimated to be several hundred billion dollars, as countervailing claims canceled each other out resulting in only 5.2 billion dollars changing hands.

As meetings proceeded with global financial leaders in Washington on Saturday, October 11, the United States government announced a change in emphasis in its rescue efforts from buying illiquid assets to recapitalizing banks, including strong banks, in exchange for preferred equity; and purchase of mortgages by Fannie Mae and Freddie Mac. These remedies can be put into effect quicker than the prior plan which was estimated to take a month to set into operation.

### **Week of October 12**

On Sunday the British government was in negotiations with Royal Bank of Scotland, HBOS, Lloyds TSB and Barclays, major British banks, regarding recapitalization which would give the British government a substantial equity interest. An investment of more than 37 billion pounds is contemplated. Some purchases would be common stock with existing shareholders given a right of first refusal (the government would only purchase the shares if existing shareholders did not). Previously announced recapitalization plans contemplated only purchases of preferred equity without government participation in governance of the banks, however, as the financial emergency has rapidly developed, more aggressive measures are being advanced. On Sunday, October 12, European leaders, meeting in Paris, led by France and Germany, announced recapitalization plans for Europe's banks. Plans were announced to guarantee bank deposits for five years. European countries would finance their own rescue plans and tailor them to local conditions. Mechanisms are also planned to increase the availability of short term credit. The total rescue plan totaled €1 trillion. Australia and New Zealand also announced bank guarantee plans. On Monday, October 13, the markets were closed in Japan and the bond market was closed in the United States.

On Sunday, in Norway, which is not in the euro zone, the Norwegian cabinet in a hastily called press conference announced a US\$57.4 billion (350 billion Norwegian kroner) plan of offering Norwegian banks new government bonds. This came three days ahead of Wednesday's hastened interest rate meeting at Norges Bank to decide whether or not to announce rate cuts similar to the coordinated cuts of October 8. Central bank Governor Svein Gjedrem also made critical comments about some of the measures that had been implemented already by other countries, among them the concerted rate cuts which he said "was a strong card, which had a two-hour impact". He further commented that "It's important to be careful with measures – so that one addresses the problems one really faces," and he also emphasized that acting at the right time was important saying "there are unusually many examples that show one can do too much too early." He cited the Icelandic government's takeover of banks as an example of quick action with no guarantee that the problems would be solved.

The G7 nations, at their meeting in Washington over the weekend pledged to "support systemically important financial institutions and prevent their failure". This decision is based on analysis of the consequences of the bankruptcy of Lehman Brothers which resulted in the loss of funds by other financial institutions. It is thought that those losses may have triggered a tightening of the credit crunch as banks ceased to lend to one another. No enforceable mechanism was created to support the pledge, but it is believed to extend to major firms such as Morgan Stanley and Goldman Sachs.

On October 13 stock markets worldwide rose with the Dow Jones industrial average showing a 400 point leap at the start of trading. At the close of trading the average was up 936 points, a record climb, up 11%, closing above 9,000 at 9,387. After announcement in France of a 320 billion euro rescue and guarantee plan, French CAC40 rose by 11.18% within the day. Germany announced a €400 billion plan. On Monday

the International Monetary Fund offered possible technical and financial aid to Hungary which has suffered during the crisis due to the flight of investors to euro, Swiss franc, and dollar denominated investments. As in the rest of the world, on Monday stock prices rose on the Hungarian exchange and pressure on the national currency, the forint eased. The forint has dropped 30% against the dollar since July. The prime minister of Spain, Jose Luis Rodriguez Zapatero, announced that Spain would provide up to €100 billion of guarantees for new debt issued by commercial banks in 2008. This plan followed a meeting at the eurozone summit over the weekend to try to develop a coordinated effort to combat the credit crisis. The UK government started the nationalization process by injecting £37 billion in the nation's three largest banks. The UK government would end up owning a majority share in the Royal Bank of Scotland (RBS) and over a 40% share in Lloyds and HBOS. In return for the bailout, the banks agreed to cancel dividend payments until the loans are repaid, have board members appointed by the Treasury, and limit executive pay. The European Central Bank attempted to revive credit market by weekly injections of unlimited euro funds at an interest rate of 3.75%. The ECB president, Jean-Claude Trichet, was also contemplating relaxing the collateral standards to make the funds more accessible to banks. Following its European partners, Italy pledged to intervene as necessary to prevent any bank failures in its country. Finance minister, Giulio Tremonti, said Italy would guarantee new bank bonds of up to 5 years until the end of 2009 and the Bank of Italy would provide €40 billion in treasury bills to banks to refinance inferior assets that can not be currently used as collateral. In coordination with other eurozone countries, the Dutch government announced that it would guarantee interbank lending up to €200 billion. This followed the set up of a €20 billion Dutch fund to help recapitalize banks and insurers.

On Tuesday the United States announced a plan to take an equity interest of \$250 billion in US banks with 25 billion going to each of the four largest banks. The 9 largest banks in the US: Goldman Sachs, Morgan Stanley, J.P. Morgan, Bank of America, Merrill Lynch, Citigroup, Wells Fargo, Bank of New York Mellon and State Street were called in to a meeting on Monday morning and pressured to sign; all eventually agreed. The plan will be open to any bank for 30 days. The equity interests purchased by the government are preferred shares that pay 5% but rise to 9% after 5 years; it is expected that the companies will repurchase this interest when they can raise private capital to do so. The plan also includes an option allowing the government to purchase common stock according to a formula which could return substantial profit to the taxpayers should the stock price of the companies substantially appreciate. The total liability assumed is \$2.25 trillion including a \$1.5 trillion guarantee of new senior debt issued by banks and a \$500 billion guarantee of deposits in noninterest-bearing accounts (business accounts used to pay current obligations such as payroll). The theory is that with additional capitalization and the guarantees, banks will be willing to resume a normal lending pattern with each other and borrowers.

Also on that day, United Arab Emirates' (UAE) ministry of finance added a \$19 billion liquidity injection to domestic banks bringing the total dollars injected to \$32.7 billion. The UAE central bank offered 13.6 billion in liquidity to help domestic banks in September. To protect local deposits, the UAE government guaranteed all deposits and interbank lending. Japan announced a plan that will help steady the Japanese market and avoid the worse of the credit crisis. Among the measures included are lifting restrictions on companies buying back their shares, strengthening disclosure on short selling, and the temporary suspension of the sale of government-owned stocks. The Australian government unveiled a \$10.4 billion stimulus package. The Economic Security Strategy is designed to help pensioners, low and middle income families, and first time home buyers withstand the credit crisis and global economic slowdown. This followed the Australian government announcing that it would guarantee all bank deposits for three years, guarantee all term wholesaling funding by Australian banks in international markets and double its planned purchase of residential mortgage backed securities. The Icelandic stock exchange began trading again after a three day shutdown. The opening did not include Iceland's three largest banks which were nationalized last week.

On Wednesday, October 15, the London stock exchange FTSE 100 fell substantially, surrendering over 314 points to slip down 7.16 percent. The losses precipitated more losses in the U.S., as the Dow Jones Industrial Average suffered its largest drop in terms of percentage since 1987, falling over 733 points. The NASDAQ plunged almost eight and a half percent, and the Standard & Poor collapsed down over nine percent.

On October 16, a rescue plan was announced for the Swiss banks UBS and Credit Suisse. Recapitalization involved Swiss government funds, private investors, and the sovereign wealth fund of Qatar. A Swiss agency was set up to purchase and workout toxic funds. UBS had suffered substantial withdrawals by domestic Swiss depositors but still reported profits; Credit Suisse has reported losses. Most large banks in the United States continued to report large losses.

### **Week of October 19**

Following a conference at Camp David over the weekend of October 18th and 19th attended by President Nicolas Sarkozy of France and José Manuel Barroso, President of the European Commission, President George W. Bush announced on Wednesday, October 22 that he would host an international conference of financial leaders on November 15 in Washington, D.C. Participants would be drawn from both the developed world and the developing world, including participants from the G20 industrial nations such as India, Brazil and China.

On Sunday, October 19 the government of the Netherlands bailed out ING, the Dutch bank, with a €10 billion capital rescue plan. On Monday the government of Belgium rescued the insurance company Ethias with a €1.5 billion capital injection. In Germany BayernLB has decided to apply for funds from the German €500 billion rescue program. Sweden announced formation of a 1.5 trillion kronor fund to support inter-bank lending and a 15 billion kronor capital injection plan. Swedish banks were reported to be increasingly affected by the financial crisis. An IMF rescue plan for Iceland was reported to be near finalization while Ukraine was reported to be in discussions with the IMF. Iceland was reported to have also received assistance from Denmark and Norway while Britain has offered a loan to support compensation of British depositors in failed Icelandic bank Landsbanki. On Monday France announced a €10.5 billion rescue plan for six of its largest banks, including Crédit Agricole, BNP and Société Générale.

Despite some improvement in the availability of credit, stock markets and weak currencies such as the British pound and the euro continued to decline worldwide during the week of October 19. Markets across Asia suffered particularly heavy losses while European markets experienced substantial losses too, but to a lesser extent compared to those in Asia. The Dow Industrials Index, on the other hand, experienced a week of extreme volatility with violent swings both upwards and downwards, eventually ending lower. The yen and the dollar showed particular strength with the yen rising with respect to the dollar. This "flight to quality" had baleful effects on the economies of all nations including the United States and Japan. On Wednesday, Pakistan joined Iceland, Hungary, Serbia and Ukraine and requested aid from the International Monetary Fund in dealing with severe balance of payments difficulties. Hungary, Russia, Ukraine, Pakistan, Turkey, South Africa, Argentina, Iceland, Estonia, Latvia, Lithuania, Romania and Bulgaria are all experiencing financial difficulties with others threatened. These countries did not hold securities based on subprime mortgages, but are affected by inability to borrow money, the credit crisis. Plans are under discussion to increase credit available to the IMF, perhaps to a trillion dollars.

On Friday, October 24, stock markets plummeted worldwide amidst growing fears among investors that a deep global recession is imminent if not already settled in. The panic was partly fueled by remarks made by Alan Greenspan that the crisis is "a one in a century credit tsunami" and by comments made by Gordon Brown during a speech, admitting essentially that Great Britain is already in recession mode. Following the trend, the US stock markets also fell sharply on opening and ended with the Dow Industrial Index down 312 points. Friday and Saturday (October 24 and 25) the 7th Asia-Europe Meeting was held in Beijing with the European Union meeting Asian states in an attempt to discuss a common approach ahead of the Emergency International Meeting that is scheduled to take place in Washington on November 15. No specific recommendations to solve the crisis were developed.

### **Week of October 26**

On Sunday, October 26, Hungary and Ukraine made tentative arrangements with the International Monetary Fund for emergency aid packages. In Poland the value of stocks has fallen 50% for the year and the zloty, the Polish currency, has fallen against both the dollar and the euro. The crisis has affected South Africa, Brazil and Turkey. South Africa was particularly affected by a dramatic drop in the price of platinum, a commodity used in automobile manufacturing. In addition to Iceland, Ukraine and Hungary,

Belarus and Pakistan are also engaged in emergency discussions with the IMF. Pakistan has what is described as a "growing balance of payments crisis". In the Gulf states, impacted by the falling price of oil and a drop in equities prices of 40% for the year, the Gulf Cooperation Council met in Riyadh on Saturday to discuss a coordinated response to the crisis.

On Monday, October 27, Hong Kong stocks crashed, losing more than 12% of their value while in Japan, the Nikkei 225 Index plummeted by 6.4% to its lowest level since 1982. European stock markets showed mixed results. After suffering an initial drop, the Dow Jones Industrial Average was in slightly positive territory for much of the trading day but eventually closed down 203 points. Oil futures continued to decline and the yen continued to rise against all other currencies. There was consideration given by both the G7 and the Japanese government to take measures to support other currencies as against the yen.<sup>1</sup>

In a second round of recapitalization, the U.S. Treasury has funded 22 banks with 38 billion dollars. The list of banks aided was confidential, but some banks including BB&T, Capital One, SunTrust Banks, City National Bank, Comerica, First Niagara Bank, Huntington Bancshares, Northern Trust, State Street Corporation, UCBH Holdings, First Horizon National Corporation, PNC Financial Services (buyer of the National City Corporation), Regions Financial Corporation, Valley National Bancorp KeyBank, and Washington Federal Savings said they would receive government money. Fifth Third Bank announced that they would apply. Criteria for funding was based on the strength of the bank with stronger banks with higher CAMELS ratings having a greater chance of being offered aid. The American Bankers Association stated that due to restrictions on salaries and payment of dividends that some U.S. banks may not participate. Another concern was that acceptance of the recapitalization plan might give a false signal that a bank was troubled.

On Tuesday, October 28, stocks rose dramatically worldwide in anticipation of rate cuts by central banks. In the U.S. the Dow Industrial Average rose 10.8%, closing at over 9000. On Wednesday, October 29, markets in the U.S. closed down slightly despite announcement by the Federal Open Market Committee of a reduction in the federal funds rate 50 points to 1 percent. Markets in the U.S. were up Thursday and Friday, closing up for the week, cutting losses to the Dow Industrial Average during October to 17%, down 30% for the year.

In Russia the \$50 billion rescue program administered by the state development bank Vnesheconombank (VEB) is assisting Russian firms controlled by Russian oligarchs who gave ownership of portions of their companies as security for loans from Western financial institutions. Recipients include Oleg Deripaska of Rusal owner of Norilsk Nickel and Mikhail Fridman of Alfa Group whose assets VimpelCom and TNK-BP were threatened. Stock markets in Russian have crashed, down 70% and there is lack of faith in its currency the ruble. Despite significant foreign reserves from the sale of oil, Russia is now faced with sharply reduced commodities prices.

In Asia Japan announced its second economic stimulus plan of \$51 billion on Thursday, October 30. Hong Kong and Taiwan cut interest rates while an interest cut to .3% was announced by the Bank of Japan on Friday. Also on Thursday the Federal Reserve established a \$30 billion currency swap line with South Korea and Singapore as well as Brazil and Mexico.

JPMorgan Chase, the largest bank in the United States, announced that it would work with homeowners who demonstrate a willingness to pay their mortgages by reducing interest payments or principal. Counseling centers are planned for troubled areas. Washington Mutual, and EMC Mortgage Corporation, a loan servicing company, acquired by JPMorgan, will be included. Bank of America has announced a similar program, as has Countrywide Financial as the result of a court settlement.

## **Week of November 2**

### **Reports of economic activity**

October sales of cars and light trucks in the United States fell precipitously in 2008 when compared with sales in October 2007, with General Motors falling 45%, Ford falling 30%, Chrysler falling 35%, Toyota falling 23%, Honda falling 25%, and Nissan falling 33%. Much of the falloff in sales was attributable to customers being unable to arrange financing. Except for Wal-Mart, which posted a slight gain, retail sales were off during October, 2008 as compared with October, 2007 in the United states with some moderate

priced stores reporting double digit decreases. October retail sales were down 4.1% from October, 2007 and down 2.8% from September, 2008 with sales of cars and auto parts leading the way with a 23.4% decline from October, 2007, and a 31.9% decline from September, 2008.

Employment reports released by the Labor Department on Friday, November 7, showed that about 500,000 jobs were lost in the United States during September and October, 2008 with unemployment rising to 6.5% at the end of October. The September figure was revised to 284,000 from the initial 159,000 reported. The initial October figure was 240,000. This is a substantial acceleration from the average 75,000 jobs lost each month since the beginning of 2008. It is anticipated by experts that unemployment will rise to 8% by the middle of 2009.

In the UK car sales fell by 23% in October, following a 21% decline in September.

### Events

Amid predictions of a "deep recession" in the UK and the Eurozone, on Thursday, November 6, the Bank of England, citing a reduced danger of inflation due to falling commodities prices, lowered its base rate by 1.5 percentage points, from 4.5% to 3%. This was accompanied by a 50 basis point drop in the base rate to 3.25% by the European Central Bank (ECB).

On November 6, the IMF at Washington, D.C., predicted for 2009 a worldwide -0.3% decrease of the BIP for the developed economies (-0.7% for the USA and -0.8% for Germany).

### Week of November 9



George W. Bush addressing a Manhattan Institute-sponsored event at Federal Hall on November 13, 2008, speaking against too much government involvement in resolving the crisis.

On Sunday, November 9, the People's Republic of China announced a \$586 billion domestic stimulus package for the remainder of 2008, 2009, and 2010. Economic growth in China with sharp drops in property and stock values. The money from the stimulus package will be spent on upgrading infrastructure, particularly roads, railways, airports and the power grids throughout the country and raise rural incomes via land reform. Also spending will be made on social welfare projects such as affordable housing and environmental protection. Some Chinese factories engaged in low-end export manufacturing have gone out of business.<sup>1</sup>

On Monday, November 10, the US Treasury announced investment of 40 billion dollars in preferred stock of AIG, adjusting the terms of the existing credit line and its amount. Total exposure, including equity and debt, is now 150 billion dollars. Funds were drawn from the Troubled Asset Relief Program which was not available at the time of the original bailout of AIG. The question of whether emergency funding would be made available to the troubled American auto industry remained under consideration. General Motors is the most threatened with a sharp drop in sales and diminishing cash reserves.

On Wednesday, November 12, US Treasury Secretary Henry Paulson scrapped the original Troubled Asset Relief Program (TARP) and announced shift in the focus to consumer lending. The remaining portion of the TARP budget will be used to help relieve pressure on consumer credits such as car loans, student loans, credit cards etc.

On Thursday November 13, the Dow Jones Industrial Average marked another dramatic session, with the index (opening at 8,282.66) that after a mixed start tumbled again below the 8,000 mark (to a low of 7,965.42) but then reversed the trend and gained more than 900 points (fourth largest daily swing ever) in less than three hours closing at 8,835.25 with a net gain of more than 550 points (third largest ever).

The prospect of a federal bailout of failing US automakers appeared dim pending the inauguration of Barack Obama. There appeared to be opposition from both the Republican members of the Senate and the office of the incumbent president, George W. Bush, which expressed doubt that the companies could be salvaged.

At the invitation of US President George W. Bush the leaders of the G-20 held the initial session of the Summit on Financial Markets and the World Economy on Saturday, November 15, in Washington, D.C. They agreed to cooperate with respect to the global financial crisis and issued a statement regarding immediate and medium term goals and actions considered necessary to support and reform the international economy. The next session will be held April 30, probably in London, after Barack Obama takes office as President of the United States. The initial session, attended by the leaders of the G-20 set forth a road map of proposed reforms which will be followed up in coming months by the development of specific proposals, including a comprehensive reform of the Bretton **Week of November 16**

### **Reports of economic activity**

In the third quarter of 2008 the gross domestic product of Japan fell 0.4% following a 3.7% drop in the second quarter. Similar reports of recession level economic activity had been released previously by Hong Kong, Germany and the European Union. It was widely anticipated that economic activity in the United States would be found to be at recession levels when statistics were released.

### **Events**

On Wednesday, November 19, proposed federal bailouts of US auto makers failed with Republican senators rejecting the Democratic plan and Democratic senators rejecting the Republican plan. Negotiations continued with the Democrats requesting a plan for viability from the automakers.

On Wednesday, November 19, the Dow Jones Industrial Average fell sharply by 427.47 points or 5.07%, closing below 8,000 points for the first time since March 2003. United States financial stocks led the way with Citigroup showing a 23% drop. The UK FTSE100 fell by about the same percentage, closing just above 4000. The BBC Global 30, combining Europe, Asia and North America in a single index, fell by 5.1%. On Thursday, November 20, the Dow Jones Industrial Average plunged another 445 points in the last minutes of the trading session, closing at 7,552. This is its lowest point in six years. Shares in Citigroup plummeted another 26% with drops of more than 10% in the shares of other major US financial institutions.

### **Key risk indicators in September 2008**

The TED spread – an indicator of credit risk – increased dramatically during September 2008.

Key risk indicators became highly volatile during September 2008, a factor leading the U.S. government to pass the Emergency Economic Stabilization Act of 2008. The “TED spread” is a measure of credit risk for inter-bank lending. It is the difference between: 1) the risk-free three-month U.S. treasury bill rate; and 2) the three-month London InterBank Offered Rate (LIBOR), which represents the rate at which banks typically lend to each other. A higher spread indicates banks perceive each other as riskier counterparties. The t-bill is considered "risk-free" because the full faith and credit of the U.S. government is behind it; theoretically, the government could just print money so that the principal is fully repaid at maturity. The TED spread reached record levels in late September 2008. The diagram indicates that the Treasury yield movement was a more significant driver than the changes in LIBOR. A three month t-bill yield so close to zero means that people are willing to forgo interest just to keep their money (principal) safe for three months – a very high level of risk aversion and indicative of tight lending conditions. Driving this change

were investors shifting funds from money market funds (generally considered nearly risk free but paying a slightly higher rate of return than t-bills) and other investment types to t-bills. These issues are consistent with the September 2008 aspects of the subprime mortgage crisis which prompted the Emergency Economic Stabilization Act of 2008 signed into law by the U.S. President on October 2, 2008.

In addition, an increase in LIBOR means that financial instruments with variable interest terms are increasingly expensive. For example, car loans and credit card interest rates are often tied to LIBOR; some estimate as much as \$150 trillion in loans and derivatives are tied to LIBOR. Higher interest rates place additional downward pressure on consumption, increasing the risk of recession.

### **Global responses**

#### **Responses by the UK and US in proportion to their GDPs**

#### **China responses**

On September 15, 2008 China cut its interest rate for the first time since 2002. Indonesia reduced its overnight repo rate, at which commercial banks can borrow overnight funds from the central bank, by two percentage points to 10.25 percent. The Reserve Bank of Australia injected nearly \$1.5 billion into the banking system, nearly three times as much as the market's estimated requirement. The Reserve Bank of India added almost \$1.32 billion, through a refinance operation, its biggest in at least a month. on 9 November 2008 the 2008 Chinese economic stimulus plan is a RMB¥ 4 trillion (\$586 billion) stimulus package announced by the central government of the People's Republic of China in its biggest move to stop the global financial crisis from hitting the world's fourth largest economy. A statement on the government's website said the State Council had approved a plan to invest 4 trillion yuan (\$586 billion) in infrastructure and social welfare by the end of 2010.[4][3] The stimulus package will be invested in key areas such as housing, rural infrastructure, transportation, health and education, environment, industry, disaster rebuilding, income-building, tax cuts, and finance.[5]

China's export driven economy is starting to feel the impact of the economic slowdown in the United States and Europe, and the government has already cut key interest rates three times in less than two months in a bid to spur economic expansion.

The stimulus package was welcomed by world leaders and analysts as larger than expected and a sign that by boosting its own economy, China is helping to stabilize the global economy. News of the announcement of the stimulus package sent markets up across the world

In Taiwan territory, the central bank on September 16, 2008 said it would cut its required reserve ratios for the first time in eight years. The central bank added \$3.59 billion into the foreign-currency interbank market the same day. Bank of Japan pumped \$29.3 billion into the financial system on September 17, 2008 and the Reserve Bank of Australia added \$3.45 billion the same day. The European Central Bank injected \$99.8 billion in a one-day money-market auction. The Bank of England pumped in \$36 billion. Altogether, central banks throughout the world added more than \$200 billion from the beginning of the week to September 17.

On September 29, 2008 the Belgian, Luxembourg and Dutch authorities partially nationalized Fortis. The German government bailed out Hypo Real Estate.

#### **U.S. responses**

The Federal Reserve, Treasury, and Securities and Exchange Commission took several steps on September 19 to intervene in the crisis. To stop the potential run on money market mutual funds, the Treasury also announced on September 19 a new \$50 billion program to insure the investments, similar to the Federal Deposit Insurance Corporation (FDIC) program. Part of the announcements included temporary exceptions to section 23A and 23B (Regulation W), allowing financial groups to more easily share funds within their group. The exceptions would expire on January 30, 2009, unless extended by the Federal Reserve Board. The Securities and Exchange Commission announced termination of short-selling of 799 financial stocks, as well as action against naked short selling, as part of its reaction to the mortgage crisis.

## Loans to banks for asset-backed commercial paper

During the week ending September 19, 2008, money market mutual funds had begun to experience significant withdrawals of funds by investors. This created a significant risk because money market funds are integral to the ongoing financing of corporations of all types. Individual investors lend money to money market funds, which then provide the funds to corporations in exchange for corporate short-term securities called asset-backed commercial paper (ABCP). However, a potential bank run had begun on certain money market funds. If this situation had worsened, the ability of major corporations to secure needed short-term financing through ABCP issuance would have been significantly affected. To assist with liquidity throughout the system, the Treasury and Federal Reserve Bank announced that banks could obtain funds via the Federal Reserve's Discount Window using ABCP as collateral.

## Federal Reserve actions to lower interest rates and stimulate the economy

Federal reserve rates changes ( Just data after January 1, 2008 )					
Date	Discount rate	Discount rate	Discount rate	Fed funds	Fed funds rate
		Primary	Secondary		
	rate change	new interest rate	new interest rate	rate change	new interest rate
Oct 8, 2008*	-.50%	1.75%	2.25%	-.50%	1.50%
Apr 30, 2008	-.25%	2.25%	2.75%	-.25%	2.00%
Mar 18, 2008	-.75%	2.50%	3.00%	-.75%	2.25%
Mar 16, 2008	-.25%	3.25%	3.75%		
Jan 30, 2008	-.50%	3.50%	4.00%	-.50%	3.00%
Jan 22, 2008	-.75%	4.00%	4.50%	-.75%	3.50%

- \* Part of a coordinated global rate cut of 50 basis point by main central banks

- See more detailed US federal discount rate chart:

## Legislation

*Main article: Emergency Economic Stabilization Act of 2008*

The Secretary of the United States Treasury, Henry Paulson and President George W. Bush proposed legislation for the government to purchase up to US\$700 billion of "troubled mortgage-related assets" from financial firms in hopes of improving confidence in the mortgage-backed securities markets and the financial firms participating in it. Discussion, hearings and meetings among legislative leaders and the administration later made clear that the proposal would undergo significant change before it could be approved by Congress. On October 1, a revised compromise version was approved by the Senate with a 74-25 vote, the sole Senator not to vote was cancer-stricken Ted Kennedy of Massachusetts. The bill, HR1424 was passed by the House on October 3, 2008 and signed into law.

## Fed response

In an effort to increase available funds for commercial banks and lower the fed funds rate, on September 29 the U.S. Federal Reserve announced plans to double its Term Auction Facility to \$300 billion. Because there appeared to be a shortage of U.S. dollars in Europe at that time, the Federal Reserve also announced it would increase its swap facilities with foreign central banks from \$290 billion to \$620 billion.

## UK Responses

On the October 8, 2008 the British Government announced a bank rescue package of around £500 billion (\$850 billion at the time). The plan comprises three parts. First, £200 billion will be made available to the banks in the Bank of England's Special Liquidity scheme. Second, the Government will increase the banks' market capitalisation, through the Bank Recapitalisation Fund, with an initial £25 billion and another £25 billion to be provided if needed. Third, the Government will temporarily underwrite any eligible lending between British banks up to around £250 billion.

\* \* \*

## The future of communications

**Lightweight, viral systems that grow with use will define how we keep in touch in the years to come**

Late last week I spoke with Andy Lippman about the future of communications.

Co-director of MIT's Communications Futures Program and associate director of the MIT Media Lab from 1983 to 2001, Lippman is a deep thinker. And for the past 30 years, Lippman has been thinking deeply about personal communications and computing. As you might expect, Lippman took the conversation to some heady places:



"A lot of people are thinking about telepresence: feeling what is happening remotely...almost like being there."

"When things are connected, all things become opportunities for services."  
"We will see real-world mashups between people, between people and machines, and machines talking to machines."

But you would be wrong to think that Lippman has his head in the clouds. Holding 11 patents, mainly related to TV and radio signals, Lippman is currently on a year-long sabbatical, working with Nortel's R&D group as a visiting fellow. Moreover, he was deeply involved in creating Nortel's Wireless Mesh Network Solution through MIT.

So what I enjoyed most about our conversation is Lippman's ability to switch between the highly practical, applied science, to the way-out stuff such as telepresence and hyperconnectivity.

"Hyperconnectivity is where the person is fully in the loop," Lippman says. "It will allow you to control stuff on Mars or do surgery from 3,000 miles away."

Funded by commercial companies, the MIT Media Lab came up with the novel idea of creating a consortium. That way, it does not have to apply for funding from each company individually.

"We owe our soul to none of them or all of them collectively," Lippman says, adding that this has allowed the lab to choose research topics that its members feel passionate about.

Of late, Lippman and his students have been working on "viral" communications -- systems that are agile, light on infrastructure, and optimized for invention. He calls such systems viral because, similar to other viral systems, they are built to "catch on person-to-person."

Traditional communications systems are anti-scalable, Lippman says, in that the more people you have tapping them, the more interference you get, and the smaller the bandwidth allocation becomes. Instead, Lippman asks, what if communications systems could grow as the number of users of the system grows?

A fine example of what the good doctor means can be seen by examining the current cellular network. Instead of having a cell phone blast its signal to a distant tower, what if it could jump from computer to computer, or cell phone to cell phone? It would require far less bandwidth and power and could scale organically, because as the number of people using the system grows, the system gains additional connection points.

A simple and elegant idea, isn't it?

And it has a very practical use. The entire one-laptop-per-child idea, also known as the \$100 computer movement, will depend on deploying communications in societies where the big, wasteful infrastructure is just not available. But communications will work nicely in "mesh" mode, with each computer passing on data to a nearby computer, using little power and small amounts of bandwidth.

Light and agile, like the doctor says.

I think Lippman's real genius is not in his skills as an engineer but rather in his ability to look at problems from a different perspective: for example, Fluid Voice, the hyperconnectivity technology that he and his students in the Media Lab built.

Fluid Voice is a phone system that acts like a big party line -- push to listen, instead of push to talk.

The default is you can hear everyone in your group who is talking. Instead of a dial, each person is a dot. If you move the dot in or out, the voice becomes louder or lower. Or you can move the dot, and the person, off the screen entirely. You can hear anybody and can decide how much attention you want to pay to each person.

On the practical side, in case of an emergency, firefighters could use Fluid Voice to tune into a police emergency or tune out the ambulance driver, for example.

Lippman's greater point is that the current limitations on radio-enabled communications systems are not due to the physics of the technology but rather to its engineering history. In the old days, radios were expensive, while spectrum was underused and inexpensive. And because receivers were dumb, it became OK to waste spectrum.

Now, the radios are cheap, and spectrum is relatively expensive.

"Mesh is an attempt to break the barrier and history of communications as a limited, fixed, and unscalable system," Lippman says.

"When I went to school, a lot of what you studied was how can you do something given certain constraints," Lippman says. Students were asked to write a program that didn't use more than this much memory, disk space, or processing cycles, for example. Engineering was taught in the context of its limitations.

At some point, engineering courses changed, Lippman says.

"Now students are asked to write a computer program where memory is free, disk space and processing cycles are unlimited," Lippman says, adding that, because of this shift, "we can challenge students to stretch their minds."

Sounds like Lippman is stretching his students' minds in worthwhile directions.

## "Free spectrum" could shape future of wireless

*For M2Z Networks' John Muleta and Milo Medin, the future of wireless can be found in spectrum long ignored by the titans of the industry*

Advanced Wireless Service-3 (AWS-3), which operates in the 2155-2180MHz band, sat around in the FCC closet collecting dust for more than a decade. No one seemed to want it until John Muleta and Milo Medin, co-founders of M2Z Networks and, respectively, CEO and chairman of the board said something like, "if you're not using it, anyway, we'll take it off your hands."

Perhaps these two gentlemen saw something others didn't.

Prior to M2Z, Muleta headed up the FCC's Wireless Telecommunications Bureau from 2003 to 2005, where he was in charge of implementing the FCC's policies on consumer wireless services and public safety radio networks.

Medin was co-founder and CTO of @Home Networks, one of the first companies to offer nationwide cable modem service. Prior to that, Medin worked at NASA Ames Research Center.

### **Long-forgotten AWS-3**

For reasons that will become obvious, the major wireless service providers have studiously avoided AWS-3.

True, the bandwidth doesn't have a beach-front address, Muleta chuckles, meaning that it is not in the posh 700MHz range that allows signals to go through walls. But what it does have is more than enough to meet FCC requirements for free nationwide broadband delivery. Using its unique technology, M2Z expects to tap AWS-3 for 8 to 10 times more capacity than traditional cellular services deliver. Service speeds would start at 384Kbps download and 128Kbps upload -- about the same as low-end DSL.

As is the case in all stories, there are upsides and downsides to M2Z's AWS-3 aspirations.

The good news is that licensing for AWS-3 is contingent on service being free. Per FCC documentation:

*Require the licensee to provide free, two-way broadband Internet service including:*

*-- engineered data rates of at least 768 kbps downstream using up to 25 percent of the licensee's wireless network capacity.*

*- an "always on" network-based filtering mechanism.*

*Require the licensee to provide for open devices and open applications for its premium service and open devices for its free service*

By the way, this service must also be porn-free, again per the FCC:

*(a) The licensee of the 2155-2188 MHz band (AWS-3 licensee) must provide as part of its free broadband service a network-based mechanism:*

*(1) That filters or blocks images and text that constitute obscenity or pornography and, in context, as measured by contemporary community standards and existing law, any images or text that otherwise would be harmful to teens and adolescents. For purposes of this rule, teens and adolescents are children 5 through 17 years of age;*

Muleta tells me that M2Z will block porn based on domain names, using network technology.

Under the FCC's specifications, the AWS-3 spectrum provider will also be able to offer a fee-based service. Thus, if your company is willing to pay about \$25 per month for a wireless card, as opposed to about \$40 to \$90 per month from the current major wireless providers, you can have 3Mbps service. Also, if you're paying for better performance then, the service is unblocked.

#### **AWS-3's threat to the wireless status quo**

Now for the bad news: Major wireless broadband providers are fighting hard to keep AWS-3 off the market. Having paid a lot of money for AWS-1 bandwidth at auction, current wireless providers T-Mobile, Sprint, and AT&T don't seem too keen on the idea of someone else giving away similar bandwidth for free.

Their first tactic was to say that AWS-3 interferes with AWS-1, which operates in the 2,110-2,155MHz range. Last week, the FCC announced test results that found no interference between the bands (PDF).

Not only has this spectrum remained fallow for 16 years, but the current players "don't know how to use unpaired technology," Muletta says. "This is a single block for sending and receiving using time as a way of sequencing the signals rather than upload and download."

According to Muletta, M2Z has unique time-division duplexing technology that will allow the service to deliver 8 to 10 times the capacity of traditional cellular service.

There are still many hurdles to overcome before AWS-3 sees the light of day. Everything from producing chips in volume to laying out the network infrastructure. What's worth noting is that half of the cell towers available in the United States aren't actually owned by today's carriers. Instead they owned by third parties that lease room on the towers, "like hotels."

The business model is familiar. Rather than paying for service, advertisers will pay for ads, in this case localized by M2Z based on the Zip code information of its users. Muletta says that Zip code data alone will be sold, not data on where users surf using M2Z's service.

M2Z has also proposed a leasing deal with the FCC. Rather than buy the spectrum outright, under that scenario, M2Z would lease AWS-3 from the FCC and give back 5 percent of its profits to taxpayers. If the FCC isn't interested in that option, M2Z still appears to have the financial backing to bid on AWS-3 with the best of them.

What I really like about M2Z is that it is one of the first companies to realize that the nature of the game has changed. Muletta understands that the future of computing and content is going to be pervasive and free, and he and Medin are shaping M2Z to deal with that reality rather than fight it.

"The entire Internet ecosystem is Web-centric," Muletta says. "The limitation to that system is that it is very expensive to connect to it. What we are trying to take out is the cost of connectivity, to reduce it down to zero for most users."

\* \* \*

## Announcement

### Requirements of 100 Hours Information Technology Training for May, 2009 Examination

Students, who intend to appear in the **Professional Competence Examination to be held in May, 2009** should undergo 100 Hours Information Technology Training Programme latest by 31<sup>st</sup> March, 2009. They should have appeared for the online examination and should have successfully completed the Training Programme prior to that date to be eligible to appear in the examinations.

**(CA. R.Devarajan)**  
Addl. Director of Studies  
Board of Studies, ICAI, Noida

## ACTIVITY REPORT OF NOVEMBER 2008

S.No.	Date	Venue	Subject
1	01/11/2008	ICAI Bhawan	CPT Revision Classes
2	02/11/2008	ICAI Bhawan	CPT Revision Classes
3	02/11/2008	ICAI Bhawan	100 Hours ITT Online Exam– 8 <sup>th</sup> Batch
4	08/11/2008	ICAI Bhawan	CPT Revision Classes
5	09/11/2008	ICAI Bhawan	CPT Revision Classes
6	15/11/2008	ICAI Bhawan	CPT Revision Classes
7	16/11/2008	ICAI Bhawan	CPT Revision Classes
8	17/11/2008 - 23/11/2008	ICAI Bhawan	Computer Awareness Programme for members
9	22/11/2008	ICAI Bhawan	Teleconference on “Information Technology”
10	22/11/2008	ICAI Bhawan	CPT Revision Classes
11	22/11/2008	Hotel Sugam	Investor Awareness Programme conducted by Madurai Branch jointly with ICSI <b>(Specially invited Chairman &amp; Secretary)</b>
12	23/11/2008	ICAI Bhawan	CPT Revision Classes
13	24/11/2008	ICAI Bhawan	Managing Committee Meeting
14	26/11/2008	ICAI Bhawan	Study Circle Meeting
15	28/11/2008	SIRC, Chennai	40 <sup>th</sup> Regional Conference of SIRC of ICAI
16	29/11/2008	SIRC, Chennai	40 <sup>th</sup> Regional Conference of SIRC of ICAI
17	29/11/2008	ICAI Bhawan	CPT Revision Classes
18	30/11/2008	ICAI Bhawan	CPT Revision Classes

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