Stimulus Packages to Counter Global Economic Crisis: A review

Sameer Khatiwada [1] [2]

International Institute for Labour Studies
Geneva

[1] This paper is a part of the work on financial and economic crisis carried out by the International Institute for Labour Studies (IILS) at the ILO in Geneva (see ILO, 2009). For further information related to this paper contact: khatiwada@ilo.org

[2] The author would like to thank Ekkehard Ernst, Emily McGirr, Steven Tobin, and Raymond Torres.

TABLE OF CONTENTS

1. Main findings

- **The global economy continues to deteriorate:** According to the most recent forecast by the International Monetary Fund (IMF), world economic output will shrink by 0.6 per cent in 2009, with advanced economies shrinking by 3 per cent.
- **System-wide financial rescue measures have been put in place but the financial system remains unstable:** At first, financial rescue measures were piecemeal and uncoordinated, but as the banking crisis deepened, countries adopted system-wide interventions. However, financial markets remain highly unstable and "credit crunch" persists.
- **All major economies have adopted monetary easing:** In order to revive economic activity, countries have adopted aggressive monetary easing by lowering short-term interest rates. Many countries have reduced rates to historically low levels.
- **Fiscal measures have been announced but have been relatively inadequate:** The total global stimulus spending is $1.98 trillion. Among 32 countries (including the G20), the stimulus spending in 2009 accounts for approximately 1.7% of GDP as compared to the 2% recommended by the IMF. Furthermore, fiscal stimulus as a percentage of global GDP is 1.4 %.
- **G20 is contributing the most to the global stimulus:** Close to 90 per cent of the global economic stimulus comes from the G20. Among the G20, the biggest fiscal rescue packages as a percentage of GDP were announced by China, Saudi Arabia, and the United States respectively.
- **Composition of spending varies between advanced and developing economies:** Based on the detailed information on composition of fiscal rescue measures available for 22 countries:

  i) Out of the total spending, tax cuts comprise over one third of fiscal stimulus in advanced economies, while they comprise only 3 per cent in developing and emerging economies.

  ii) The proportion of stimulus on infrastructure spending is three times higher in developing and emerging economies than in the advanced economies.

  iii) In advanced economies only 3 per cent of total spending is on employment measures while for developing and emerging economies it is 0.2 per cent. Likewise, social transfers to low-income households comprise a relatively small percentage for both groups: 10.8 per cent in advanced and 6.8 per cent in developing and emerging.
- **Rescue packages were announced based on relatively optimistic forecasts:** Most of the fiscal stimulus packages were announced late last year, but, since then the economic conditions and forecasts have deteriorated significantly (this leaves aside the bigger question of announcement versus implementation.)
- **Financial measures have far outweighed fiscal measures:** On average, the financial measures outweigh the fiscal measures by a factor of 5 or more.

2. Introduction

The global economy is in the midst of the worst economic crisis since the Great Depression. What began as a financial crisis when the U.S. housing market turned sour has now expanded into a global meltdown, wiping away trillions of dollars of financial wealth, drying up liquidity, weakening consumer and business confidence, leading to negative economic growth, increasing unemployment, and spreading economic malaise globally. In January 2009, the International Monetary Fund (IMF) predicted world output will grow at 0.5 per cent in 2009, the lowest rate since the Second World War.[3] However, as the world economy has continued to worsen and the rescue efforts have not had the desired effects, the latest forecast by the IMF (March 2009) predicts that the world economy will shrink by 0.6 per cent in 2009 (see table 1).

Table 1: Projections of World Economic Outlook[1]

	IMF		Deutsche Bank	OECD
	2008	**2009**	**2009**	**2009**
World Output	3.4	-0.6	-1.2	..
United States	1.1	-2.6	-3.9	-4.0
Euro Area	1.0	-3.2	-3.0	-4.1
Germany	1.3	-2.5	-3.5	-5.3
France	0.8	-1.9	-2.8	-3.3
Japan	-0.3	-5.0	-7.6	-6.6
United Kingdom	0.7	-3.8	-3.5	-3.7
Canada	0.6	-2.0	0.1	-3.0
Russia	6.2	-0.7	-2.4	-5.6
China	9.0	6.7	7.0	6.3
India	7.3	5.1	4.6	4.3
Brazil	5.8	1.8	-1.0	-0.3

[1] Updated on March 2009

Source: IMF, DB & OECD

Given the grim outlook for 2009, countries around the world have adopted unprecedented measures to weather the global economic slowdown. This paper provides a comprehensive overview of the rescue efforts undertaken by approximately 40 countries (including the G20), which makes up more than 90 per cent of the world economy. Rescue efforts undertaken by countries can be divided into three categories: i) financial rescue efforts (guarantee of private deposits, capital injections into banks, buying of "toxic assets" etc.); ii) monetary rescue efforts (reductions in policy rates, quantitative and/or qualitative easing); and iii) fiscal rescue efforts (new spending on public goods and services, stimulus aimed at consumers like tax cuts and transfers, and stimulus aimed at firms like corporate tax cuts and sectoral subsidies.

3. Financial rescue efforts

Financial efforts were initially uncoordinated and piecemeal…

The global financial market entered the current turmoil in the summer of 2007, but it was the collapse of Lehman Brothers in mid-September 2008 that put the financial system in a state of cardiac arrest. As credit markets froze, stock indices tumbled, and international financial institutions were on the brink of collapse, it became clear that governments had to intervene. The first order response was largely uncoordinated, but the case for internationally coordinated efforts has become increasingly clear and countries have launched several coordinated efforts.

[3] In 2007 and 2008, the world output grew by 5.2 and 3.4 per cent respectively.

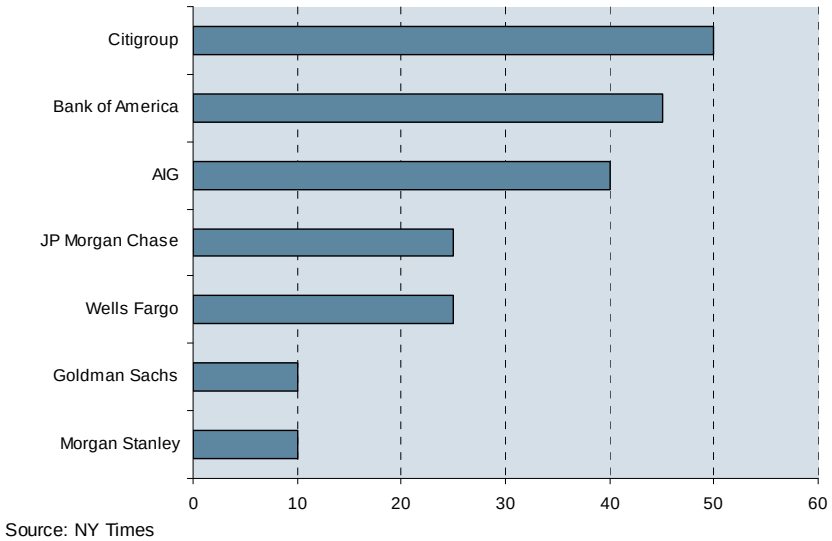
Most countries adopted crisis related efforts between October and November of 2008. More importantly, government efforts to strengthen bank balance sheets have evolved from a case by case approach to system-wide intervention. For example, the U.S. government injected capitals into individual banks (AIG) or induced mergers (Merrill Lynch and Bank of America) in hopes of reviving the credit market by encouraging banks to lend to each other. The British government did the same thing, so did other governments in Europe. But the case-by-case approach did not reverse the declining market confidence and credit markets remained frozen, hence a system-wide intervention was essential.

…but ultimately system-wide interventions were put in place

In order to restore market confidence and avoid bank-runs, the system-wide intervention put in place by the U.S. and the European governments involved the following: i) ensuring bank funding through explicit government guarantees on retail deposits and other bank liabilities; and ii) reducing bank leverage through government purchases of distress assets or capital injections.[4] As table 2 shows, almost all the major economies have increased guarantees of private deposits (at least temporarily), put in place inter-bank loan guarantees, banned or restricted short-selling, and injected capital into troubled banks by buying equity stakes (see box 1 for definitions of rescue tools).

Australia, Canada, Germany, Norway, Spain and Switzerland have opted to buy the "toxic assets," while the U.S. originally abandoned this plan in favour of direct capital injections. However, under the new administration, the U.S. is considering getting troubled assets off banks' balance sheets by using $500 billion, possibly up to $1 trillion, in private and government money. The three main elements of the new programs proposed by the U.S. Treasury Secretary Timothy Geithner are: i) injecting government capital into the biggest financial institutions (as figure 1 shows, this is already underway); ii) establishing public-private partnership to buy banks' troubled assets (MBS); and iii) starting a credit facility with the Federal Reserve of as much as $1 trillion to promote lending to consumers and businesses.

Figure 1. Committed or Approved Capital Injections by the U.S. Govt, Feb. 09 ($ bn)



Source: NY Times

[4] Fender & Gyntelberg, 2009

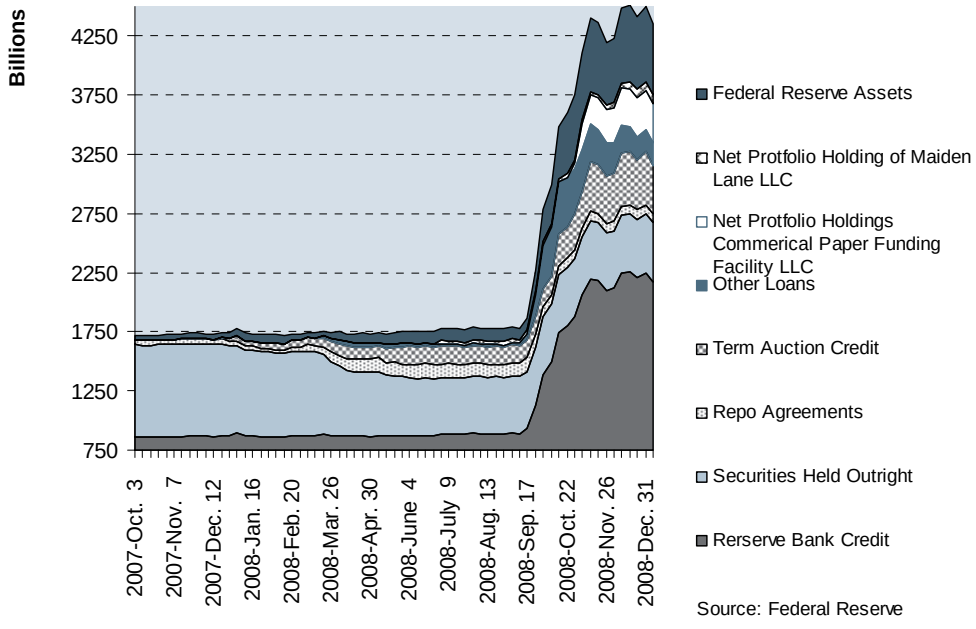
Table 2: Crisis Resolution Instruments for Selected Countries[1]

	Increased guarantee of private deposits	Guarantees for bank loans or debt	Fund to purchase commercial papers	Purchase mortgage bonds	Ban or restrict short-selling[2]	Capital Injections	Options to purchase assets of uncertain value	Induced Mergers & Acquisitions	IMF's emergency lending
Australia	X	X		X	X		X		
Austria	X	X			X	X			
Belgium	€ 100,000	X			X	X			
Brazil								X	
Canada		X		X	X		X		
China						X		X	
Denmark	X	X		X	X				
Finland	€ 50,000	X			X				
France	€ 70,000	X			X	X			
Germany	X	X			X	X	X		
Greece	€ 100,000	X			X	X			
Hungary	€ 50,000	X				X			$15.7 billion
Iceland	X					X			$2.1 billion
India						X			
Indonesia	2 billion rupiahs								
Ireland	€ 100,000	X				X			
Italy	€ 100,000				X	X			
Japan		X			X				
Korea	X	X				X			
Mexico		X							
Netherlands	€ 100,000	X			X	X			
New Zealand	X	X							
Norway	X	X					X		
Poland	€ 50,000								
Portugal	€ 100,000	X				X			
Russia	X	X			X	X			
Saudi Arabia	X	X							
Spain	€ 100,000	X		X	X		X		
Sweden	€ 50,000	X		X		X			
Switzerland	X		X			X	X		
Turkey									X
United Kingdom	£50,000	X		X	X	X		X	
United States	$250,000	X	X	X	X	X	X	X	

[1] Most crisis resolution instruments were put in place in October-December, 2008, but given the persisting financial market instability, countries have adopted other measures or amended existing ones; only the countries that instituted at least on measure are included. An "X" denotes some action taken by a country in the corresponding area.
[2] Ban on short-selling has been lifted for some asset classes in the UK and Switzerland

Source: IILS, based on Bloomberg, OECD, & BIS

Figure 2. Increases in Fed's Balance Sheet (2007 to 2009)



Central bank balance-sheets increased significantly

Furthermore, central banks around the world have taken unprecedented range of actions to avert catastrophe in the global financial market. In the U.S., the Federal Reserve's balance sheet exploded in the mid-September (see figure 2). After the collapse of Lehman Brothers, the Fed has played a growing intermediation role in money markets. Since the inception of crisis, it has accepted a wider range of collaterals, which has led to the increase in its balance sheet. Its assets have more than doubled in a matter of weeks reflecting direct lending to banks and dealers through existing and new lending facilities. Similar developments have taken place at other major central banks like the ECB, the Bank of England, and the Bank of Japan.

Box 1: Definitions of Financial Rescue Tools

Increased guarantee of private deposits: Governments around the world provide some form of insurance on bank deposits in order to ensure financial stability and public confidence in its financial institutions. When there is a banking crisis and a general lack of confidence in nation's financial institutions, such as during the Great Depression, depositors tend to rush to the bank to withdraw their savings (*bank runs*). In order to avoid such large scale panic, governments provide insurance that protects against the loss of insured deposits when a private bank or a savings association fails. One important feature of this system is that there is an upper limit to the amount that is insured. However, after the current financial crisis hit, the US government and European countries adopted a harmonized increase in the upper limit. For example, the Federal Deposit Insurance Corporation (FDIC) in the US increased the upper limit from $100,000 per depositor per bank to $250,000 per depositor per bank.[5] However, this upper limit will return back to its earlier level on Jan 1, 2010.

Guarantees for bank loans and debts: When there is a general lack of trust and confidence towards each other's balance sheets, banks are unwilling to lend each other. Even if a financial institution knows that its own balance sheet is intact, it cannot be sure that its counterparty is in the clear. In the fall of 2008, this is exactly what happened because banks had little or no knowledge of the troubled assets held by other banks. Due to this severe lack of confidence, the inter-bank credit market effectively froze. (See the TED spread in figure 5 for Sept. and Oct., 2008). As a temporary measure, guarantee of inter-bank loans (bank liabilities) ensures that banks lend to each other, which then allows for a proper functioning of inter-bank credit market.

Ban or restrict short-selling: After stock markets suffered huge losses, the Securities and Exchange Commission (SEC) in the US and the Financial Services Authority (FSA) in the UK announced a temporary ban on short selling in financial companies because of the essential link between their stock price and confidence in the institution. SEC and FSA banned short selling for 799 and 32 financial companies respectively. Some countries like Australia announced a complete ban. Short selling refers to a practice of selling stocks that the seller does not own at the time of sale. The seller borrows the stocks from a broker, sells them at the market, later buys the same stocks at a lower price, and repays it back to the broker. Short-selling is an effective means of deepening the market and hence lowering arbitrage possibilities. However, when the market gets thin as is currently the case, short-selling by itself can drive prices and short-sellers can create their own arbitrage possibilities, for instance through spreading rumours. In principle, short-selling is not restricted to stocks but can be done with any other financial instruments.

Capital injections: The most common financial rescue tool used by governments is direct infusion of capital (equity injection) into troubled financial firms. Buying up shares gives the firms much needed capital quickly, while the government has a financial stake in the company (AIG was an example of direct capitalization). Since inception of the crisis, consensus seems to have been growing that direct capitalization (partial nationalization) is the key to unfreezing of credit markets. British Prime Minister's rescue plan, which has received favourable reviews from notable economists, is the first to clearly spell out liquidity injection as a policy objective.[6] Mirroring the British plan, the U.S. government decided to take equity stakes (preferred stocks) in country's major financials institutions. Besides getting public money, banks are also encouraged to raise private capital. Some countries have adopted a plan in which government matches new private capital with state capital, which then imposes a market test on the financial institutions.

Option to buy toxic assets: Following the bailout of Bear Sterns, AIG, Freddie Mac, and Fannie Mae, the U.S. Congress approved the Emergency Economic Stabilization Act to give authority to the U.S. Treasury to buy troubled mortgages and mortgage-related securities (Troubled Asset Relief Program, TARP). The premise of this plan is that the current crisis is due to the presence of "toxic" assets on bank balance sheets and that the presence of these assets clogs the financial system and chokes off the flow of credit. Because of the substantial presence of these troubled

[5] FDIC was established in the US after the experience of large scale bank failures and bank runs during the Great Depression.

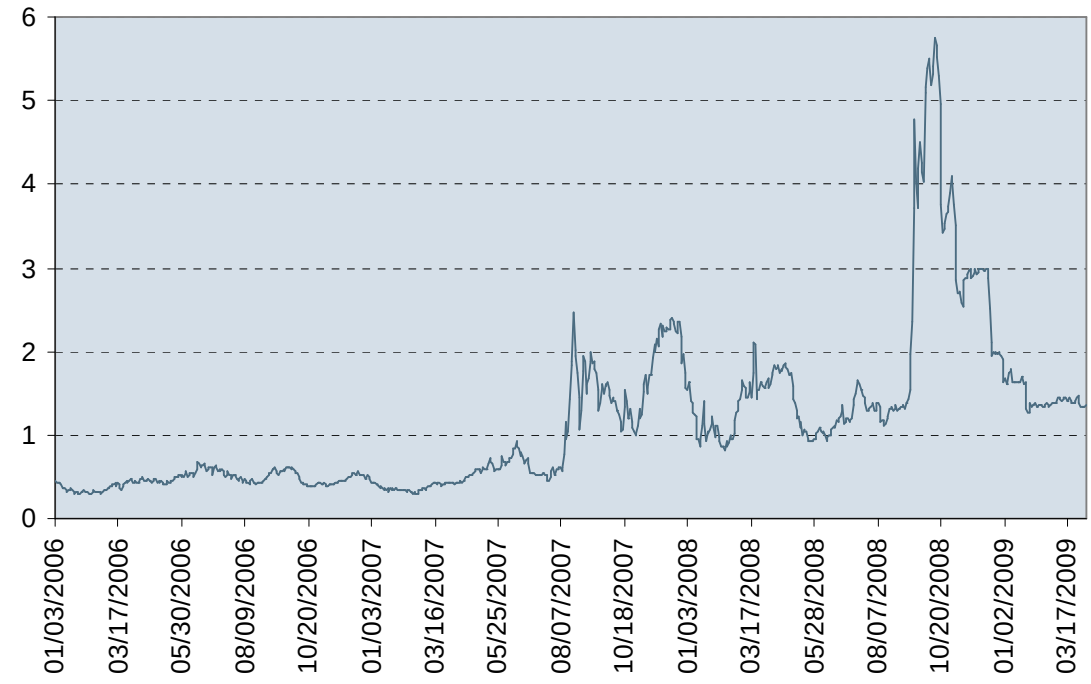
[6] Krugman, Paul, "Gordon Does Good," *The New York Times*, Oct. 13, 2008

assets on balance sheets, banks are facing difficulties raising capital and thus cannot carry out their role of financial intermediation in the economy. A crucial issue with respect to the purchase of troubled assets is determining a relevant price. If the government pays too much, taxpayers stand to loose, but if the government offers too little, the financial institutions that are holding these assets will not sell them. However, this process of buying up toxic assets done transparently at fair market value would set a price floor and thus help clarify the value of financial institutions, opening up scope for recapitalization.

Despite the interventions, "credit crunch" persists…

In the last few weeks of 2008, global credit market started showing signs of gradual recovery. Between the last two months of 2008 and Jan. 2009, the TED spread (difference between the three-month T-bill interest rate and three-month LIBOR), which measures banks' willingness to lend (the credit risk in the economy), has narrowed considerably (figure 3) from 4.6 percentage points in October, 2008, to about 1.5 percentage points in February, 2009.[7] Even though the TED spread is still above its historical average, the narrowing of the spread in the last several weeks shows that the credit market is thawing (albeit slowly) and that banks are willing to lend each other.

Figure 3. TED Spread, Jan 2006 – March 2009, daily data



Source: Federal Reserve

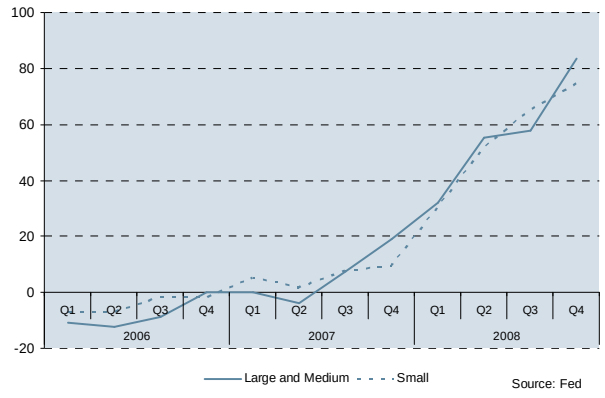
Despite government efforts to restore financial intermediation, evidence shows that the availability of credit in the real economy has shrunk considerably, making it difficult for businesses and consumers to obtain loans. A quarterly survey of lenders in the U.S. and E.U. shows that the lending standards have tightened considerably for both businesses and consumers (see figures 4 and 5. Even though governments in the E.U. and the U.S. have taken unprecedented steps at unclogging the credit markets, a full recovery is long way off. One factor is that government conditions for support to banks have thus far been weak. Even in countries where banks receiving government support are required to make credit available to businesses, there are no sanctions or penalties for institutions that fail to comply. Banks continue to undergo

[7] T-bills are considered risk free while LIBOR reflects the credit risk of lending to banks. When the TED spread increases it means that the counterparty risk is increasing, and therefore, inter-bank lenders demand a higher rate of interest or accept lower returns on safe investments such as T-bills.

the process of "deleveraging", i.e. the amount of capital available to the real economy is restricted by banks efforts to improve their balance sheets and reduce the burden of "toxic asset". [8] Meanwhile, emerging market economies are starting to feel the squeeze, as supply orders from Europe and the U.S. have dried up, exporters are facing difficulty financing their businesses and continuing production.[9]

Figure 4. Percentage of lenders tightening standards, by size of enterprise seeking loans

Panel A: United States



Panel B: European Union

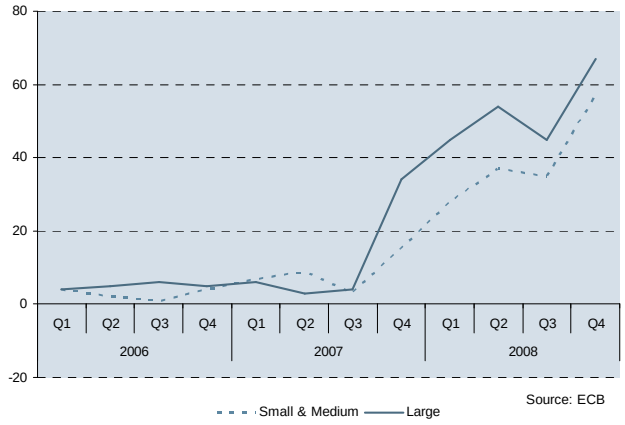
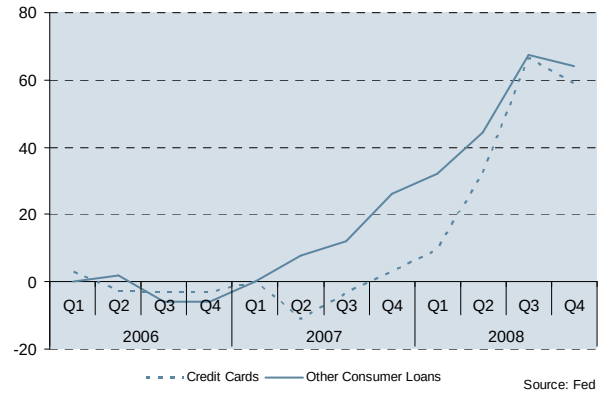
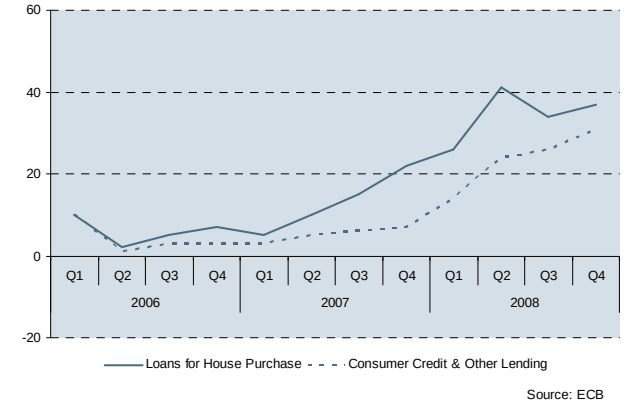


Figure 5. Percentage of lenders tightening standards for consumer loans

Panel A: United States



Panel B: European Union



…because the problem of removing "toxic assets" remains

As the international efforts to stabilize the global financial system are underway, banks around the world continue to face numerous challenges with considerable debate as to how to solve the problem, e.g. through nationalization or not.[10] Current U.S. government plan involves a public-private partnership to acquire the troubled assets rather than a full-scale nationalization of

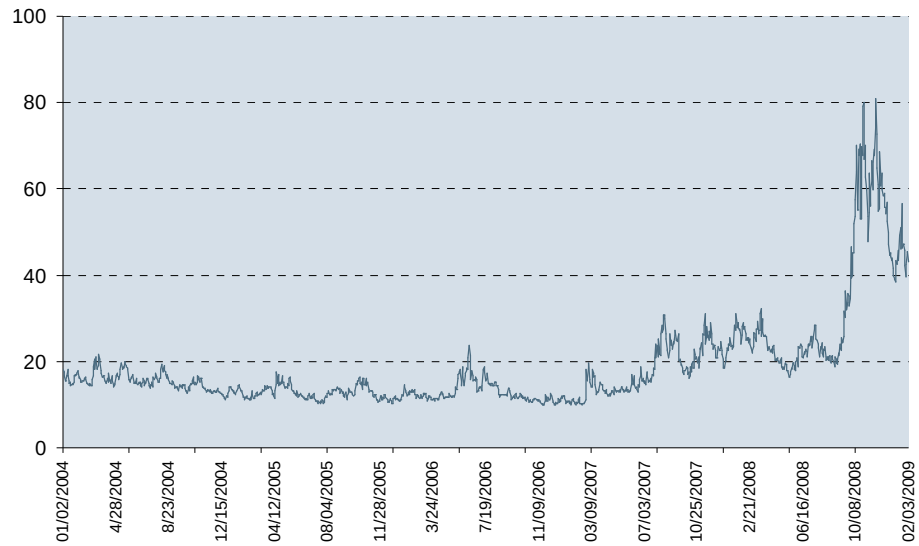
[8] As illustrated in table 2, some government efforts have attempted to address this directly by purchasing or insuring toxic assets in the hopes of improving the lending situation.

[9] There is a lack of empirical evidence on the impact of global credit squeeze on trade financing but the credit crunch has become a major problem for the emerging markets as well.

[10] In 1992, Sweden took over its banking system, nationalized the insolvent banks, cleaned up the balance sheets, and then re-privatized them.

banks. Meanwhile, many of the European countries are taking steps that would increase state control of banking sector. For example, Germany recently approved draft legislation to nationalize one of its banks – first German bank nationalization since the 1930s. Furthermore, it has becoming increasingly clear that the banks in emerging economies of Europe (Hungary, Ukraine, Belarus, Lithuania, Latvia, and Estonia) might need a region-wide rescue effort. Also, Ireland, Greece, and Spain are facing grim prospects in their banking sectors.

Figure 6. CBOE Volatility Index, Jan 2004 – Feb 2009



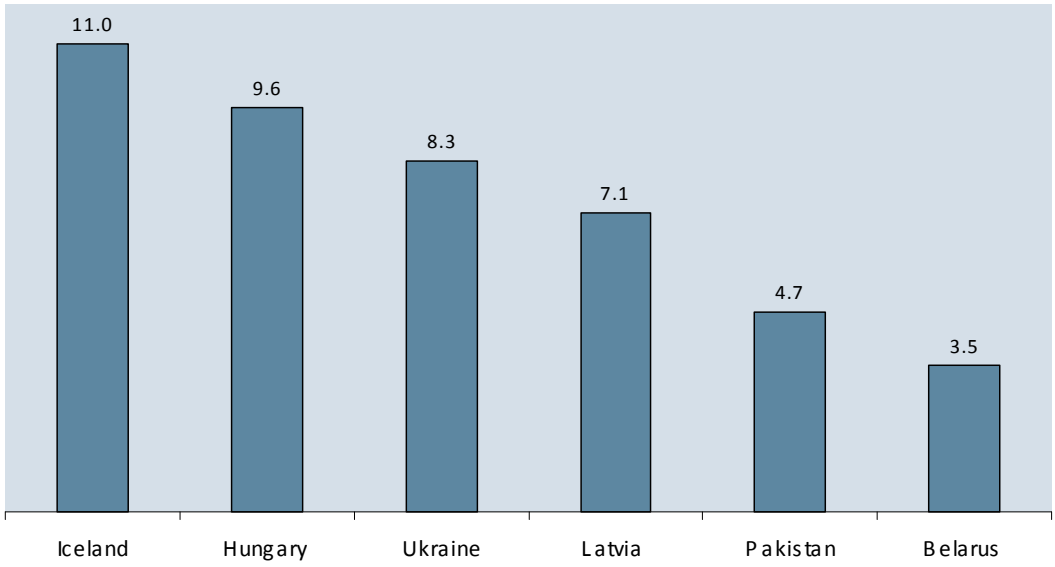
As the CBOE Volatility Index shows (figure 6), the global financial markets are highly unstable and there is considerable uncertainty going forward. However, what is clear is that unless the problem of removing "toxic assets" from bank balance sheet is solved, "credit crunch" will persist and global aggregate demand will continue to worsen.

Meanwhile, IMF's emergency lending program has helped developing and emerging economies…

As the current financial crisis spreads, a number of countries are experiencing capital outflows and instability in their economies. Therefore, as part of the crisis resolution tools available for countries, the IMF has offered its fast-track emergency lending facilities. So far, the governments of Belarus, Hungary, Iceland, Latvia, Pakistan, and Ukraine have resorted to IMF loans to restore their financial and economic systems (see figure 7).[11] The IMF has about $200 billion for immediate lending and can draw an additional $50 billion if needed. According to the executive director of the IMF Dominique Strauss-Kahn, the Fund may need another $150 billion or more to help counter the hit to emerging markets and poor countries. Japan has pledged $100 billion while other nations have yet to commit to help.

[11] Turkey is in the process of receiving IMF aid.

Figure 7. IMF Help as a Percentage of GDP



Source: IMF

…and a plan for a new international regulatory structure is being formulated

Internationally coordinated rescue measures seem to have stabilized the financial system from the brink of a catastrophe. The next step for policymakers is to address the shortcomings of the international regulatory framework which allowed for the crisis to occur in the first place. On November 15, 2008, G20 countries met in Washington D.C. and agreed to implement reforms that will strengthen financial markets and regulatory regimes so as to avoid future crises. Five main principles of reform outlined by the G20 summit are: i) strengthening transparency and accountability; ii) enhancing sound regulation; iii) promoting integrity in financial markets; iv) reinforcing international cooperation; and v) reforming international financial institutions (see box 2 for details). Furthermore, the G20 Summit set forth an action plan to implement agreed upon reforms, with the immediate measures to be completed by March 31, 2009, before G20's next meeting in April in London.

Box2: G20 Summit, Nov. 15, 2008

The G20 highlighted the following as the root causes of the crisis:

- Inadequate appreciation of risks and failure to exercise due diligence by market participants;
- Weak underwriting standards, unsound risk managements practices, increasingly complex and opaque financial products and excessive leveraging increased vulnerabilities in the financial system;
- Regulators and supervisors did not adequately appreciate and address the risks building up in financial markets and keep pace with financial innovation;
- Inconsistent and insufficiently coordinated macroeconomic principles, and inadequate structural reforms, led to unsustainable global macroeconomic outcomes;

They agreed on the following principles of reforms for financial markets:

- *Strengthening transparency and accountability:* enhancing required disclosures on complex financial products, enhancing disclosure requirements by firms and their financial health, aligning incentives to avoid excessive risk-taking;

- *Enhancing sound regulation:* strengthening regulatory regimes, prudential oversight, better risk management, ensuring that all financial products and participants are regulated, strong oversight of credit rating agencies, making regulatory regimes effective and efficient, transparent assessments of national regulatory regimes;
- *Promoting integrity in financial markets:* bolstering investor and consumer protection, avoiding conflicts of interest, preventing illegal market manipulation, protecting against illicit finance risks arising from non-cooperative jurisdictions, promote information sharing with other jurisdictions;
- *Reinforcing international cooperation:* internationally consistent regulations, improving coordination and cooperation across all segments of financial markets, strengthening crisis prevention, management, and resolution;
- *Reforming international financial institutions:* reform the Bretton Woods Institutions to reflect the changing economic order to increase their legitimacy and effectiveness, expanding membership of the Financial Stability Forum (FSF) to include emerging economies.

The G20 asked its finance ministers to formulate recommendations for reforms in the following areas:

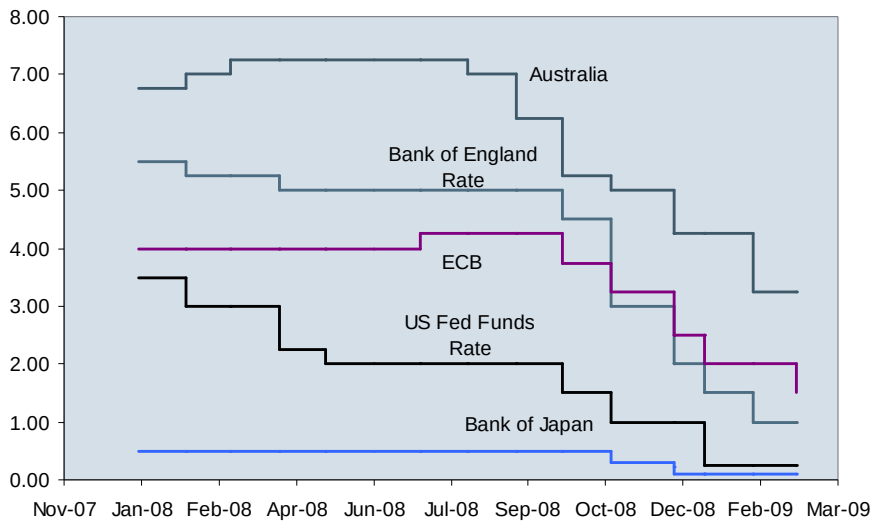
- Mitigating against pro-cyclicality in regulatory policy
- Reviewing global accounting standards
- Strengthening the resilience and transparency of credit-derivatives markets
- Reviewing compensation practices
- Reviewing the mandates, governance, and resource requirements of international financial institutions
- Defining the scope of systemically important institutions and determining their appropriate regulation or oversight

[Source: G20 Statement of Agreement]

4. Monetary rescue efforts

Reductions in policy rates to revive economic activity…

Figure 8. Changes in Policy Rates (2007-09)



Source: Bloomberg

Modern monetary policy involves adjusting interest rates to variation in the inflation outlook ("inflation targeting"). At the current juncture, however, monetary policy has been used

as the first powerful instrument to sustain and strengthen aggregate demand and economic activity. In the US, the Federal Reserve alters the federal funds rate, which is the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions overnight. Changes in the federal funds rate trigger a chain of events that affect other short-term interest rates, foreign exchange rates, long-term interest rates, the amount of money and credit, and, ultimately, a range of economic variables, including employment, output, and prices of goods and services. In short, the reduction in policy rates aims at strengthening growth in aggregate demand. During an expected economic downturn, countries resort to this tool, so long as there is room to cut interest rates.

Countries around the world have adopted aggressive monetary easing given the rapidly deteriorating economic outlook. Over the past two months, there have been a series of internationally coordinated interest rate cuts by developed economies (figure 8), and emerging economies have followed suit. As table 3 shows, all the major economies in the world have adopted monetary easing. This shift in focus of monetary policy from inflation targeting to supporting economic activity has been supported by a rapid decline in commodity prices. With projections showing rapidly decelerating consumer price inflation both the Fed and the ECB have been aggressively cutting short-term interest rates.

Table 3: Policy rate reductions to revive economic activity[1]

Australia	Cut to 3.25 percent, Feb. 09	**Malaysia**	Cut by 0.75 percentage points to 2.5 percent, Jan. 09; cut by 0.5 percentage points to 2 percent, Feb 09
Austria	Cut (ECB)[2]	**Mexico**	Cut by a quarter of a percentage point to 7.5 percent, Feb. 09
Belgium	Cut (ECB)	**Netherlands**	Cut (ECB)
Brazil	Cut by 1 percentage point to 12.75 percent, Jan. 09	**New Zealand**	Cut by 0.5 percentage points to 3 percent, March 09
Canada	Cut by 2.25 percentage points over 2008; cut by 0.5 percentage points to 1 percent, Jan. 09; cut by another 0.5 percentage points to 0.5 percent, March 09	**Nigeria**	Cut by 0.55 percentage points to 9.7 percent, Sept. 08
Chile	Cut the overnight lending rate by one percentage point to 7.5 percent, Jan. 09; cut by another 0.25 percentage points to 7.25 percent, Jan. 09	**Norway**	Cut by 0.5 percentage points to 2.5 percent, Feb 09
China	Cut one year lending rate by 1.89 percentage points to 5.58 percent, Dec. 08; cut by another 0.27 percentage points to 5.31 percent, Dec. 08	**Philippines**	Cut by 0.5 percentage points to 5 percent, Jan. 09
Denmark	Cut by 0.75 percentage points to 2.25 percent, March 09	**Poland**	Cut by 0.25 percentage points to 4 percent, Feb 09
Finland	Cut (ECB)	**Portugal**	Cut (ECB)
France	Cut (ECB)		
Germany	Cut (ECB)	**Saudi Arabia**	Cut main repo rate by 0.5 percentage points to 2.5 percent, Dec. 08; cut by another 0.5 percentage points to 2 percent, Jan. 09
Greece	Cut (ECB)	**South Africa**	Cut main repo rate by 0.5 percentage points to 11.5 percent, Dec. 08
Hungary	Increase by 3 percent, Oct. 08 (emergency measure); cut by 0.5 percentage points to 10 percent, Dec. 08; cut by another 0.5 percentage points to 9.5 percent, Jan 09	**Spain**	Cut (ECB)
Iceland	Increase (emergency measure); interest rate at 18 percent, Jan 09	**Sweden**	Cut by 1.75 percentage points, Dec. 08; cut to 1 percent, Jan 09
India	Cut by a percentage point to 6.5 percent, Dec. 08; cut by another percentage point to 5.5 percent, Jan. 09; cut by 0.5 percentage points to 5 percent, March 09	**Switzerland**	Cut to 0.5 percent, Dec. 08; cut to 0.25 percent, March 09
Indonesia	Cut by 1.5 percentage points to 8.75 percent, Jan. 09; cut by 0.5 percentage points to 8.25 percent, Feb. 09; cut by 0.50 percentage points to 7.75 percent, March 09	**Thailand**	Cut to 2 percent, Jan. 09; cut by 0.5 percentage points to 1.5 percent, Feb 09
Ireland	Cut (ECB)	**Turkey**	Cut to 13 percent, Jan. 09; cut by 1.5 percentage points to 11.5 percent, Feb 09
Italy	Cut (ECB)	**United Kingdom**	Cut by one percentage point to 2 percent, Dec. 08; cut by 0.5 percentage points to 1.5 percent, Jan. 09; cut by another 0.5 percentage points to 1 percent, Feb. 09
Japan	Cut by 0.2 percentage points to 0.3 percent, Oct. 08; cut by another 0.2 percentage points to 0.1 percent, Dec. 08	**United States**	Cut by 3.25 percentage points from Jan. to Oct., 08; cut to a range of 0.25 to 0 percent, Dec. 08
Republic of Korea	Cut by one percentage point to 3 percent, Dec. 08; cut by another percentage point to 2 percent, Feb. 09	**Vietnam**	Cut by 1.5 percentage points to 7 percent, Jan. 09

[1] Updated on March 17, 2009

[2] The ECB rate now stands at 1.5 percent, March 09

Source: IILS based on Bloomberg

…followed by quantitative and qualitative easing

The monetary policy adopted by the Fed in the U.S. is to set the official rate at zero and engage in large-scale quantitative and qualitative easing. Quantitative easing involves increasing the base money stock by purchasing government securities and qualitative easing involves purchasing private securities, including possibly illiquid private securities and/or private securities subject to substantial default risk. Instead of reducing interest rate to zero, the ECB is reported to be thinking of quantitative easing, under which the ECB prints money to buy securities such as government and corporate bonds from banks. Economists argue that there are no conceptual or operational problems operating monetary policy with a zero official policy

rate.[12] Moreover, once interest rates hit the zero mark, the only instruments available to a central bank are quantitative easing and qualitative easing.

But the global economic activity continues to weaken

Even though all the major economies have reduced their key policy rates and engaged in quantitative (and/or qualitative) easing, global economic activity has continued to worsen. Indeed, monetary policy is one piece of the rescue efforts and has to go hand-in-hand with financial and fiscal rescue efforts. At the current juncture, for rate reductions to have a serious impact on economic activity, fiscal rescue packages are vital. The next section provides a comprehensive overview of fiscal efforts taken major economies of the world.

5. Fiscal rescue efforts

Thirty two countries have announced fiscal stimulus packages

As the G20 Summit in Washington underscored, there is a growing consensus that aggressive fiscal measures – cutting taxes and boosting spending – are required to stimulate domestic demand and avert the worst economic slump since the Great Depression. As a result, countries have announced fiscal rescue packages of varying sizes, with China announcing the biggest total package as a percentage of GDP, followed by Saudi Arabia, Malaysia, and the United States (see figure 9 and table 4).[13] For 2009, the economic stimulus announced by 32 countries (including all the G20) as a percentage of global GDP is 1.4 per cent.[14] Furthermore, close to 90 percent of the global stimulus comes from G20 nations.

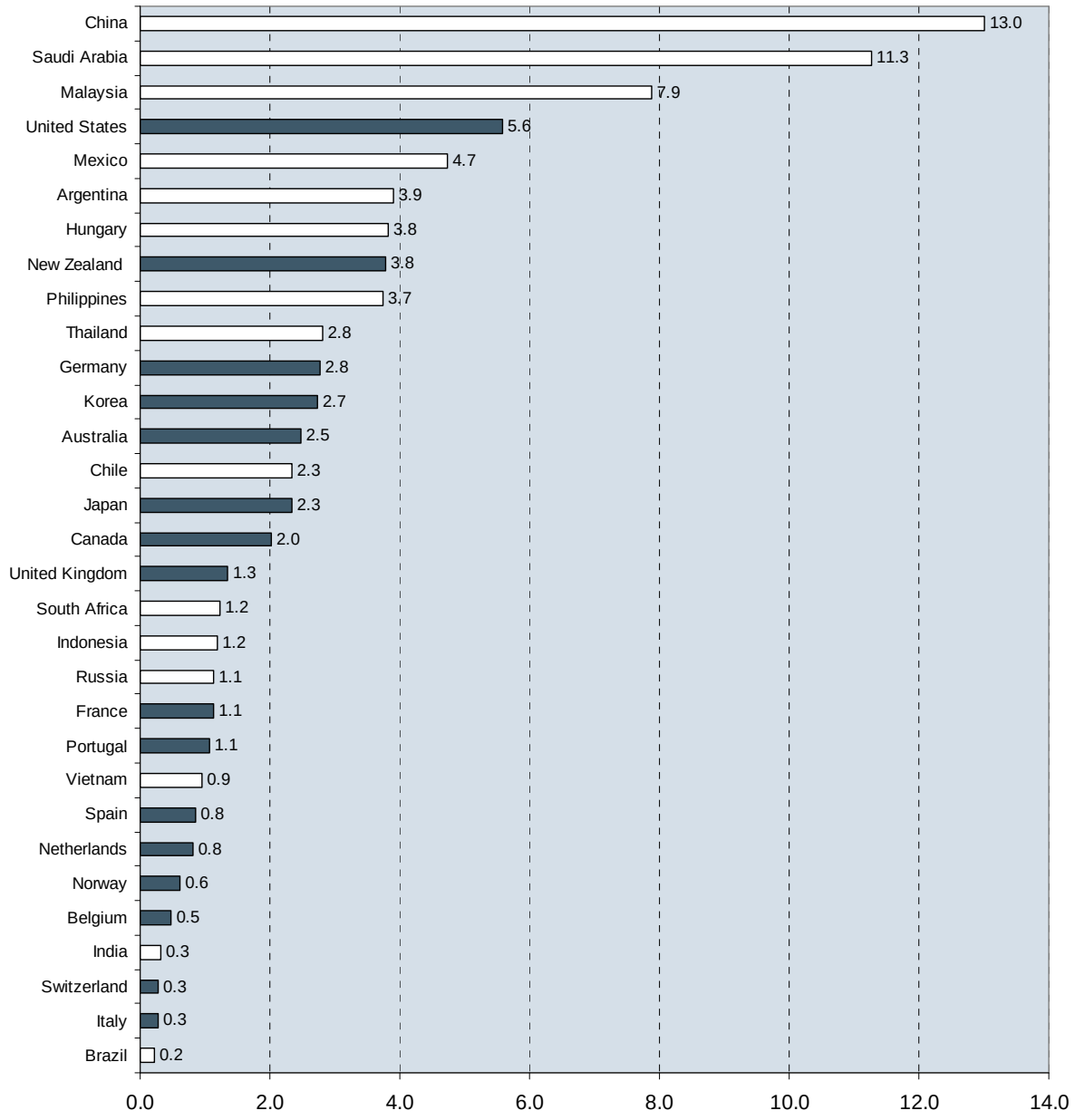
The impact of fiscal measures on economic activity and employment generation will depend on the concrete set-up of these measures and whether they involve higher spending or lower taxes. As a note of caution, it has to be mentioned that the current exceptional circumstance of a deep global economic slowdown make the outcome of any concrete fiscal measure particularly uncertain. Nevertheless, some broad categories of measures exist that have shown distinct consequences for economic performance in the past. Hence, in order to further analyze the announced fiscal packages, we divide them up into three categories: i) public spending on goods and services, ii) fiscal stimulus aimed at consumers, and iii) fiscal stimulus aimed at firms (see table 5). The fiscal measures in these three categories will have different effects on the economy, both regarding the speed with which they act and regarding the persistence of their growth enhancing impact.

[12] See: Buiter, Willem, 2009

[13] "Total fiscal package" means the entire amount announced by the country whereas "stimulus in 2009" means the spending allocated for 2009 out of the total package.

[14] Ibid.

Figure 9. Total Fiscal Rescue Package as a Percentage of GDP in 2009 [1]



[1] Developed economies are indicated in blue; developing and emerging economies, in white. Time frame of spending is not clear for most countries and in some cases. These estimates were calculated by taking the total package as the numerator and the GDP in 2009 as the denominator. The GDP in 2009 was estimated by using 2008 GDP and growth forecasts (March 2009) by the IMF for 2009.

Source: IILS, based on national sources.

Table 4: Fiscal Rescue Packages[1]

	Total Fiscal Package (USD billions)	Total FiscalPackage as a Percentage of GDP in 2009	Likely Spending in 2009 (in USD billions)	Spending in 2009 as a Percentage of GDP
Argentina	13.2	3.9	13.20	3.9
Australia	26.5	2.5	11.66	1.1
Belgium	2.52	0.5	2.52	0.5
Brazil	3.6	0.2	3.60	0.2
Canada	31.06	2.0	15.53	1.0
Chile	4	2.3	4.00	2.2
China	586	13.0	257.84	6.1
France	32.75	1.1	33.00	1.1
Germany	103.3	2.8	44.42	1.2
Hungary	6.5	3.8	6.50	4.0
India	4	0.3	4.00	0.3
Indonesia	6.15	1.2	6.15	1.2
Italy	6.3	0.3	6.30	0.3
Japan	110	2.3	70.40	1.5
Korea	25	2.7	12.50	1.3
Malaysia	18.2	7.9	9.10	4.2
Mexico	54	4.7	22.14	1.9
Netherlands	7.56	0.8	7.56	0.8
New Zealand	5	3.8	5.00	3.7
Norway	2.9	0.6	2.90	0.6
Philippines	6.84	3.7	3.42	1.3
Portugal	2.77	1.1	2.77	1.1
Russia	20	1.1	20.00	1.1
Saudi Arabia	60	11.3	21.00	4.0
South Africa	3.76	1.2	3.76	1.3
Spain	14.05	0.8	14.05	0.8
Switzerland	1.34	0.3	1.34	0.3
Thailand	8.32	2.8	3.16	1.2
Turkey	0	0.0	0.00	0.0
United Kingdom	36.36	1.3	33.81	1.2
United States	787	5.6	251.84	1.8
Vietnam	1	0.9	1.00	1.1
Total ($ billions)	1989.98		894.48	
Advanced Economies	1194.41		515.60	
Developing & Emerging Economies	795.57		378.87	

[1] 2009 GDP based on IMF's growth forecasts for 2009
Source: IILS based on national sources

Fiscal stimulus can be divided into: spending on public goods and services, stimulus aimed at consumers, and stimulus aimed at firms

A broad analysis of the 40 countries with available data confirms that almost all the rescue efforts can be divided into three main areas (see table 5): increase spending on public goods and services, fiscal stimulus aimed at consumers (e.g. personal income tax cuts, cash transfers), and fiscal stimulus aimed at firms (e.g. corporate tax cuts).

In terms of *spending on public goods and services:* (at least half the countries have announced spending increases in infrastructure and on education and health)

- Infrastructure projects generally focus on building and repair of roads, bridges, railway lines, and rural infrastructure with attention given to projects in the pipeline (e.g. China, Germany and Saudi Arabia). Some countries (e.g. China, Japan, Portugal, and the United States) include energy-efficient projects as part of infrastructure investments. China and Thailand have also announced measures to increase home availability (through public housing projects) for poor households;
- In terms of education and health, China and Saudi Arabia have announced significant increases in education and health spending with some school and hospital constructions as part of rural development programmes for several countries.

In terms of *fiscal stimulus aimed at consumers:*

- Germany, New Zealand, Russian Federation, Spain, the United Kingdom, and the United States are some of the many countries that opted for tax cuts aimed at stimulating consumer spending (these tax cuts fall into two categories: income tax cuts and sales tax cuts such as VAT reductions). Others have adopted tax cuts to boost sales in certain sectors, such as automobiles in Brazil and Germany.
- Australia, Italy, Mexico and the United States have put in place measures to help home buyers. In some cases, this includes incentives for consumers to purchase energy efficient homes and "greening" existing homes by providing subsidies and tax exemptions.
- Australia, China, France, Indonesia, Italy, Japan, Mexico, Philippines, Spain, and the United States have announced increases in social transfers aimed at poor and low-income households. Social transfers include direct cash transfers, conditional cash transfers, and social welfare programmes.

In terms of *fiscal stimulus aimed at firms:*

- Several stimulus packages have placed emphasis on the viability of large firms, especially in the financial and automotive sectors.
- In some cases, measures have been explicitly targeted at SMEs (e.g. Japan, the Republic of Korea, and Mexico). In addition, public investments in infrastructure, construction and housing will also provide new market opportunities for SMEs. Other measures to firms have been specifically targeted to mitigate the impact on employment.

Table 5: Classification of Fiscal Measures

	Total Announced Fiscal Rescue Package	Total Rescue Package as a Percentage of GDP in 2009	I. Public Spending on Goods and Services	II. Fiscal Stimulus Aimed at Consumers	III. Fiscal Stimulus Aimed at Firms
Argentina	$13.2 billion	3.9	Infrastructure Spending (details pending)	Measures to fuel consumption of goods like cars and refrigerators	Low cost loans to framers, automakers, and other exporters
Australia	$26.5	2.5	Funding for schools and hospitals; Transportation projects (railway and highway)	Help to 4 million pensioners, carers, and seniors; carer allowance; support for low and middle income families; help to first time home buyers. Total spending in this category adds up to approximately $10 billions.	Supporting car manufacturers; Investment Allowance
Brazil	$3.6 billion	0.2		Extension of Bolsa (CCT program) to include 5 million more citizens; increase in minimum wage by 12% as of Feb 1; tax cuts on consumer loans and personal income to boost car sales	Tax cuts to help auto manufacturers
Canada	C$ 40 billion	2.0	$7 billion in infrastructure spending (infrastructure stimulus fund, repairs and maintenance, and accelerated construction of at colleges and universities)	Tax cuts	Protecting jobs and supporting sectoral adjustments; improving access to financing
Chile	$ 4 billion	2.2	$1.5 billion increase in public spending		Subsidies, tax rebates, and $1 billion capitalization for state copper giant
China	$586 billion	13.0	Speeding up rural infrastructure construction; accelerating the expansion of railways; airport constructions in western province; upgrading power grids; greater spending on health and education in rural areas; enhancing the construction of sewage and waste treatment facilities.	Low-rent housing (0.28 trillion RMB); raising minimum grain purchases and farm subsidies; subsidies for low-income urban residents; increasing the number of pension funds	Direct tax cuts for 9 industries (steel, telecommunications, automotive etc.); support and development of high-tech and service industries; remove loan quotas on commercial lenders
France	€26 billion	1.1	Increasing investments in infrastructure projects	€200 payment for 3.8 million impoverished households	Protection for the auto sector; support for business; investing in housing and construction; Social tax exemption for employers (with less than 10 workers) who hire new employees in 2009
Germany	€82 billion	2.8	Infrastructure Investment (schools and roads) worth €18 billion	Income tax cuts (€9 billion); reduction in health insurance contributions (€9 billion taking into account employers as well); €2,500 payment for drivers who buy a low-emission car; €100 checks per child	Reduction in health insurance contributions;
India	$4 billion	0.3	$4 billion new spending for roads, ports and infrastructure		Measures to help exporters and labour-intensive industries; cut in excise duty;
Indonesia	$6.15 billion	1.2	Infrastructure spending through local and central governments	Increased funds for direct cash transfer programme (BLT), the rice for poor people and school operational aids programme, and the hope family programme (PKH)	Help for the export sector and stimulate private investments; boost to export financing
Italy	€ 5 billion	0.3	Stepped up public works spending	€2.4 billion cash payments to low-income families; and mortgage relief; additional welfare spending	Corporate tax breaks
Japan	$110 billion	2.3	Funds to local governments to invest in infrastructure projects; accelerated introduction of energy-saving technologies; tax incentives for energy saving technologies;	Aid to unemployed workers; housing assistance; UE insurance extension; cash transfers regardless of income	Increase wage subsidies for SMEs employers; subsidise employers who hire temporary workers as regular employees; inject funds into domestic banks to support small and medium sized businesses;
Korea	$25 billion	2.7	Infrastructure (4 trillion won); Increased spending on medical services for low-income earners; additional local-government spending (1 trillion won)	Social transfers to low-income households (1 trillion won)	Tax breaks for investment in factories (3 trillion won); assistance to small businesses (3.4 trillion won)
Malaysia	MYR 67 billion	7.9	Rural infrastructure investment; housing, school, and hospital building	Savings from cut in fuel price subsidies	Savings from cut in fuel price subsidies
Mexico	$54 billion	4.7		Freezing of gasoline prices and reduction in LNG price; old electric appliance replacement for poor families; purchase and improvement of homes by the country's poorest citizens; seasonal employment program; loans for home buyers	Support to companies with technical work stoppage; freezing of gasoline prices and reduction in LNG price
Netherlands	€6 billion	0.8	Speeding up infrastructure spending		Temporarily subsidizing company payrolls
New Zealand	$5 billion	3.8		Income tax cuts	
Norway	$2.9 billion	0.6	Infrastructure spending; new spending on schools and hospitals		Tax cuts for struggling businesses
Philippines	PHP 300 billion	3.7	Infrastructure investment; school and hospital building	Conditional cash transfers (CCTs)	Tax exemptions
Portugal	€2.2 billion	1.1	Schools; energy installations projects	Employment programs	Fiscal incentives for firms
Russia	$20 billion	1.1	Defense spending	Tax cuts	Tax cuts
Saudi Arabia	$17.3 billion	11.3	New spending on education and health		
South Africa	39 billion Rand	1.2	Expanded public works program; spending on schools, law enforcement, and HIV/AIDS programmes	Personal tax cuts and welfare grants	
Spain	€11 billion	0.8	New public work projects; creation of Fund for Local Entities and the Special Fund for Employment and Economic Reactivation	Tax support measures for families; increase in social welfare; delay in mortgage payments for families with unemployed breadwinners	Tax cuts; increased access to credit for SMEs
Thailand	THB 300 billion	2.8	Housing and rural infrastructure development; increased spending on health	Cost of living alleviation projects and sustenance allowance; free education program; capacity building for the unemployed	Sector-specific industry promotion
United Kingdom	£25.6 billion	1.3	Infrastructure Spending (£3 billion)	VAT reduction from 17.5 to 15 percent (£12.5 billion); Permanent increase in personal income tax allowance for basic rate taxpayers (£3.19 billion)	Subsidies for employers (up to £2,500) who hire workers that have been unemployed for more than 6 months; other employment measures (£1.3 billion)
United States	$787 billion	5.6	Infrastructure spending; production of energy from renewable resources; aid to science facilities and research; broadband service in rural areas; aid to school districts and public colleges; additional aids to schools serving low-income areas; increase in the side of Pell grants (education grants)	Tax relief for low-wage and middle-income workers of roughly $300 billion; extended jobless benefits and retraining; health coverage for the unemployed; temporary increase in food stamps	Help to car makers and other distressed sectors in need of credit
Vietnam	$1 billion	0.9	Housing and infrastructure investment		Agriculture, aquaculture, and forestry production promotion; promotion of manufacturing production for domestic consumption; assistance to SMEs

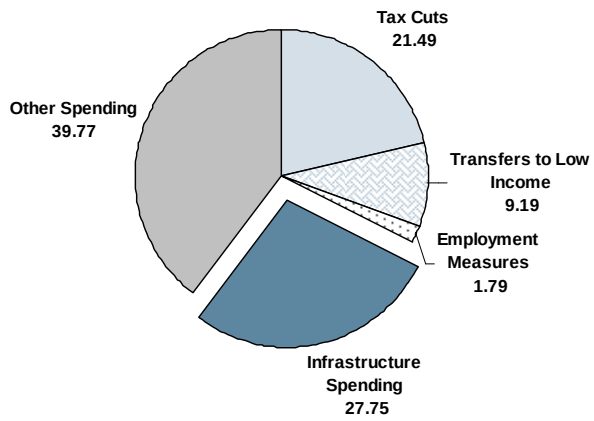
Source: IILS based on national sources

There is little emphasis on employment measures and social transfers

Across a range of 22 countries with detailed data on composition, there is a significant variation in terms of the emphasis placed on different components (figures 10 and 11).

- Sixteen out of 22 countries have announced spending on infrastructure projects, and on average, close to one third of economic stimulus packages are directed towards such spending. Infrastructure projects are part of public works programmes announced by countries which are designed to create jobs and increase long-term economic growth.
- Tax cuts such as reductions in VAT, income taxes, payroll taxes, and sales taxes have been put in place by more than half the countries and on average 21.5 per cent of the global stimulus is in this category.
- On average, direct transfers to low-income households and employment measures constitute the two smallest portions of stimulus packages – 9.2 per cent and 1.8 percent respectively. Moreover, half or less of the countries have announced transfers to low-income or employment measures, respectively. Transfers to low income include direct cash payments, CCTs, and payment of unemployment benefits. Meanwhile, employment measures include increasing the number of training centers and services like job search and placement. Creation of new jobs mostly falls under infrastructure spending.
- Moreover, half or less of the countries have announced transfers to low-income or employment measures, respectively. Transfers to low income include direct cash payments, CCTs, and payment of unemployment benefits. Meanwhile, employment measures include increasing the number of training centers and services like job search and placement. Creation of new jobs mostly falls under infrastructure spending.

Figure 10. Composition of Spending as a Percentage of Total Fiscal Package [1]



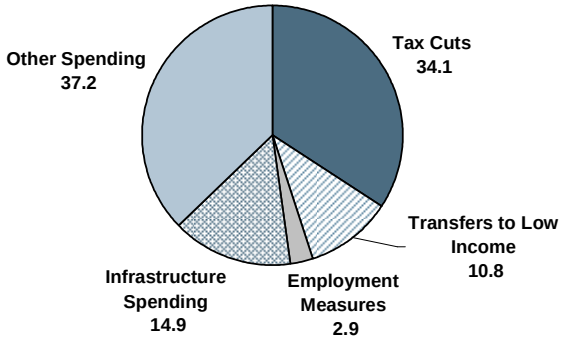
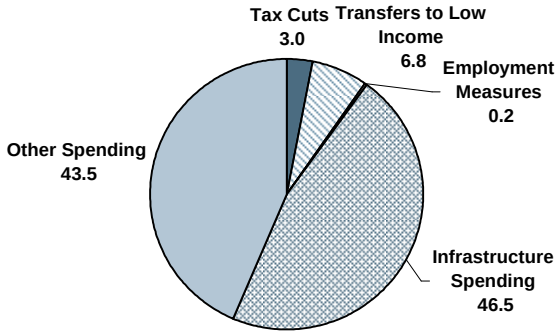
[1] Based on 22 countries – 10 advanced and 12 developing & emerging economies

"Other spending" includes all other measures, which are country specific and/or difficult to categorize in the first four categories. For example, direct/indirect help to businesses, indirect transfers for consumers, and increased funding for education and health, are some of the components included in "other spending."

It is not possible to separate out labour tax cuts from other tax cuts.

Source: IILS, based on Bloomberg, Asian Development Bank, and New York Times.

Figure 11. Composition as a Percentage of Total Fiscal Package[1]

Panel A: Advanced Economies	*Panel B: Developing & Emerging Economies*
	

[1] Based on 10 advanced and 12 developing & emerging economies

Source: IILS estimates

Emphasis of stimulus also varies between advanced and developing economies

Similarities and differences between advanced economies and developing economies in terms of their stimulus spending are (figure 11):

a) Employment measures – training programs, job matching, funding for employment services – comprise a small portion of stimulus for both group of countries. Advanced economies are spending 3 per cent in employment measures while developing and emerging economies are spending 0.2 per cent.

b) However, most countries have announced spending in public works projects that are likely to create millions of new jobs. The fraction of stimulus going into infrastructure spending is three times higher in developing and emerging economies compared to that of the advanced economies.

c) Meanwhile, tax cuts comprise over one third of fiscal stimulus in advanced economies, while they comprise only 3 per cent in developing and emerging economies.

d) Social transfers to low-income comprise a relatively small percentage for both groups (10.8 in advanced and 6.8 in developing and emerging).

e) The category of "other spending" is high for both groups because it includes all other measures, which are country specific and/or difficult to categorize in the first four categories.

Table 6: Labour Market Initiatives[1]

	I. Extension of Unemployment Benefits	II. Activation Measures		III. Increase in Public Sector Jobs or Infrastructure Spending[3]
		A. Hiring Incentives for Employers[2]	B. Other activation measures (job-search help, training, measures targeted at disadvantaged group etc)	
Argentina				X
Australia		Funds to employers for staff development and training programs	Increase in productivity training places from 57,000 to 113,000	X
Belgium		Cuts in employer's social security contributions	A recovery plan for the labour market agreed on Dec, 08	
Brazil	Increase in minimum wage by 12 % as of Feb-09, which will affect 45 million workers; expansion of UE benefits from 3 to 5 months to 5 to 7 months			
Canada	Extension of benefits by five weeks		$1.5 billion in training fund for laid-off workers	X
Chile	X	X		X
China	X (ongoing discussions at the local and regional level; recommended by the central govt.)	Reduction in medical and accident insurance premiums; flexible working hours and pay for service sector firms	Nationwide vocational training program for migrant workers returning home after losing jobs	A temporary moratorium on firing in state owned enterprises
France		Employers with less than 10 employees will not pay social taxes for each new employee they hire in 2009.	X	X
Germany	X	Reduction in health insruance contribution	X	
India				X
Indonesia			Job training; voluntary transmigration programs for laid off workers to areas less affected by the crisis	X
Ireland				Plans to increase wages in public sector
Italy	Unempoloyment benefits to people who previously failed to qualify			X
Japan	X	Increased subsidies for SMEs employers; subsidies for employers who hire temporary workers as regular employees	Support for non-regular workers in job-placement	Finanical support to local governments that hire job-seekers
Korea	Support vulnerable workers (outside the boundaries of a social safety net) who are put on unpaid temporarily leave	Tax exemption and extension on tax submission periods for employers that maintain their workforce	X	X
Malaysia		X	Training for retrenched workers; re-training unemployed graduates over the next 2 to 3 years	X
Mexico	15 billion pesos in aid to laid-off workers	Measures to prevent job losses - 2 billion pesos to companies facing production cuts and layoffs	Increase in seasonal employment program	
Netherlands		Subsidies for company payrolls	Establishment of mobility centers to assist employees in finding jobs	X
Philippines	Increase in CCTs		X	X
Portugal			Employment programs	X
Saudi Arabia				X
Spain		A €1,500 per job subsidy for companies that hire unemployed workers with families to support.		X
Sweden		Subsidies for employers hiring workers who have been unemployed for long periods	Job matching programs for unemployed	
Thailand	Cost of living alleviation projects and sustenance allowance		Capacity building for the unemployed	X
Turkey	X (proposed but not approved)	Subsidies to employers		
United Kingdom		Subsidies for employers (up to £2,500) who hire workers that have been unemployed for more than 6 months	X	X
United States	Extension of unemployment benefits; health insurance for those who lost their job; increase in food stamps; increase in social security benefits	X	X	X
Vietnam	New unemployment insurance program, Jan-09			X

[1] An "X" represents some action taken by a country in that catergory.
[2] Corporate tax cut is not counted as an incentive for employers to hire, nor is sectoral subsidies.
[3] All the countries with increased spending in infrastructure projects are counted as are countries that increased public sector employment.
Source: IILS based on National Newspapers

There are several announcements of labour market initiatives despite limited funding allocated for them

Some countries have announced explicit measures to help workers and employers as part of their fiscal rescue efforts (see specific country examples in table 6):

- Japan, Brazil, Chile, and the United States have put in place extension of unemployment benefits. France, Italy, and Switzerland have also put in place more generous systems of unemployment benefits for temporarily laid-off workers. Meanwhile, Canada, China, and Turkey are in the process of extending unemployment benefits. Other countries like the Republic of Korea, Philippines, and Thailand have announced country-specific measures to assist vulnerable workers.
- Some countries are making greater use of in-work benefits in conjunction with reduced working hours to curtail layoffs. For example, in Germany, the government extended the possibility for workers who continue to be employed – but at reduced working hours – to receive income supplements, and companies are reimbursed 100 per cent of their social security contributions on behalf of employees when the down time (i.e. reduced working hours) is used for training.
- To encourage hiring, some countries have announced subsidies and exemptions. For example, the United Kingdom has announced subsidies for employers (up to £2,500) who hire workers who have been unemployed for more than six months, and Japan has announced subsidies for employers who hire temporary workers as regular employees. Other countries that have announced some sort of hiring incentives include Australia, Chile, China, France, Germany, the Republic of Korea, the Netherlands, and the United States.
- Australia, Canada, Chile, China, France, Germany, Indonesia, Japan, the Republic of Korea, Portugal, Thailand, the United Kingdom and the United States have announced training programmes for laid-off workers as part of their labour market initiatives. Training programmes include, among others, vocational workshops for laid-off migrant workers, and expanded opportunities for apprentices in trades.
- It is also likely that the new infrastructure projects, discussed briefly above, and increased funding for local governments will result in more public sector jobs. As of March 2009, some 20 countries of the 40 have made such announcements.
- A few countries have announced explicit goals for job creation. These include Chile (100,000), France (80,000 to 110,000), Hungary (20,000), Indonesia (2.6 million), Spain (300,000) and the United States (3.5 million). In France, Spain and the United States, job goals include the creation of green jobs. However, the goals for job creation do not include plans to save existing jobs.

6. Summary: A brief discussion of rescue measures

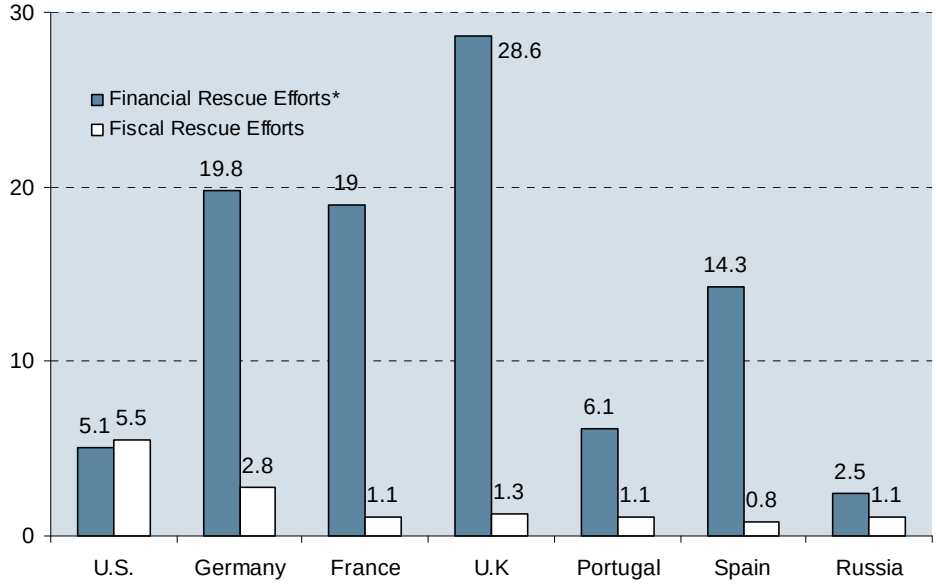
There are issues related to the size and timing of fiscal stimulus packages

It is important to note that there are several issues concerning the economic stimulus packages. First, the breakdown of rescue efforts in terms of old spending (already on the pipeline) and new spending is uncertain and unclear. Second, the time-horizon in which the stimulus package will be administered is also questionable. For some countries like the U.K., Germany and the U.S., we know that the time-frame is two years (2009-10), but for most countries, the time frame of new spending measures is not clear. Third, most countries have announced fiscal rescue packages different from their financial rescue packages, but there is a tendency to count in financial help to different sectors (like loan guarantees) as part of the fiscal

package. (For the countries included in our dataset, financial efforts and fiscal efforts are separate.) And fourth, some countries have announced stimulus spending embedded in their annual budgets, which makes it difficult in separating new spending from the old ones.

Financial rescue efforts are significantly larger than fiscal rescue efforts

Figure 12. Comparison between Fiscal and Financial Rescue Efforts as a Percentage of GDP



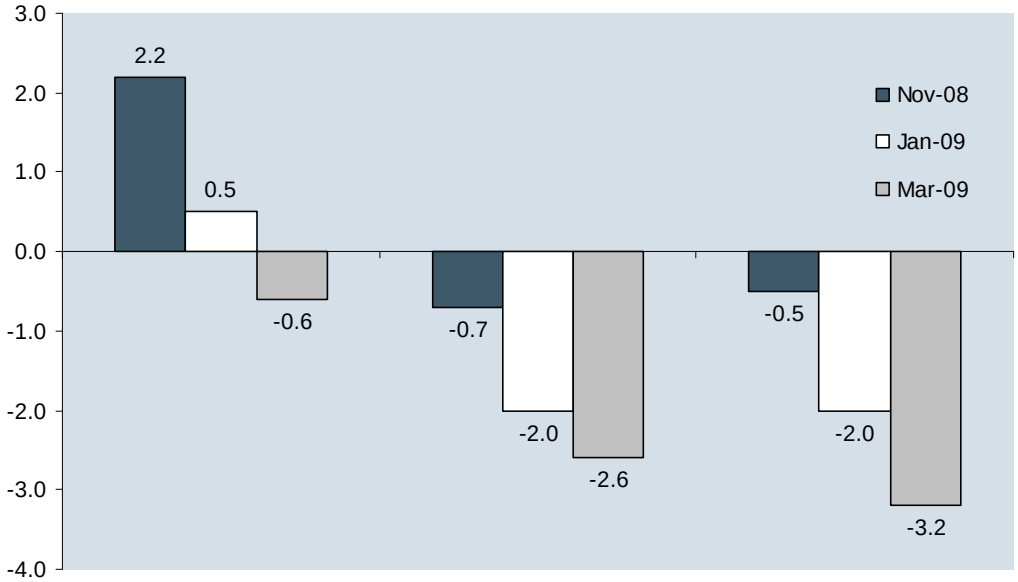
Source: ILO, OECD & Bloomberg

There has been considerable emphasis on rescuing the financial sector. As Figure 12 shows, financial rescue efforts dwarf fiscal rescue efforts for all countries except the U.S. However, after taking into account the bank rescue measures announced by the new U.S. administration, the size of financial rescue efforts will surely dwarf fiscal rescue efforts.[15]. In case of the European countries, the contrast between financial and fiscal measures is stark. While, it is true that comparison between financial and fiscal rescue efforts as a percentage of GDP should not be taken literally, it is very likely that governments will incur costs in rescuing the financial sector which will be far greater than the costs of fiscal rescue efforts.

[15] From an accounting point of view, financial rescue packages may not have any impact on the current net debt or budget balance. Measures like capital injection, if treated as a financial transaction, where the government receives in return a financial asset of equal value to the payment, would not affect the budget balance. In fact, the government could actually make money once the markets return to normalcy. Furthermore, buying troubled assets could also prove to be profitable if the government manages to sell them at a higher value. And finally, loan guarantees are not exactly fiscal costs because they might never be exercised or used.

Stimulus packages were announced when growth projections were relatively optimistic

Figure 13. Downward Revisions in IMF's Growth Forecasts



Source: IMF

Furthermore, almost all the stimulus packages examined in this paper were announced by countries in late 2008 or early 2009. But the global economic situation has worsened considerably since then. As figure 13 shows, the IMF has adjusted its forecasts downward significantly. For example, in Nov. 2008, the IMF predicted that the world economy would grow by 2.2 per cent in 2009, but the March 2009 forecast predicts that the world economy will shrink by 0.6 per cent. Hence, when the stimulus packages were designed and implemented makes a significant difference in terms of whether the packages can collectively fight off a prolonged global recession. Furthermore, there is an issue of time lag between announcement of measures and their implementation. Despite the rush to announce fiscal stimulus packages, the speed at which they have been implemented is uncertain and questionable.

Global fiscal stimulus is inadequate

Table 7: Economic Stimulus in 2009

	As a % of GDP	As a % of World GDP
Total	1.7	1.4
Advanced Economies	1.3	-
Developing & Emerging Economies	2.7	-

Notes: Based on 32 countries where data is available
GDP in 2009 based on IMF's March 09 projections are used for estimations

Fiscal stimulus as a percentage of GDP for 32 countries is 1.7 per cent, while as percentage of world GDP it is 1.4 per cent. Meanwhile, stimulus as a percentage of GDP for advanced economies is 1.3 per cent and for developing and emerging economies it is 2.7 per cent.

Furthermore, fiscal stimulus announced by the G20 is close to 90 per cent of the total global economic stimulus as it includes the two biggest contributors, the United States and China.

Despite the widespread efforts to counter global economic recession, global economic stimulus is inadequate in light of the IMF's recommendation of 2 per cent for global stimulus, which is more than a half a percentage points higher than the currently allocated spending. It is abundantly clear that additional stimulus spending is warranted, especially from countries that have fiscal space to do so.

References

Blanchard, Olivier, "Cracks in the System," *Finance & Development*, Dec. 2008, IMF.

Bernanke, Ben, "Deflation – making sure it does not happen here," speech delivered before the National *Economists Club*, Washington DC, 21 Nov., 2002.

Caballero, R. J., E. Farhi, and P. Gourinchas, "An Equilibrium Model of Global Imbalances and Low Interest Rates," *American Economic Review*, 2008, 98:1, pp.358-393.

Fender, Ingo, and Jacob Gyntelberg, "Overview: Global Financial Crisis Spurs Unprecedented Policy Actions," *BIS Quarterly Review*, Bank of International Settlement, Dec. 2008.

Global Economic Perspectives, "The End of Recession and the Limits to Fiscal Policy," *Deutsche Bank*, Dec. 17, 2008.

Gros, Daniel and Stefano Micossi, "The beginning of the end game…" VoxEU.org, Sept 20, 2008.

Herszenhorn, David M., "Democrats in House Unveil $825 Billion Stimulus Bill," *The New York Times*, Jan 16, 2009.

ILO, *The Financial and Economic Crisis: A Decent Work Response*, International Institute for Labour Studies, Geneva, 2009.

Johnson, Simon, "The Economic Crisis and the Crisis in Economics," *Peterson Institute of International Economics*, Jan 7, 2009, (revised version of speech prepared for the Presidential Address to the Association for Comparative Economics, San Francisco, Jan 4, 2009).

OECD Economic Outlook, *Preliminary Edition*, No. 84, November 2008.

Richardson, Matthew and Nouriel Roubini, "Nationalize the Banks! We're all Swedes Now," The Washington Post, Feb. 15, 2009.

Spilimbergo, Antonio, Steve Symansky, Olivier Blanchard, & Carlo Cottarelli, "Fiscal Policy for the Crisis," *IMF Staff Position Note*, Dec. 29, 2008, SPN/08/01, IMF.

Taylor, John, "Financial Crisis and Policy Responses: An Empirical Analysis of What Went Wrong," NBER Working Paper 14631, Jan. 2009.

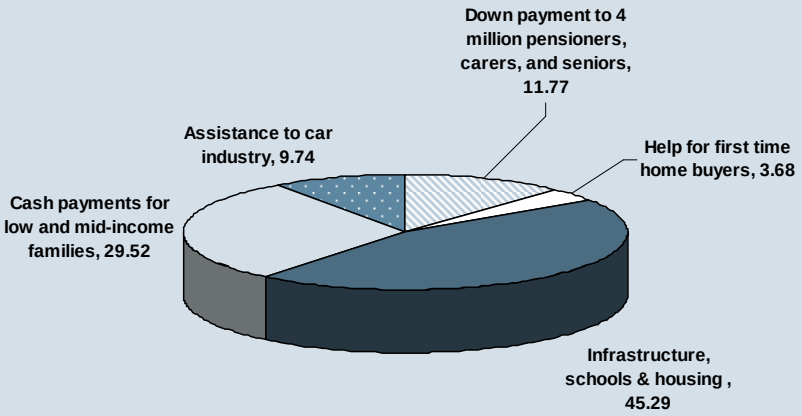
World Economic Outlook, International Monetary Fund (IMF), *An Update of Key WEO Projections*, Nov. 6, 2008.

World Outlook, "Searching for a New Source of Global Demand Growth," *Deutsche Bank*, Dec. 5, 2008.

Appendix: Fiscal stimulus country boxes for the G20

Australia

A.1 Composition of Australia's Fiscal Stimulus Spending as a Percentage of Total Package (A$ 52 billions over 2 yrs)



Source: IILS, based on national sources

[1] This chart also takes into account the second stimulus announced on Feb 2, 09

First stimulus package announced by Australia in December, 2008, include the following:

- A $4.8 billion down payment to Australia's four million pensioners, carers and seniors.
- Those who are receiving a carer allowance will also receive $1,000 for each eligible person they care for.
- A $3.9 billion payment in support for low and middle income families.
- A $1.5 billion investment to help first home buyers purchase a home.

A more substantive stimulus package was announced in February, 2009 – "National Building and Jobs Plan" – which includes the following:

- Free ceiling insulation for around 2.7 million Australian homes.
- Build or upgrade a building in every one of Australia's 9,540 schools.
- Build more than 20,000 new social and defense homes.
- $950 one off cash payments to eligible families, single workers, students, drought effected farmers and others.
- A temporary business investment tax break for small and general businesses buying eligible assets.
- Significantly increase funding for local community infrastructure and local road projects.

Labour market initiatives (under both stimulus packages)

- Tax Bonus for Working Australians of up to $950 paid to every eligible Australian worker earning $100,000 or less. This will support up to 8.7 million individuals.
- $950 Single Income Family Bonus to support 1.5 million families with one main income earner.
- $950 Farmers' Hardship Bonus paid to around 21,500 drought affected farmers and farm dependent small business owners receiving exceptional circumstances related income support.
- $950 Training and Learning Bonus paid to students and people outside of the workforce returning to study to help with the costs of education and training.
- Double the number of productivity training places from 57,000 to 113,000.

Brazil

Stimulus package

Brazil announced a fiscal stimulus package worth $3.6 billion – 0.2 percent of its GDP. Its stimulus efforts is focused on the auto sector because it has slowed from a record pace as the global credit crisis limits consumer financing and pushes interest rates to record highs. The auto sector comprises approximately 5 percent of Brazil's economy; hence it is not surprising that the government has put all its efforts in helping this sector.

Stimulus aimed at consumers include:

- Tax cuts on personal income to boost car sales
- Increased subsidies to poor to buy new homes

Stimulus aimed at firms include:

- Tax cuts to help auto manufacturers
- Tax cuts on construction materials

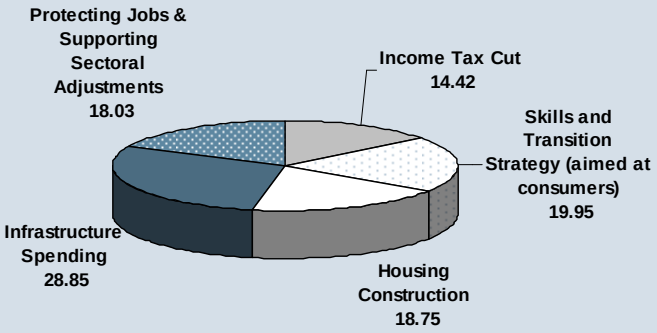
Labour market initiatives

- Increase in minimum wage by 12 % as of Feb-09, which will affect 45 million workers
- Brazil is also planning to spend as much as 1.1 billion reais ($483.7 million) in 2009 on expanding the country's unemployment benefits.
- Before this plan, people registered as unemployed collected monthly benefits for three to give months, with the amount being proportional to their wages in the last job (minimum $204 and maximum $383). Furthermore, the government recently announced that it plans to extend this to 5 to seven months, and if the job market continues to deteriorate, to 10 months.

Canada

Stimulus package

A.2 Composition of Canada's Fiscal Stimulus as a Percentage of Total Package (C$ 40 billions over two years)



Source: IILS, based on national sources

On March 10, 2009, Canada announced its "Economic Action Plan" worth 40 billion Canadian dollars.

Public spending on goods and services:
- Stimulating housing construction by building homes, encouraging home ownership, and enhancing energy efficiency
- Expand and accelerate infrastructure spending by modernizing and greening of federal buildings

Stimulus aimed at consumers:
- Income tax cuts aimed at stimulating consumer spending
- Improving access to finance for consumers and households

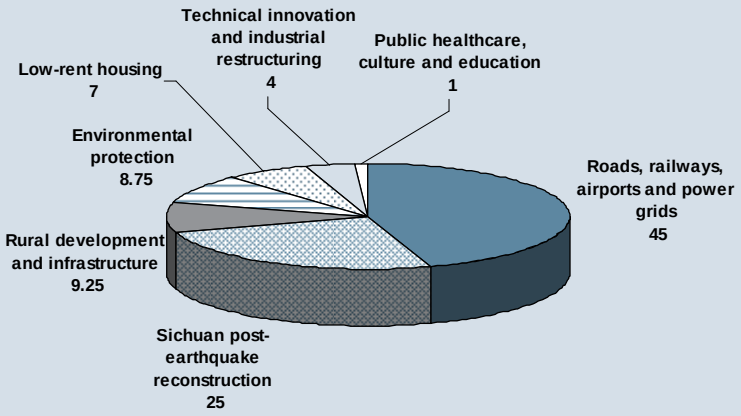
Stimulus aimed at businesses:
- Protecting jobs and supporting sectoral adjustment (help to automotive, forestry, and manufacturing)
- Improving access to financing for businesses.

Labour market initiatives
- Enhanced benefits for unemployed workers – an extra 5 weeks, working-sharing, and wage earner protection
- Additional funding for enhanced training for unemployed Canadians
- Enhanced support for older workers in vulnerable communities
- Measures to provide more opportunities for youth employment
- Five aboriginal training and employment projects

China

Stimulus package

Figure A.3 Composition of China's Fiscal Stimulus as a Percentage of Total Package ($586 billions over 2 yrs)



Source: IILS, based on ADB

China announced a $586 billion (4 trillion RMB or 13.88 percent of its GDP) fiscal rescue package aimed at stimulating domestic demand.

- Public spending on goods and services includes:
  - speeding up rural infrastructure construction
  - accelerating the expansion of railways
  - airport constructions
  - upgrading power grids
  - greater spending on health and education in rural areas, and
  - enhancing the construction of sewage and waste treatment facilities
- Likewise, China's fiscal stimulus aimed at consumers includes:
  - low-rent housing
  - raising minimum grain purchases and farm subsidies
  - subsidies for low-income residents, and increasing the number of pension funds
- Stimulus aimed at firms includes direct tax cuts for 9 industries (steel, telecommunications, automotive etc), support and development of high-tech and service industries, and removal of loan quotas on commercial lenders.

Labour market initiatives

Labour market initiatives by the government include:

- Reduction in medical and accident insurance premiums for employers
- Flexible working hours and pay for service sector firms
- Nationwide vocational training programs from migrant workers returning home after losing their jobs
- A temporary moratorium on firing in state owned enterprises (SOEs)

France

Stimulus package

- **In December, the French government announced a €26B ($33B) stimulus package which will help France weather the global economic slowdown by making a massive effort on investment to support businesses and protect jobs.**
- The plan combines major state infrastructure projects with targeted measures to improve cash-flow for hard-hit businesses, protect jobs and shore up France's vital auto and construction industries, including:
  - increasing investments in public infrastructure projects;
  - protections for the Auto Sector;
  - support for Business;
  - investing in housing and construction;
  - support for low-income households.
- French President, Nicolas Sarkozy appointed Patrick Devedjian to the new position of "chargé de la mise en oeuvre du plan de relance". His ministry will be provided with resources to ensure the implementation and evaluation of the stimulus package.

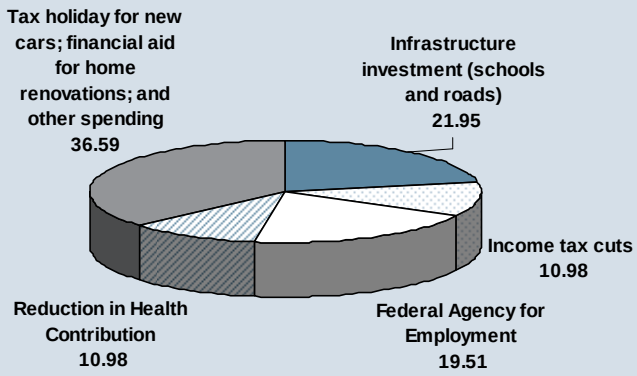
Labour market initiatives

- The Government announced that employers with less than 10 employees will not pay social taxes for each new employee they hire in 2009. This measure will cost the state approximately 700M and is expected to be complement with a new initiative on professional training expected in 2009.
- Given the anticipated job losses and relatively high unemployment rates that are expected, the government will provide €500M for active employment measures.
- The plan should create 80,000-110,000 new jobs, making up for the expected disappearance of some 90,000 jobs in 2009 due to the crisis.

Germany

Stimulus package

Figure A.4 Compositon of Germany Fiscal Stimulus as a Percentage of Total Package (€82 billions over 2 years)



Source: IILS, based on Bloomberg and National Sources

- **On December 5, Germany's upper house of parliament approved a stimulus package valued at €32B (about $40B USD) over two years**. The package is hoped to provide a €50B boost to the economy by stimulating private investment.
- Measures previously approved by the lower house included a tax holiday for new cars as well as financial aid for home renovations to improve energy efficiency, and money for infrastructure projects.
- **On Jan 12, 2009, Germany announced €50 billion over the next two years to counter the deepening economic slump and the new measures included:**
  - o infrastructure investments in schools and roads
  - o income tax cuts
- Now the total rescue package announced by Germany is €82 billion over 2009 & 2010 – 1.6 percent of its GDP.

Labour market initiatives

- Extension of unemployment benefits
- Reduction in health contribution for both workers and employers
- Aid to federal agency for employment

India

Stimulus package

India announced a fiscal stimulus worth $ 4.1 billion – 0.3 percent of its GDP – in Dec. 2008. India's fiscal stimulus is focused on supporting specific sectors like labour-intensive and export oriented industries. Some of the reasons for India's modest and focused stimulus packages are: i) the effect of the global slowdown has had a relatively modest effect on India; ii) the impact has been on urban industrial areas; and iii) India already has a country-wide rural poverty alleviation programs, which are financed outside of the stimulus package.

Stimulus aimed at firms include:

- Support for exporters and labour-intensive industries
- General tax cut
- Support for housing sector and SMEs

Spending on public goods and services includes:

- Infrastructure investment and rural development

India announced a second stimulus worth $4 billion in Jan., 2009, which was a financial rescue package, focusing on capital injections into state-run lenders and financing help for non-bank finance companies.

Labour market initiatives

- Higher salaries for government workers, but this is outside of the stimulus package and is part of a series of off-budget spending plans.
- India is considering the accelerated introduction and possible expansion of the 2007 Rajeev Gandhi Shramik Kalyan Yojana (RGSKY) – a self-financing social security scheme for formal economy workers. The scheme provides unemployment allowance to insured persons as well as health care for the workers and their families, and support for upgrading skills to find alternative employment.
- In December 2008 in India, the Ministry of Labour and Employment constituted Industrial Tripartite Committees: one each for cotton, textile, jute, road transport, electricity generation and distribution, engineering, sugar and plantation industry. These are non-statutory committees with the objective to provide a forum for dialogue on the problems that enterprises and workers face in particular industries and to explore possible solutions.

Emerging social floor in India*

- Prior to the onset of the crisis, India extended the coverage of the National Rural Employment Guarantee Act, first introduced in 2005, to all rural areas. Under the NREGA, rural households are entitled to 100 days of manual work per family each year at the minimum wage for agricultural labour.
- Furthermore, the Government of India is also introducing new measures to protect the poor. In December 2008 the lower house of the parliament passed the Unorganized Workers' Social Security Bill, which is designed to provide health, life and disability insurance, old-age pension and a group accident scheme for workers in the informal economy, including agricultural and migrant workers.

* "The Fallout in Asia: Assessing labour market impacts and national policy responses to the global financial crisis," Jan. 2009, ILO Bangkok

Indonesia

Stimulus package

- On Dec. 15, 2008, the Indonesian government announced that it will increase its poverty alleviation fund to IDR 78 trillion ($7.1 billion) in 2009 from IDR 50 billion in 2008. The poverty allocation fund finances various programmes like:
  - direct cash transfers
  - the rice for poor people and school operational aids programme
  - the national community empowerment programme
  - the hope family programme
- On Dec. 24, 2008, the Indonesian government announced a fiscal rescue package worth IDR 100 trillion ($9.2 billion) for infrastructure projects. According to the government, a quarter of this amount will be channeled to local administrations and the rest will be implemented by the central government.
- On Jan 5, 2009, the government announced another economic stimulus package worth IDR 50.5 trillion ($4.6 billion). Three fourths of this package will be finance from unspent leftover from the 2008 budget while the rest will come from 2009 budget. This rescue package includes:
  - VAT exemption to 17 sectors including steel, textiles, palm, oil and footwear
  - Exemption of import duties for raw materials for 14 sectors including manufacturing (the tax exemptions are available only for firms affected by the global economic slowdown and with at least 500 employees)
  - Direct funding for sector worst hit by crisis
  - Infrastructure projects
  - Safety net programs
- Less than on third of the IDR 50.5 trillion (announced on Jan 5, 2009) has been allocated, and the rest is to be announced in late January, 2009. However, the government has indicated that the rest of the package will be geared towards job creation and providing further support to the private sector.

Labour market initiatives

In December, 2008, the Indonesian government announced following measures:

- Intensification of voluntary transmigration programmes to laid off workers to areas with potential jobs and less affected by crisis
- Job training and networking programmes
- Building of 50,000 to 100,000 homes to employ about 500,000 workers
- The government wants to create a total of 2.6 million jobs

Japan

Stimulus package

- Japan's largely export-driven economy has been dually impacted by the strong yen and slowing global demand. **The Japanese government has allocated approximately $110 billion for fiscal stimulus (2.27 percent of its GDP).**
- Increased spending on social welfare and public health includes:
  - Reduction in elderly health insurance premium for low-income citizens
  - Increase childcare facilities
  - Help for hospitals
  - Cash transfers regardless of income (this plan has been opposed by some political groups)
- Specific measures aimed at consumers include:
  - offer tax breaks for workers affected by the economic slowdown
  - provide incentives for home buyers and tax breaks for existing home owners
- Measures aimed at business include:
  - Inject funds into domestic banks to support small and medium-sized businesses
  - Enhance public credit guarantee schemes and loans provided by government financial institutions
  - Tax incentives for businesses using energy saving and efficient facilities and plants
- Infrastructure investments include:
  - Increased investment in energy saving and new energy technologies
  - Enhance energy efficiency in transportation system (tax cuts for energy efficient cars, subsidies for energy efficient railway systems)
  - Increased resources for R&D aimed at energy saving green technologies

Labour market initiatives

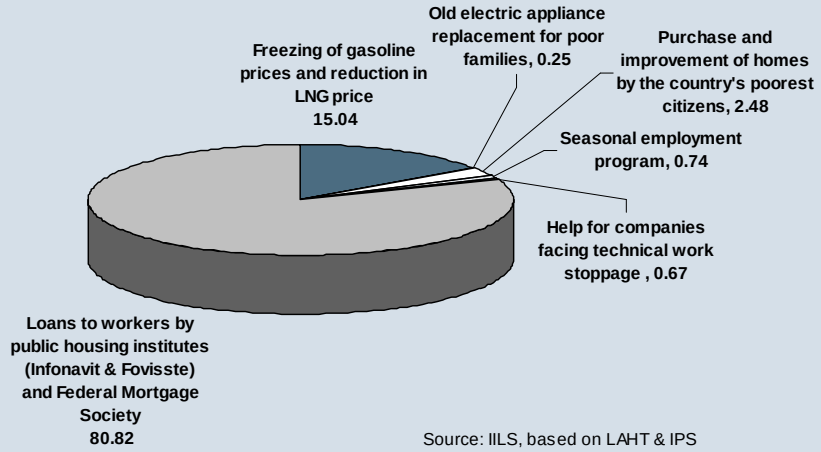
Some of the many labour market initiatives include:

- Providing housing to those who lost a job and a company house
- Increase wage subsidies for SMEs employers
- Enhance support for non-regular workers in job placement
- Provide financial support for local governments that hire job-seekers
- Subsidies for employers that hire temporary workers as regular employees
- Ease employment insurance eligibility criteria to cover more non-regular workers
- Extension of unemployment benefits

Mexico

Stimulus package

Figure A.5 Composition of Mexico's Fiscal Stimulus as a Percentage of Total Package ($54 billion)[1]



Source: IILS, based on LAHT & IPS

[1] Only about half of the 54 billion has been allocated - the chart is based on the allocation of $22.72 billion

Mexico has announced a $54 billion rescue package, but only $22.72 of it has been allocated. The details regarding the rest of the package are set to be released soon. Mexico's rescue efforts can be divided into the following two categories:

- Fiscal stimulus aimed at firms include:
  - Support for companies with technical work stoppage
  - Freezing of gasoline prices and reduction in LNG price
- Fiscal stimulus aimed at consumers include:
  - Freezing of gasoline prices and reduction in LNG price
  - Old electric replacement for poor families
  - Purchase and improvement of homes by country's poorest citizens
  - Loans for home buyers

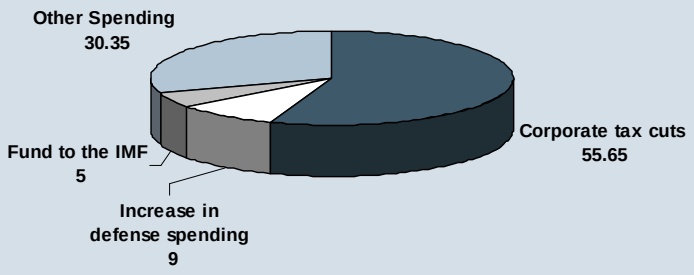
Labour market initiatives

- Increase in seasonal employment program
- Increase in public sector jobs through infrastructure investment and other public works projects (this is yet to be announced formally)

Russia

Stimulus package

A.6 Composition of Russia's Fiscal Stimulus as a Percentage of Total Package ($20 billion)



Source: IILS, based on Financial Times

Russia announced a fiscal stimulus package worth 550 billion Roubles ($20 billion) – 1.1 percent of its GDP.

Fiscal stimulus aimed at firms:

- Corporate tax cut worth 400 billion Roubles - $11.13 billion

Spending on public goods and services:

- $1.8 billion in defense spending
- 1 billion contribution to the IMF

Other provisions include:

- The State will be more involved in providing credit in the economy.
- Russia will continue spending its reserves to keep the Rouble stable. Russia had a reserve of $453 billion in Nov., 2008.

Labour market initiatives

The Russian government has not announced explicit labour market initiatives.

Saudi Arabia

Stimulus package

Saudi Arabia announced its fiscal stimulus program as a part of its annual budget announcement and **the total stimulus spending amounts to SR 225 billion ($60 billion) – 11.3 per cent of its GDP.** (The annual budget was calculated at an oil price of $37 per barrel.)

- Factors that make Saudi Arabia's situation different from other major economies:
  - Decline in oil prices has hurt the economy, but favourable oil prices in the past helped Saudi Arabia to build a strong reserve – estimated at $450 billion – to use as a buffet during hard times.
  - In 2008 Saudi Arabia registered its largest surplus in its history (SR590 billion or $157 billion).
- The areas that received additional funding in the 2009 budget are education, health, infrastructure and municipal services. Some of the specific ones are as follows:[1]
  - SR 9 billion for Education
  - SR 8 billion for Science and Technology
  - SR 10 billion in the Saudi Credit Bank for loans to businesses and enterprises
  - SR 25 billion for Real Estate Development Fund
  - Allocations for poverty reduction programmes
- Even before the global economic crisis started impacting Saudi economy, the Saudi government had been involved in a large-scale public spending program to increase demand for goods and services. In 2008, actual spending increased by SR 100 billion ($26.6 billion), which was more than 24 percent of budgeted spending.

Labour market initiatives

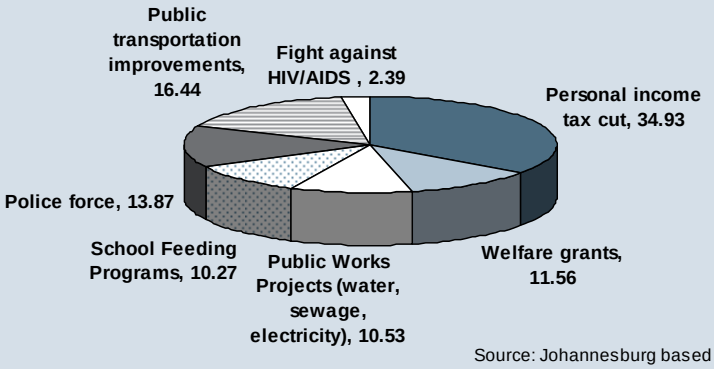
- No explicit labour market initiatives have been announced by the Saudi government. However note that the labour market in Saudi Arabia has not been visibly hit by the global economic slowdown.

[1] These do not add up to SR 225 because all the components of stimulus spending are not clear. Since, the stimulus spending was embedded in the annual budget; it is very difficult to separate out stimulus spending from the regular budget.

South Africa

Stimulus package

Figure A.7 Composition of South Africa's Fiscal Stimulus as a Percentage of Total Package (R 39 billions)[1]



Source: Johannesburg based The Times
[1] This includes only the new spending from the Feb. 09 budget

On Feb. 11 2009, South African Finance Minister Trevor Manuel announced new spending measures, but stayed away from calling it a fiscal stimulus package. With the additional spending, South Africa's municipalities will receive vastly increased grants for infrastructure projects like water, sewage systems, and electricity distribution. Following is a break-down of stimulus efforts.

Public spending on goods and services:

- R4.1 billion will be added to the Expanded Public Works Program.
- R4 billion more will be spent on school feeding programmes.
- R5.4 billion will be added to the war chest to fight crime, including 20,000 more police by 2012.
- An additional R6.4 billion will be allocated for public transport improvements.
- R932 million more will be set aside to fight HIV/AIDS and increase the number of people on anti-retroviral treatment from 630,000 to 1.4 million by 2012.

Stimulus aimed at consumers:

- Personal taxes will drop by R13.6 billion, of which 9 billion will go to compensate for inflation.
- Welfare grants will increase by about 5 percent and the cut-off age for the R240 child support grant will increase to 15, affecting approximately 500,000 children.

South Africa has not announced new spending aimed at firms.

Other measures announced by the South African Finance Minister are:

- Increase in price of cigarettes by 13 percent;
- Increase in fuel tax by 40.5 cents a liter for petrol and 41.5 cents for diesel;
- Light bulbs that are not electricity efficient will face increase tax of R3;
- Tax hike for alcoholic beverage;
- New cars will be taxed based on their carbon output.

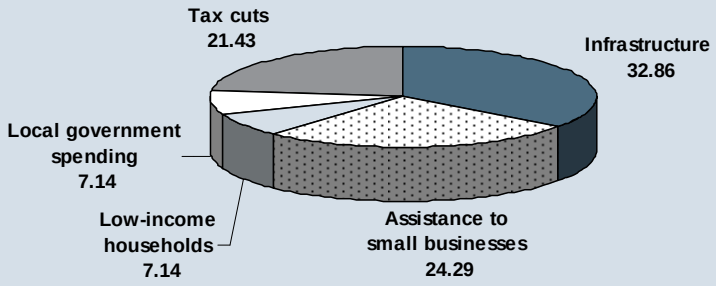
Labour market initiatives

No explicit labour market initiatives were announced. However, note that the welfare spending was increased considerably.

South Korea

Stimulus package

Figure A.8 Composition of South Korea's Fiscal Stimulus as a Percentage of Total Package ($11 billion)



Source: IILS, based on Bloomberg

On Nov. 3, 2008, Korea announced a 14 trillion won ($11 billion) fiscal rescue package which includes:

- Spending on infrastructure and other government projects (4.6 trillion won)
- Assistance to small businesses (3.4 trillion won)
- Social transfers to low income households (1 trillion won)
- Help for local governments (1.1 trillion won)
- Tax cuts (3 trillion won)

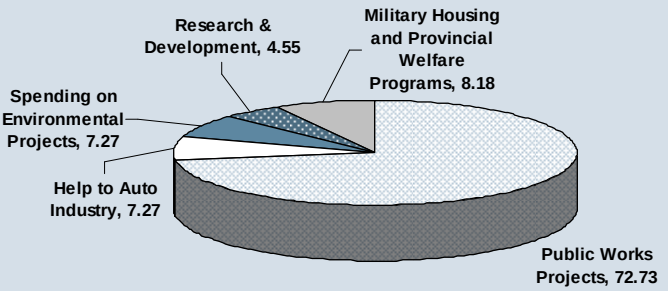
Labour market initiatives

- Support vulnerable workers outside the boundaries of social safety net who are put on unpaid temporary leave
- Tex exemption and extension on tax submission periods for employers that maintain their workforce
- Training programs
- Internship programmes for jobless graduates
- Increase in public sector jobs

Spain

Stimulus package

A.9 Composition of Spain's Fiscal Stimulus as a Percentage of Total Package (€11 billions)



Source: IILS, based on national sources

On November, 2008, Spanish government unveiled a €11 billions stimulus spending – approximately one percent of its GDP.

- €8 billions for public work projects
- €0.8 billions to help the country's auto industry
- €0.8 billions in environmental projects
- €0.5 billions in research and development
- In addition, the government said that it will be spending hundreds of millions of euros on restoring residential and military housing and on provincial welfare programs.

The Spanish government had previously announced a €40 billion spending which included mortgage relief, tax cuts, and credit lines for businesses.

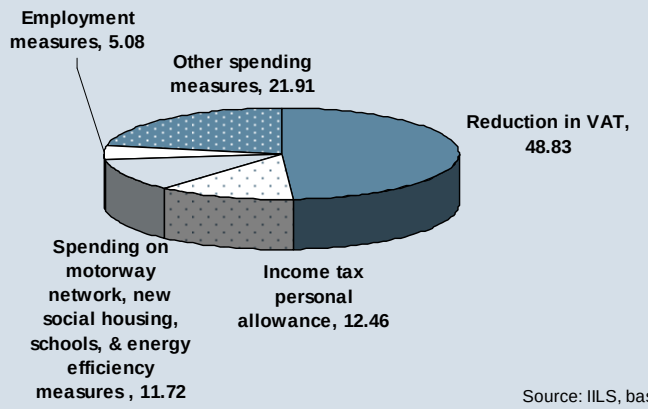
Labour market initiatives

- The Spanish government plans to create 300,000 jobs with this stimulus spending.

United Kingdom

Stimulus package

Figure A.10 Composition of U.K.'s Fiscal Stimulus as a Percentage of Total Package (£25.6 over 2 years)



Source: IILS, based on U.K. Treasury

The Government in supporting the economy and low- and middle-income families through initiatives including:

- £3 billion of public investment will be brought forward from 2010-11 to 2008-09 and 2009-10 to support infrastructure spending; and
- A permanent increase in the personal income tax allowance for basic rate taxpayers, resulting in a tax cut of £145 per year beginning in 2009-2010.

The National Economic Council (NEC), a Cabinet Committee replacing the Economic Development Committee, will meet twice a week to assess a broad set of economic and social policy issues, including:

- The implications of financial market instability for the global, national and regional economies;
- The impact of global economic developments on skills and employment;
- The barriers to innovation, entrepreneurship and small business growth; and
- Domestic implications of developments in global commodity markets.

The Government has provided a 2.5% reduction in the Value Added Tax (VAT) effective for 13 months (from 17.5% to 15%) from 1 December 2008 to increase consumer spending and boost consumer confidence.

Labour market initiatives

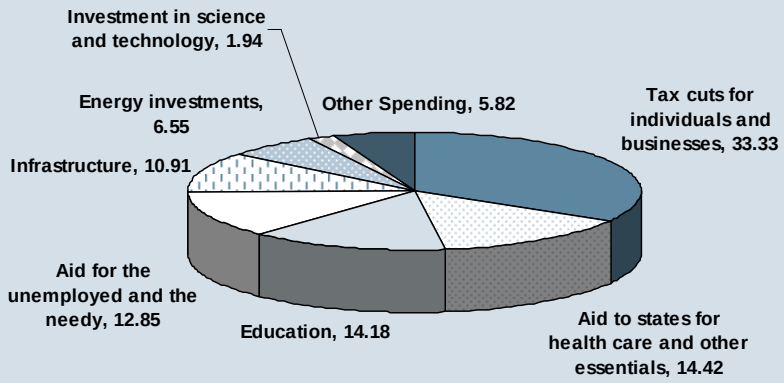
The UK Government will assist individuals looking for employment and those facing redundancy reintegrate the workforce as quickly as possible through employment measures worth £1.3 billion, which include:

- Establishing a National Employment Partnership;
- Targeting successful Local Employment Partnerships;
- Strengthening pre-redundancy re-training support through Train to Gain and Skills Hubs;
- Expanding the Rapid Response Service so that it provides support for all layoffs, not only large employers;
- Setting aside additional funding to ensure Jobcentre Plus and the New Deal have sufficient resources.
- Furthermore, the British government recently announced subsidies for employers up to £2,500 who hire workers that have been unemployed for more than six months.

The United States

Stimulus package

A.11 Composition of U.S. Fiscal Stimulus as a Percentage of Total Package ($787 billions over 2 yrs)



Source: IILS, based on NY Times

On February 17, 2009, the United States signed into law American Recovery and Reinvestment Act – a $787 spending bill to stimulate the American economy. Three main components of the stimulus spending are:

- Roughly $300 billion in tax breaks for individuals and businesses;
- More than $250 billion in direct aid to states and individuals;
- Almost $200 billion to modernize and improve the nation's infrastructure.

Besides the ARRA, the U.S. government also announced a $275 billion mortgage plan, which includes:

- A $75 billion help for homeowners facing foreclosures (reduce monthly payments for borrowers, help homeowners with loans owned or backed by Fannie Mae and Freddie Mac to refinance at lower rates);
- Commitment to buy up to $200 billion of preferred stock in Fannie and Freddie.

Labour market initiatives

The Act has allocated $106 billion for labour market initiatives – approximately 13 percent of the total stimulus package, and the components are:

- Extension of unemployment benefits ($43 billion);
- Health coverage for those who lost their jobs ($39 billion);
- Temporary increases in food stamps ($20 billion);
- Increases in social security benefits for low-income disabled and elderly ($4 million).