

GREEN MEASURES TO FACE GLOBAL WARMING AND ECONOMIC RECESSION

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Abstract:

An outlook of the world economic and environmental crises is first presented. Afterward, a presentation and an analysis of the different measures taken by the major trading blocks to face the repercussions of the crises are provided. Finally, the example of the Japanese eco-point program is discussed as one of the rare measures that could bear amazing results both economically and environmentally.

Introduction:

Religious say: “it is God’s anger and human evil’s consequences”; Businesses say: “it is a natural event happening almost every 100 years”; Scientists say: “it is the law of the nature”; Jurists say:”it is due to the lack of regulations and the excess of liberalization”; and Laymen say:”it is because of the greed of businesses”. The crisis hits hard. Although the strength differs, almost everyone felt the consequences of the crisis on his life.

Across the history, human did experience many crises from the First World War to the big depression in 1930 to the Second World War, to the oil shock, etc. What makes the current crisis a bit special is the multiplicity of its problems, the speed of its proliferation and its universality. When the financial crisis hits in late 2007, the world had began clearly experiencing the intensifying bitter consequences of the global warming on the economy and on people’s lives. Late 2008 was a dark period economically and environmentally. The world suffered strong typhoons, torrential rain, devastating earthquakes, hot temperatures, drought, and starvations; companies experienced sales drop, financial problems; people suffer jobs extensive losses; incomes decrease and sometimes totally vanish; global pandemics hit hard people lives and business (e.g., Swine Flu).

The severity of the late crisis has let politicians, experts and laymen to considerably rethink past policies, reevaluate objectives, restructure plans and readjust visions with the aim to

appease negative repercussions of the crisis, find a way out and calm local and international tensions over past orientations blamed to be the main causes for the crisis.

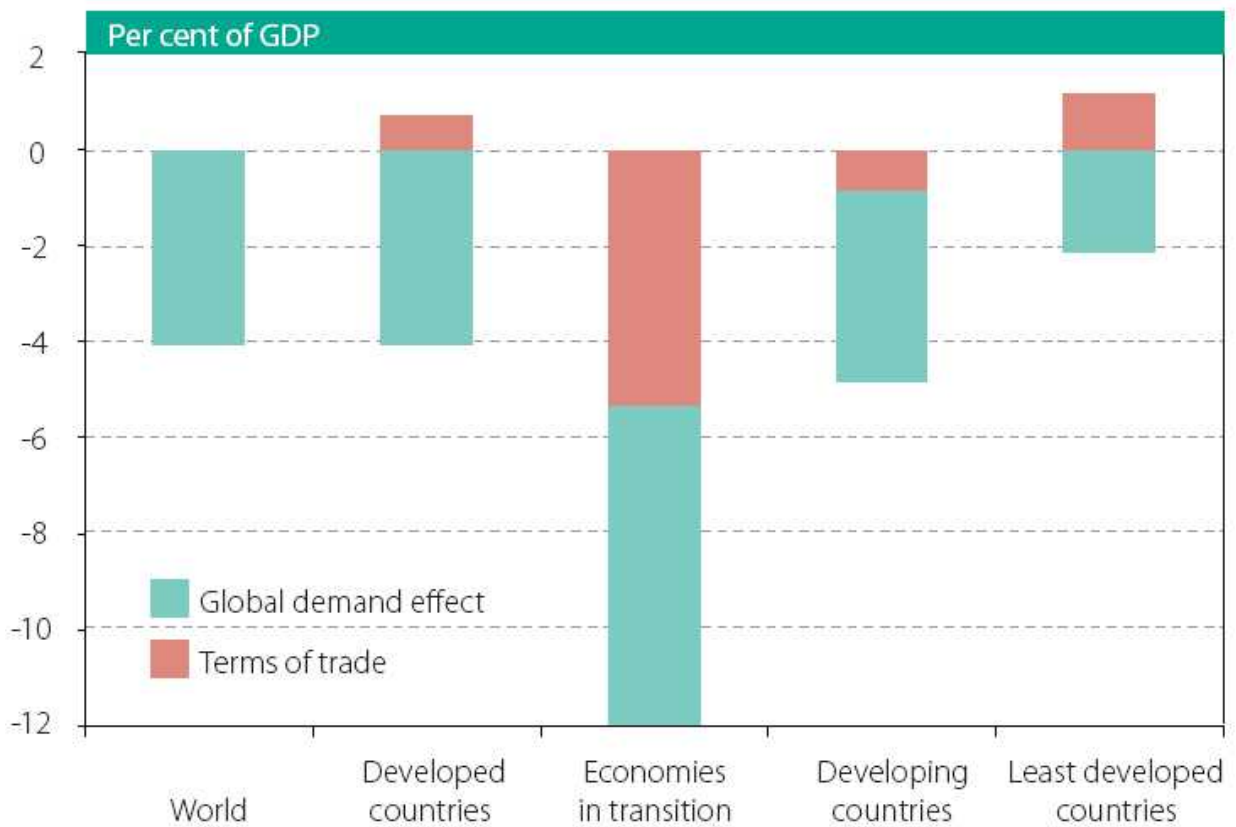
Although, numerous are the plans developed and the measures established; the global crisis is showing few signs of relenting. The problem is that for the crisis to be alleviated large spending is required; inversely, recessionary periods are usually associated with cutting funds, slashing budgets and tightening the belts as profits are expected to drop significantly. That's why it is usually common to see governments leading in expenditure during recessions to reassure the public and the businesses and incite them to rejoin their previous level of spending. The history shows successful examples where governments' spending could alleviate the crisis and bring countries back to the right path (e.g., Turkey in 1990; Argentina in 2000). The current crisis is somewhat special. First, it is a global one. Second, it hits almost all sectors. Third, it comes in a time when the world is suffering several other problems such global warming, Middle East wars, and Swine Flu. The current crisis differs from the previous ones basically in the fact that lenders are not available. Strong economies that were supporting and lending money to economies in recessions previously were the most hurt and become themselves borrowers and seekers of help nowadays. Hence, traditional rescue plans seem to be less effective and actually had been found less effective (e.g., measures adopted by the Bush government). Governments had the challenges to come with the policies able to deal effectively with these various problems with the lowest cost possible. This paper, referring to the case of eco-point policy adopted by the Japanese government to face the current crises, investigates how clever and wisely oriented policies can bring sizeable success during recessionary period.

Background:

General outlook on the crisis:

Doubtless, the current crisis is heavy and a bitter experience for politicians, businesses, and normal people. It hits hard everywhere and at all levels. The number of people laid off reached to alarming levels and do not stop from increasing; Bankruptcies are multiplying; Exports are down; Firms and governments are in deficit; and no available funds to deal with all these problems. The United Nations WESP monthly briefing notes delivers a grim picture on the world economy in 2009. Figure 1 shows the projected shocks of the 2008 crisis on the world trade in 2009.

Figure 1: projected trade shocks in the world in 2009



Source: WESP monthly briefing notes, 2009

According to the WTO (World Trade Organization), the volume of world goods trade faces its largest decline since World War II, plunging by 9 percent in 2009. In addition to factors in the real economy, the collapse in trade activity results from a drastic reduction in the availability of trade finance.

The World Bank estimates that in 2009, 104 developing countries will have inadequate current account surpluses to cover their private foreign debt coming due, and total financing needs are expected to exceed \$1.4 trillion. In order to address financing needs in developing countries, the World Bank proposed the creation of a “vulnerability fund”, to be financed from 0.7 percent of each developed country’s stimulus package. The United Nations, in a letter from the Secretary-General to the leaders of the G20, called for transferring financial resources of about \$1 trillion to developing countries in 2009–2010.

Outlook of the crisis in the developed region:

Besides economies in transition and developing economies that were hit hard by the economic downturn of 2008/2009; developed economies too have experienced painful growth decelerations and almost all of them fall into deep recession. Measures taken by the developed countries to tackle the issues of worsening economies have had common

backgrounds with several specificities taking into account each economy profile and the set of available resources ready to be mobilized to help bring the economy back into the right path.

United States of America

In the baseline scenario, GDP in the United States is expected to contract by 3.5 per cent in 2009 and to only recover to a meager rate of 1 per cent in 2010, well below what is needed for recovery from the downturn. The slump in the housing sector that started in 2006 is still ongoing, while the credit crunch, asset price deflation and rising unemployment underpin sharp retrenchment of business investment and household consumption. Policy measures have been scaled up significantly in 2009, including a continuous expansion of the balance sheet of the United States Federal Reserve Bank, a new fiscal stimulus package of \$787 billion, and the Public-Private Investment Program of more than \$1 trillion to dispose of non-performing bank assets. However, it will take time for these measures to unclog the financial system and to restore economic growth. Uncertainties remain about the effectiveness of these measures. With unemployment rising sharply and financial deleveraging continuing, the risk of the economy falling into a protracted deflation is still increasing. In the optimistic scenario in which things would fall into place by the third quarter of 2009, the United States economy could recover in the second half of the year and there would be post growth of about 1.5 per cent in 2010.

Japan

Japan's economy is falling into a deep recession. The severe downturn in global demand, particularly for automobiles, information technology and machinery, has led to a collapse of Japanese exports, causing sharply falling corporate profits, tightening financial conditions, rising unemployment, declining household wealth, and weakening domestic demand. In response, the central bank reduced interest rates, along with a number of other measures, to stabilize financial markets and ease corporate financing. The Government has adopted a series of fiscal stimulus packages, with additional government spending totaling about 5 per cent of GDP. In the outlook, GDP is expected to fall by 7.1 per cent in 2009. A mild recovery is possible in 2010, but this will be highly dependent on global recovery.

Western Europe:

Western European economies have been hard hit by the crisis. GDP in the euro area is expected to fall by 3.7 per cent in 2009, having registered 0.8 per cent growth in 2008. Despite the assumption that current fiscal and monetary stimuli gain some traction over the course of 2009, the European Union economies should expect no more than a gradual stabilization of activity with an expected near zero growth in GDP in 2010. Economic woes differ across Western Europe, as countries face differing degrees of exposure to downturns in housing markets, construction sectors, manufacturing exports and banking sectors. Across the region, though, unemployment rates are surging and are expected to continue to increase even after the decline in output has stopped. On average, the unemployment rate in the euro area is expected to increase to 10 per cent in 2009, up from 7.5 per cent in 2008.

Australia, Canada and New Zealand

The economies of Australia, Canada and New Zealand are also expected to shrink in 2009, suffering from falling global demand and commodity prices. In Australia, the unemployment rate is expected to jump from the 4.2 per cent of 2008 to over 6 per cent in 2009 and to 8 per cent in 2010. In Canada, the rate is expected to surge to 9 per cent in 2009. Despite fiscal and monetary stimuli, only a mild recovery is expected in 2010, however, mainly on the back of the moderate recovery of the global economy, if the baseline conditions prevail.

Guidelines of the United Nations Economic Committee and governmental responses to the crisis

Guidelines of the United Nations Economic Committee

Governments are struggling to come with the most efficient plans to address the current crisis. The scale of the crisis as well as the lack of financial resources locally and abroad had made the achievement of efficient plans both a risky and a fate-decisive task. Governments need to allocate the few resources under hand wisely and appropriately not to be out of money and out of solutions. Experts from different fields gathered their experiences aiming at developing the most universal, quickly effective and less risky rescue plan. Governments seek economists help, financials help, jurists help, marketers help, social figures help, and public help. All developed and developing countries agreed on the necessity for the plans to be universal not excluding any sectors; to be able to appease the negative effects in the short run and to bring sizeable or moderate sustainable positive effects in the middle and long run; to be developed quickly but not in detriment of their qualities; and to be able to deal with major problems such environment, liquidity and job losses all together.

Since the intensification of the financial crisis in September 2008, Governments worldwide have made available massive public funding (amounting to \$18 trillion, or almost 30 per cent of WGP (world growth product)) to recapitalize banks, taking partial or full Government ownership of ailing financial institutions and providing ample guarantees on bank deposits and other financial assets. Further, recognizing that monetary and financial measures will not be enough to stave off a recession, many countries have also adopted fiscal stimulus plans, totaling about \$2.6 trillion (about 4 per cent of WGP), but to be spent over 2009-2011. According to the UN economic committee, while significant, this may still fall somewhat short of the stimulus of 2 to 3 per cent of WGP per year that would be required to make up for the estimated decline in global aggregate demand. More concerted action will be needed in four major areas.

- *First*, further decisive and cooperative action is needed to restore the financial health of banks, especially in developed countries. As indicated, despite the unprecedented support given to date, problems in financial sectors remain and additional efforts for adequate recapitalization of banks will be needed to facilitate resumption of domestic and international lending. Without this, the fiscal stimulus is not likely to be very effective.

- *Second*, the fiscal stimulus measures should be better coordinated and aligned with global sustainable development objectives. Thus far, there has been no true coordination of the fiscal measures being undertaken by national Governments. Without adequate coordination, the stimulus measures may fall short of what is needed. Failure to coordinate the size and timing will limit the multiplier effects of the stimuli, thus reducing the impact on global economic growth and employment. Further, and importantly, more than 80 per cent of the stimulus is being undertaken by the major developed countries. Facing a stronger downturn and with greater response capacity, most counter-cyclical efforts should indeed originate in those countries, but this does not ensure adequate rebalancing of the global economy. Moreover, since much of the stimulus will come from the major deficit countries, without corrective action, this would perpetuate the problem of the global imbalances. Meanwhile, most developing countries lack the resources to undertake needed counter-cyclical measures for their economies. While significant, the additional international liquidity to be provided by the international community, as agreed by the Group of 20, is insufficient to give developing countries the resources they need to ensure a more balanced global stimulus aligned with long-term development needs. Another concern is that many of the stimulus packages imply (often unintentionally) unfair trading practices by providing subsidies and incentives to domestic firms. The implication is that this may constrain recovery of economies that do not have the resources for fiscal stimulus and support to domestic industries. Global coordination should also deal with this concern.

- *Third*, fundamental reforms of the international financial system are needed to overcome the systemic flaws which caused this crisis in the first place and in order to guard against future

crises. Without elaborating in detail here, such reforms should first deal with the major weaknesses in the regulation and supervision of the international financial system. Existing mechanisms are now generally seen as insufficient for mitigating the inherent pro-cyclicality of the financial system, which tends to foster asset price bubbles. A macro prudential regulatory system needs to be created, based on counter-cyclical capital provisioning, to develop institutions for the supervision of all financial market segments in which systemic risk is concentrated, including hedge funds and cross-border flows.

•*Fourth*, broader global economic governance reforms must also be considered to ensure coherence in the global governance of the international financial architecture, the multilateral trading system, the framework for addressing climate change, the development agenda, and peace and security. Such coordination could take place through a new global economic council that is part of the United Nations system, as proposed by some Member States, or through deep reform of the United Nations Economic and Social Council. Whatever the mechanism, it is essential that a body be created that can provide coordination and oversight of responses to the broader range of global challenges and set the world on a new but sustainable development path.

Governmental responses: the United States of America

Since February 2008 the U.S. government has taken a number of steps aimed at dealing with the most severe financial crisis experienced by the United States in nearly eight decades. The crisis originated in America's real estate and banking industries and has now spread to the rest of the economy and too much of the world. Emergency legislation passed by the U.S. Congress in 2008 and early 2009 attempted to (1) prevent the failure of major U.S. financial institutions; (2) minimize the impact of financial institutions' weakness on ordinary business and consumer borrowing; (3) provide immediate stimulus to consumer spending by raising after-tax household income through temporary tax reductions and increases in government transfers; (4) provide temporary funds to state and local governments in order to reduce their need to boost taxes or reduce spending during the recession; (5) protect the incomes and health insurance of newly laid off workers and members of other economically vulnerable populations; and (6) provide direct federal support for infrastructure investments and research and development projects in health, science, and efficient energy production.

Governmental responses: Japan

The traces of sunlight that only a short while ago greeted Japan's economy have disappeared in little more than the blink of an eye, and the dark clouds that have gathered are now

battering the nation's economy with stormy conditions as it sets sail in the turbulent seas of 2009.

If Japan is to reach the port of recovery, it will need a well-plotted map to help it navigate this once-in-a-century tempest. First, the government must establish what the weaknesses are in the nation's economy and consider countermeasures. A major problem is that domestic and foreign demand; the two engines powering Japan's economic growth are out of kilter.

Through processing trade, in which imported raw materials are manufactured into goods that are then sold to other countries, Japan realized rapid economic growth after World War II.

This model depends heavily on foreign demand, especially from the United States and advanced nations in Europe. But although efforts have been made to expand the operations of Japanese firms through overseas factories, there have been no substantial changes in the fundamental reliance on overseas markets.

The financial crisis has been growing in the United States and European markets--the main drivers of foreign demand--which has caused a dramatic slowing in one of the two engines of demand. And although they had enjoyed high growth, emerging markets in Asia, particularly China and India, are seeing their growth prospects cloud over, too. Japanese companies must now actively seek major new markets in an effort to secure a more balanced foreign demand. However, it is a tall order selling high-end, expensive Japanese products on a large scale to developing countries. A new business model should therefore be developed that allows the country to profit from the dividends accrued through offering production know-how to such countries.

Because Japanese firms depend so heavily on foreign demand, the nation's economy is vulnerable to foreign exchange fluctuations. The yen has, for example, risen to about 90 yen per U.S. dollar, drastically reducing the profits of export-oriented companies. However, the yen's rising value could open up new strategies for Japanese firms, such as making it possible to acquire top-rate foreign companies. The strengthening yen should therefore be seen not as a problem but as an opportunity to take advantage of the current turmoil.

From a medium- to long-term perspective, the country's aging society, with its declining birthrate and falling population, also will make it difficult to chart an effective economic course.

The advantage this country enjoys in dealing with the situation is the size of the financial assets of its households--still worth a massive 1.47 yen quadrillion despite a decrease in the total over recent years. A shift to domestic demand-led economic growth has long been called for. But in the long run, the size of the domestic economy is tending to shrink.

Under these circumstances, the key to activating domestic demand lies in Japan's savings ratio--one of the highest in the world, and a point of pride for the country. An estimated 1.5 quadrillion yen is effectively kept under mattresses. Boosting domestic demand and preparing for future generations can both be realized if this huge sum is utilized for investment in social infrastructure.

Because it is increasingly difficult to secure loans, some companies that turned a profit have gone bankrupt because of cash flow problems. To avoid deflation being exacerbated by tighter constraints on credit as happened 10 years ago, the government implemented several policies aiming at preventing such aggravated deflation. For instance, coordinated interest rate cuts were introduced immediately after the outbreak of the crisis. To complement this joint action, certain measures have been taken, such as further interest rate reductions,

quantitative monetary relaxation to increase the money supply, the injection of public funds and increased public spending.

The government implements economic stimulus measures worth 75 trillion yen through two supplementary budgets and the fiscal 2009 budget.

Many experts consider these measures not enough. The state's finances now face a further crisis as tax revenues fall due to the recession. But this is not the time to hesitate in increasing public spending on measures needed to boost the economy.

Without first restructuring the economy, the conditions necessary for a hike in the consumption tax rate, which is aimed at securing the stable financial resources for social security, will remain elusive. The number of public works projects, meanwhile, should be narrowed to areas linked to public safety and improving the quality of the nation's infrastructure, such as increasing earthquake resistance.

Governmental responses: European Union

In the EU, the crisis has prompted action on many levels – the national governments, the European Central Bank and the Commission. All have been working closely together to protect savings, maintain a flow of affordable credit for businesses and households and put in place a better governance system for the future.

All Member States will need to take action to deal with the crisis. Properly coordinated, national efforts can target different goals in parallel. They can cushion the blow of recession in the short term. But they can also promote the structural reforms needed to help the EU emerge stronger from the crisis, without undermining longer term fiscal sustainability. For this reason, the recovery plan puts particular emphasis on innovation and greening of EU investment. The EU level can act as a catalyst for such "smart action", combining EU policies and funds to help Member States maintain or pull forward investments which will create jobs, boost demand, and strengthen Europe's capacity to benefit from globalization.

The strategic aims of the recovery plan are to:

- Swiftly stimulate demand and boost consumer confidence;
- Lessen the human cost of the economic downturn and its impact on the most vulnerable. Many workers and their families are or will be hit by the crisis. Action can be taken to help stem the loss of jobs; and then to help people return rapidly to the labor market, rather than face long-term unemployment;
- Help Europe to prepare to take advantage when growth returns so that the European economy is in tune with the demands of competitiveness and the needs of the future, as outlined in the Lisbon Strategy for Growth and Jobs. That means pursuing the necessary structural reforms, supporting innovation, and building a knowledge economy;
- Speed up the shift towards a low carbon economy. This will leave Europe well placed to apply its strategy for limiting climate change and promoting energy security: a strategy which will encourage new technologies, create new 'green-collar' jobs and open up new opportunities in fast growing world markets, will keep energy bills for citizens and businesses in check, and will reduce Europe's dependence on foreign energy.

In pursuing these aims, the European Economic Recovery Plan is designed to:

- Exploit synergies and avoid negative spill-over effects through co-ordinated action;
- Draw on all available policy levers, fiscal policies, structural and financial market reforms and external action;
- Ensure full coherence between immediate actions and the EU's medium- to longer term objectives;

- Take full account of the global nature of the problem and shape the EU's contribution to international responses.

This European Economic Recovery Plan proposes a counter-cyclical macro-economic response to the crisis in the form of an ambitious set of actions to support the real economy. It consists of:

- An immediate budgetary impulse amounting to €200 bn (1.5% of EU GDP), made up of a budgetary expansion by Member States of €170 bn (around 1.2% of EU GDP), and EU funding in support of immediate actions of the order of €30 bn (around 0.3 % of EU GDP);

- A budgetary plan timely, temporary, targeted, and co-ordinated. Timely so that they quickly support economic activity during the period of low demand, as delays in implementation could mean that the fiscal impulse only comes when the recovery is underway; temporary so as to avoid a permanent deterioration in budgetary positions which would undermine sustainability and eventually require financing through sustained future tax increases; targeted towards the source of the economic challenge (increasing unemployment, credit constrained firms/households, etc. and supporting structural reforms) as this maximizes the stabilization impact of limited budgetary resources; and co-ordinated so that they multiply the positive impact and ensure long term budgetary sustainability.

- Public expenditure has an impact on demand in the short-term. Measures that can be introduced quickly and targeted at households which are especially hard hit by the slowdown are likely to feed through almost directly to consumption, e.g. temporarily increased transfers to the unemployed or low income households, or a temporary lengthening of the duration of unemployment benefit.

- Guarantees and loan subsidies to compensate for the unusually high current risk premium can be particularly effective in an environment where credit is generally constrained. They can help bridge a lack of short-term working capital which is currently a problem for many companies;

- Well designed financial incentives for speeding up the adaptation of our economies to long-term challenges such as climate change, including for example incentives for energy efficiency;

- Lower taxes and social contributions: lower social contributions paid by employers can have a positive impact on job retention and creation while lower taxation of labor income can support purchasing power in particular for low wage earners;

- Temporary reductions in the level of the standard rate of VAT can be introduced quickly and might provide a fiscal impulse to support consumption.

- Supporting consumer purchasing power through improved market functioning: policies that improve the functioning of key markets can help sustain demand by helping bring down prices, thus supporting the purchasing power of households;

- Addressing immediate competitiveness problems. In Member States with inflation and competitiveness problems measures need to be taken urgently that reinforce the link between the wage setting mechanism and productivity developments;

- Supporting employment and facilitating labor market transitions: today's prime labor market challenge is to avoid wasteful labor shedding by industries temporarily affected by short-term demand disturbances. To that end, more flexibility in working time arrangements or enhanced employment services could help;

- Reducing regulatory and administrative burdens on businesses. Such reforms help increase productivity, and strengthen competitiveness. Measures that can be implemented rapidly include continuing efforts to reduce the time to start up a business.

Common points across the governmental responses:

Looking at the different governmental responses above, several common points unifying these responses can be pinpointed. These points can be recapitulated in:

- All of the measures are to set to bring quick relief in the short run, although not so considerable, and to come with sustainable growth over the middle and the long run;
- All the policies developed had had as some of the ways to face the crisis to invest in green energy and in energy saving technologies. The aim for all the measures is to deal with the two prominent problems of global warming and economic crisis simultaneously;
- All the responses emphasize public spending in terms of financial support to consumers and small businesses and fiscal cuts to ease investment and boost consumption. Nevertheless, all of the three major economic players (i.e. USA, Japan and EU) have agreed on the necessity to strictly control the amount, the duration and the target of the public financial support and the fiscal cuts in order to ensure their efficiencies and sustainability. The discouraging results of the first government support to consumers in difficulties in early 2008 in USA have strengthened the fear among the USA and the other blocks to experience similar failure and hence deepen the crisis and be out of resources to solve it. Therefore, all measures have come with strict rules and regulations based on which they hand out financial aids to consumers and cut fiscal rates. Government entities are highly involved in all the process of selecting the targets, fixing the process of hand outs and fiscal cuts, controlling their implementations and assessing their results. Governments have set targets of consumers and industry everyone based on its economic architecture. Those sectors with the highest employment rate and the highest contribution to the country GDP were privileged. For instance, banks were the first sector to support in all the three blocks as the crisis was originally a financial crisis; car makers and relative industries (electronic and Audio) were specifically targeted in USA and Japan. Electronics and appliances manufacturers (mostly small and middle size enterprises) were the second sector in importance in Japan due to their considerable contribution to the country export. Green energy technologies were targets in all of the three economic blocks but took a priority in Europe due to the high dependency of Europe on energy from outside the union. Infrastructure companies got too a considerable importance due to their high employment rate and long term activities;
- All the measures agreed on the necessity to boost local consumption as exports fall sharply. Government hand outs were the measures adopted in USA and Japan in accordance with fiscal cuts. Fiscal cuts were the main in Europe to help the public consume more. Governments encouraged local companies to invest in R&D in order to come with new products friendly to the environment, with competitive price and could get the interest of a public resilient to spend;
- The necessity to support industries with high employment rate and to help firms in difficulties to keep their employees. The solution has to be economic and social. The public, the most hurt by the economic downturn, has to be the focus of legislators and economists when the solution is developed as the public is a direct victim of the crisis and a part of the solution;
- The necessity to strictly control financial institutions and governments spending to avoid further collapses of the financial systems through the enrichment of few bankers and lenders in detriment of the public and the businesses. New rules aiming at fixing the amount of government debt, regulating the insurance system and supervising the stock market are enacted in all the three blocks.
- The emergency to invest in energy saving technologies, to invest in health and education, to cut ineffective expenditures, to avoid wasting public resources and to involve the public in the effort of recovery through educating them the appropriate ways to consume and to remind them about their duties to support their economy especially in time of crisis. This is done via

a permanent review of the policies set and through media campaigns mobilizing the public and seeking its help and wise behavior.

Japan Eco-point strategy: a wise and successful measure

As part of the Aso administration's economic stimulus package, Japanese government has introduced a program in which buyers of energy-saving household electronic appliances are given "eco-points" that can be exchanged for gift certificates or other goods.

Under the plan, the government will give the consumer eco-points equal to 5 to 10 percent of the purchase price. On May 16 and 17--the first weekend after the program started--many electronic products shops across the country were crowded with consumers.

The purpose of Eco-point Policy is to prevent global warming, to activate economy, to spread digital TV and eco-friendly technologies, and to raise public awareness about global warming so they adopt more eco-friendly behaviors.

The government says the eco-points program is "one that will kill three birds with one stone," addressing the economy, the environment and the shift to digital broadcasts (an objective set to be achieved in 2011).

The electric appliances targeted by the eco-point program are air conditioners, refrigerators, and digital TVs, whose level of energy saving are higher than 4-star. According to the government's explanation, these three appliances are the biggest electricity guzzlers in the household, responsible for half of all household carbon dioxide emissions. The government says if the system encourages the public to buy more energy-efficient appliances, then it will help cope with global warming. Eligible products must satisfy a certain energy-efficiency standard; so far, almost all of them are Japanese products to boost local production. In addition, in order to urge the public to switch their TV sets to digital ones before the Japanese terrestrial broadcast system shifts completely to digital broadcasts in July 2011, an extra 5 percent of the price's worth of eco-points is added to TV sets only.

Consumers can get eco-points if they buy green home electronics from May 15th 2009. With the eco-points, they can exchange kinds of goods or service. From the 1st of July 2009, consumers can register the eco-points and apply for exchanging goods. (Period of getting eco-point: 15th, May 2009 ~ 31st, March 2010/Period of registering and exchanging: 1st, July 2009 ~ 30th, April, 2010). There are 2 ways of application to exchange the eco-points: through the internet or applying in writing. Applicants must provide certain documents testifying their buying such as copy of the warranty, the receipt and copy of the recycle documents.

Consumers can get the goods they want through post service or window of post office after applying through internet or sending the documents to the eco-point office. The list of exchangeable goods compose 271 items and include gift certificates valid at any department store, prepaid cards for public transportation, green handbags, green commodities, etc. The list also includes 109 types of gift certificates issued by local organizations across 36 prefectures. The latter gift certificates can be used only in specific areas as to ensure fair

repartition of the program output across prefectures. A further 64 organizations have been chosen to compose a list of local or eco-friendly products that can be acquired with the eco-points. "If we'd limited the program to electronic money or department store gift certificates, the funds wouldn't reach local retailers," said an official at the Ministry of Economy, Trade and Industry. "We had to expand the menu of products and services."

Large companies that issue gift certificates for eco-points must donate at least 0.1 percent of the purchase price to environmental concerns. However, that requirement has been eliminated for small businesses and community retail associations.

The government set aside 294.6 billion yen in the fiscal 2009 supplementary budget for the eco-point program as part of a larger package of economic stimulus measures. The program is expected to reduce CO2 emission by 40 million ton. About 7 billion yen will go to clerical expenses for managing the program. The rest of the money will be paid in subsidies to the companies that provide products or services in exchange for the eco-points.

Features of the eco-point program:

With reference to the common points across the governmental responses to the crisis enumerated earlier in this paper, it can be said that the Japanese eco-point program could fulfill most of these points. In fact,

- The program had a quick sizeable effect on consumption and on production of home electronics
- It deals with the economic crisis and the environmental issues together. The program aims at stimulating consumption and production of eco-friendly home appliances so the CO2 emission is reduced by well over 40 million ton;
- It is implemented through a strictly controlled government spending. The Japanese government represented by the eco-point office is controlling the list of products that can benefit from eco-point and those that can be exchanged via eco-points, the amount of money to spend in each prefecture, and the repartition of exchangeable goods (e.g. gift cards, prepaid transportation cards, etc) across sectors so the largest number of sectors could benefit directly or indirectly from the program;
- It is based on boosting local consumption of Japanese made products as exports fall considerably. Products eligible for eco-points are Japan-made products only and the entire program is available only inside Japan;
- The program targeted home appliances sector which is one of the sectors with high employment rate in Japan. Eco-point program could help companies maintain their workforce at least for a while;

-The program as well as other similar program for automakers, encourages firms to invest in green energy and energy efficient technologies so the solution can be sustainable and deals with all the major problems together.

Return on economy of the eco-point program

Return on consumption and retailing:

Applications for the "eco-point" system totaled around 510,000 in the first month, according to a government source (Kyodo, August 1st 2009). The Ministry of Economy, Trade and Industry said the eco-point program has helped to boost sales of flat-panel televisions and refrigerators.

More customers are visiting electronic shops since the start of the program and the sales of thin-screen TV sets are remarkably increasing. Best seller is 32 inch TV set. Sales (during 15th~24th, May) of TV sets and refrigerators were twice of same period of last year, and those of Air conditioners were 1.5 times. (Economy ecology, July 2009)

"Everyone — families, old people, young people — are coming to buy TVs," said Junichi Yajima, a sales clerk at a Bic Camera retail outlet. "Some people don't understand Eco-points, but they've heard about it and see it as a good opportunity."

Electronics sales shot up 50 percent on year during the mid-May week after Eco-points started, according to the Ministry of Economy, Trade and Industry. Researcher of Gfk Marketing Services Japan said that sales of flat-panel TVs were up 60 percent from a year earlier those of large refrigerators surged 120 percent in May thanks to the government's eco-point program. The data were calculated based on a survey of 4500 electronic shops in the last two weeks of May 2009.

Government officials expect sales of eco-friendly electronic appliances to increase by about 1.5 trillion yen compared to the period before the economic crisis

Impact on flat TV sales:

Prior to the announcement on the 10th April, yearly domestic total growth was +31% in terms of volume and +15% in value in the flat TV sector. In the period from the announcement to immediately before the operation commencing (10th April to 14th May, 5 weeks), consumers held off on purchasing. For the five week total after the 15th May, flat TV showed strong growth of +43% in volume and +27% growth in value.

In terms of both the spread of digital TV and the contra cyclical policy, the Eco point system made an encouraging start. Most flat TV models already meet the criteria for eco points so they can, therefore, be considered a 'government discount'.

Impact on refrigerators sales:

Immediately after the implementation of the system, refrigerators exhibited high growth. Although sales in terms of volume demonstrated limited growth, value growth rose +23%

after the 15th May. This trend shows that consumers clearly select the eco point intended models.

Eco point intended models have experienced slight increases prior to the announcement due to the increase in environmentally conscious consumers. In terms of the unit share, intended models greatly increased after 15th May. After the operations began, the average sales price increased to approximately 95,000 JPY, from 76,000 JPY.

Impact on air conditioners sales:

Despite high unit increases just after the eco point system started, growth became limited two weeks later. The highest sales season of air conditioners is July; air conditioner sales experienced a considerable growth. Even acknowledging July as the highest sales season, intended models still increased after 15th May. The price gap between intended models and non-intended models was 40,000 JPY – 50,000 JPY in standard models. In such products, only 9,000 eco points will be granted. As a result it is not easy to switch to intended models just because of the eco points. Retailers should push the consumers from the ‘total energy-saving’ point of view, including lower monthly electricity charges.

Return on production:

With the implementing of Eco-point policy, needs of TV sets, Air conditioners, refrigerators are increased. This brings out the increase in manufacturing and employment. For instance, Sharp decided to increase production of LCD pane by 10%. Edion, a home appliance retailer, started discount service that if consumers buy the eco-electronics and use the eco-point in their shop, they will provide them 10% discount. Yodobashi camera, a large electronics retailer, increased their point percentage. The air conditioner manufacturer Daikin decided to increase production by 15%. Most of them will be produced in July. And Hitachi planed to increase production by 2%.

In an interview with the Japanese media about Toshiba performance in the first two quarters of 2009, a Toshiba officer said about the impact of eco-point program: “Eco-points started on May 15, and its impact depends on the product area. Unit sales increased for flat panel TVs. The shift to digital broadcasting also had an influence here, and like other companies Toshiba also saw a large increase in unit sales. In refrigerators, our overall result was stable, since the models supporting “Eco-points” standards were limited to large capacity models in Toshiba’s case. In air-conditioners, the unseasonal weather undermined the effects of “Eco-points”, and the industry saw fewer unit shipments than for the same period last year”.

"The measure is very well-focused. It's working greatly to stimulate the economy," said Fumio Otsubo, president of Panasonic Corp. And Setsuhiro Shimomura, president of Mitsubishi Electric Corp. said: "The (eco-point) system is bringing great effect".

Despite its success at least in this first phase, the eco-point program have generated several critics concerning its ability to sustain the boost of consumption and production and the fear that the first positive sizeable effect will disappear in the short run and problems will occur again. Similarly, several politicians and analysts have criticized the program by being a political action not an economic action aiming at promoting the ruling party image for the upcoming election. Taking these criticisms into consideration, economically and socially speaking, the eco-point program can be considered a wise choice, an original idea and a successful strategy. The data about retailing, consumption and production of electric appliances and other sectors directly or indirectly related to electric appliances backs these conclusions. Whether the program will keep on boosting the economy in the future is still not clear, however, the impact brought by the program in the first trimester after its implementation witnesses and supports its success.

Conclusion:

One day the crisis will be over. Individuals, firms and governments are always learning from bad experiences and trying to prepare better for the future to avoid difficult situations. Although, the current crisis is global, it somewhat hits countries differently given the economic and social architecture specifying each country. The best solution appears to be the one taking into account global needs, dealing with all the prominent problems and involving all the countries hit. Nevertheless, country-dependent wise solutions within the global universal one are required due to the differences in economic and social profiles. The eco-point program is found to be a clever idea. The program based on mobilizing Japanese people heavy savings, boosting sectors with high employment rate, boosting local consumption, dealing with environmental issues and strictly control governmental spending showed a considerable success at least in the first trimester after its launch. Criticisms to the program should be addressed and learning from other countries experiences should be considered to enhance current recovery programs and come with more efficient ones.

References:

- American Business Press. (2002), <http://www.americanbusinesspress.com>
- Koksal, M.H and Ozgul, E. (2007), “The relationship between marketing strategies and performance in an economic crisis”, *Marketing Intelligence and Planning*, Vol.25, No.2.
- Moorman, C., Rust, R. T. (1999), “Role of marketing” *Journal of Marketing*, Vol.63, pp.180–197.
- Rigby, D. (2001, July), “Moving upward in a downturn. *Harvard Business Review*”, Vol.79, pp.99–105.
- Shama, A. (1993, July), “Marketing strategies during recession: A comparison of small and large firms”, *Journal of Small Business Management*, Vol.31, No.3, 62– 72.
- Srinivasan, R, Rangaswamy, A, and Lilien, G.L. (2005) “Turning adversity into advantage: does proactive marketing during a recession pay off? *International Journal of Research in Marketing*, 22, 109-125
- Teece, D. J., Pisano, G., Shuen, A. (1997) “Dynamic capabilities and strategic management” *Strategic Management Journal*, Vol.18, No.7, pp.509– 533.
- Unknown (2009), “Seizing the initiative”, *Strategic direction*, Vol.25, No.3.
<http://www.un.org/esa/policy/wess/wesp2009files/wesp09update.pdf>
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0800:FIN:EN:HTML>
<http://eco-points.jp/EP/index.html>
- GfK Marketing Services Japan Ltd, press release
2009/1/5 The Yomiuri Shimbun
The Asahi Shimbun, May 23(IHT/Asahi: May 25, 2009)
IHT/Asahi: June 22, 2009
Economy Ecology, July, 2009