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A review of global fiscal stimulus

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A REVIEW OF GLOBAL FISCAL STIMULUS

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Abstract

This paper is part of a series of discussion papers that have been prepared by the International Institute for Labour Studies (IILS) within the framework of the joint project "Addressing European labour market and social challenges for a sustainable globalization", which has been carried out by the European Commission (EC) and the International Labour Organization (ILO). The discussion paper series provides background information and in-depth analysis for two concluding synthesis reports that summarize the main findings of the project. This paper relates to first part of the project "Addressing the short- and medium-term labour market and social challenges of the current economic and financial crisis" and the concluding synthesis report "Building a sustainable job-rich recovery".

In response to the global financial and economic crisis that started in 2008, countries around the world embarked on an unprecedented level of intervention with aims to keeping the economy buoyant and stop a full-scale assault on the labour market. Although world economic growth returned to positive territory, a number of labour market challenges persist. At the same time, massive public spending, depressed economic activity, and reduced revenue are causing considerable fiscal pressure. As such, policy makers are urged to bring public expenditures under control, including scaling back programmes introduced as part of stimulus measures. The aim of this paper is threefold: first it gives an overview of the global stimulus spending; second it examines their effectiveness; and third, it presents a snapshot of recent fiscal consolidation measures.

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A REVIEW OF GLOBAL FISCAL STIMULUS

Main Findings

- In response to the financial and economic crisis of 2008-09, most major economies embarked on an unprecedented level of fiscal expansion in the form of stimulus packages. Among the G20 countries alone, the size of fiscal stimulus amounted to $2 trillion – roughly 1.4 per cent of the world GDP. More importantly, the response to this crisis stands out because of the synchronicity among major economies on all fronts – financial, monetary, and fiscal responses.

    - An examination of country responses reveals that Asia put in place comparably large stimulus packages. Asia and the Pacific, not including Japan and Korea, spent 9.1 percent of its 2008 GDP on stimulus efforts (weighted average by country size). China was the main driver of the stimulus spending in Asia as it had a stimulus package worth 12.7 percent of its 2008 GDP. Meanwhile, advanced economies spent 3.4 percent of their 2008 GDP on stimulus.

- Evaluation of country efforts reveals that countries that showed relatively better GDP and employment recovery also had implemented bigger stimulus packages as a percent of GDP. Countries in emerging Asia and other developing economies tend to fall in this category. But in terms of responsiveness, countries in this category did not respond the quickest with China being the exception. But on the other hand, countries with higher GDP per capita (high income countries) were also the earliest responders.

- However, the timeliness of response was largely a function of the channels through which crisis spread around the world. For example, the crisis spread to the rest of the world slowly through various transmission mechanisms such as the domestic banking sector's exposure to the global financial markets, decline in world trade, and reduction in global aggregate demand. For example, as the crisis gripped the developed economies, it seemed that emerging economies had indeed "decoupled" from the advanced world; but, it quickly became clear that decoupling was a myth, and like the advanced economies, emerging economies had to intervene.

- Meanwhile, countries with higher GDP per capita (advanced economies) spent a larger share of total stimulus spending on transfers to low-income families. Furthermore, even though advanced economies spent less on infrastructure compared to developing and emerging economies (40 per cent), they still had a relatively higher percentage (21 per cent) devoted to infrastructure spending. In other words, most countries with stimulus spending channelled a sizeable chunk of their resources into infrastructure development and renovation aimed at lifting aggregate demand and creating employment opportunities.

- In terms of the effectiveness of fiscal stimulus measures, it is still widely accepted that no fiscal stimulus injection would have been much worse to the global economy in terms of the lost output. The current recovery of the global economy owes much to the active use of fiscal stimulus measures against the global crisis.

- However, because of rising government deficits and sky-rocketing public debt, several governments have embarked on fiscal austerity measures to rein in public spending and get the public finances in order. Cutting or reducing certain programmes, while improving fiscal balances in the short run, could undermine the fragile recovery underway. In fact, spending on labour market programmes can help job seekers to find new employment opportunities more rapidly, while at the same time sustaining disposable income and demand – which can help fiscal balances in the long run.

Introduction

In response to the global financial and economic crisis that started in 2008, countries around the world embarked on an unprecedented level of intervention. Within months of the crisis, stimulus packages were announced, ranging for example from 1.4 percent of GDP in the United Kingdom to close to 6 per cent of the GDP in the United States, and over 12 percent of GDP in China. The aim of such intervention – complemented in many instances by financial and monetary policies – was to keep the economy buoyant and stop a full-scale assault on the labour market.

World economic growth has returned to positive territory but the recovery is fragile and uneven. Developing and emerging economies have rebounded strongly with growth much more tepid in advanced economies. In both instances, however, a number of labour market challenges persist. In regions where employment growth is positive, it is not strong enough to offset the growing number of individuals entering the labour market. Similarly, there are concerns about the quality of job growth – precarious employment is on the rise and underemployment is growing. In other cases, employment continues to decline and labour market detachment is taking hold – posing serious challenges for certain groups, such as youth.

At the same time, massive public spending, depressed economic activity, and reduced revenue are causing considerable fiscal pressure. According to the recent IMF forecast, among advanced economies, public debt as a percent of GDP is expected to exceed 100 by 2010, 30 percentage points up from 2007. As such, policy makers are urged to bring public expenditures under control, including scaling back programmes introduced as part of stimulus measures. The rest of the paper is organized as follows: section A gives an overview of the global stimulus spending, section B examines their effectiveness, and section C presents a snapshot of recent fiscal consolidation measures.

A. Global stimulus spending

1. General overview

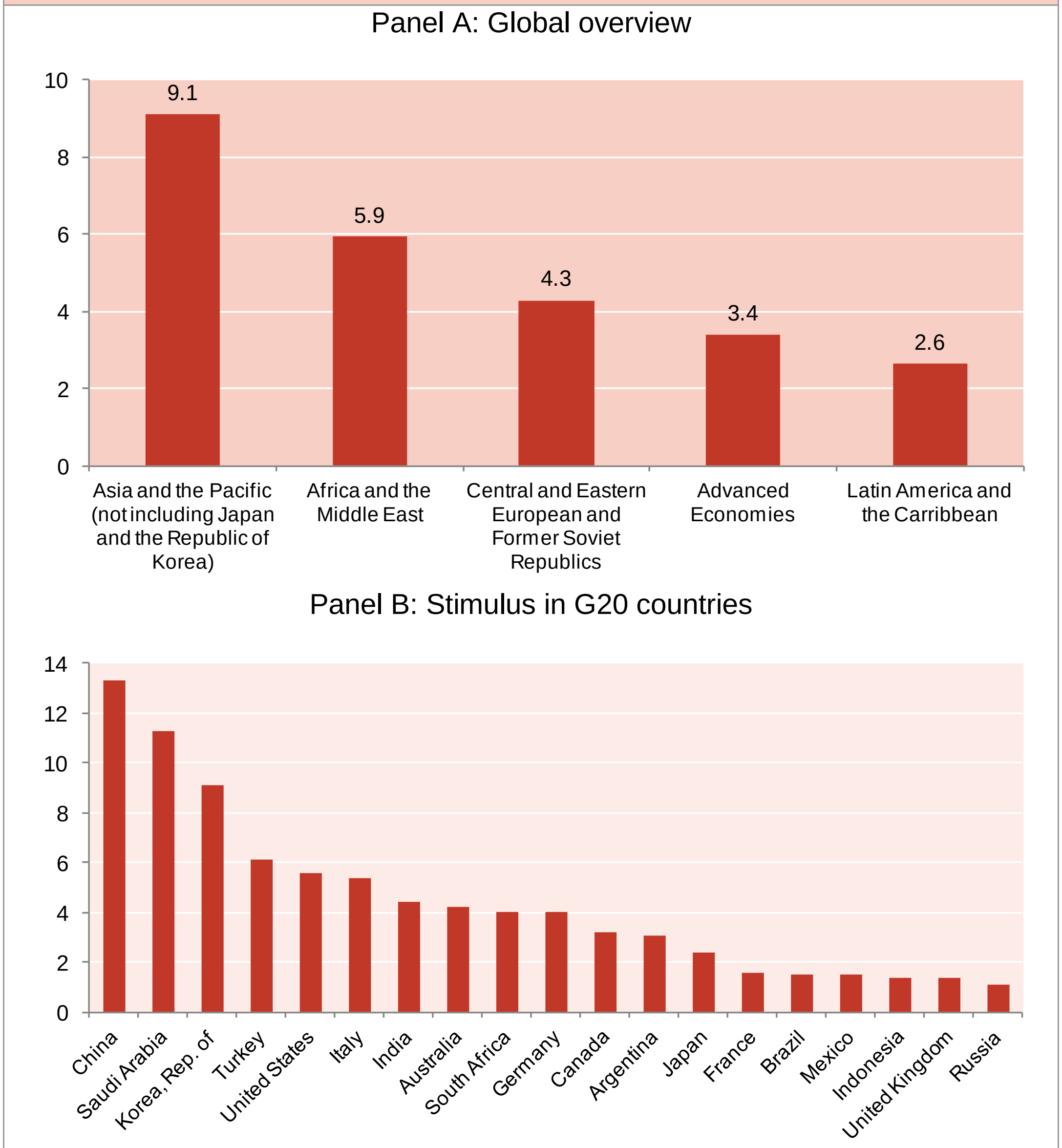
In order to fight the worst global recession since the Great Depression, countries around the world, starting from advanced economies to developing and emerging, put in place fiscal rescue efforts – new spending on public goods and services, stimulus aimed at consumers like tax cuts and transfers, and stimulus aimed at firms like corporate tax cuts and sectoral subsidies.

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 exceptional circumstance of a deep global economic slowdown in 2008-09 make the outcome of any concrete fiscal measure particularly uncertain. Nevertheless, some broad categories (labour market measures, social transfers, infrastructure spending, and other measures to boost aggregate demand) of measures exist that have shown distinct consequences for economic performance in the past. The fiscal measures in these 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 (see section B).

An examination of country responses to the financial and economic crisis reveals that Asia put in place comparably large stimulus packages (see Figure 1). Asia and the Pacific, not including Japan and Korea, spent 9.1 percent of its 2008 GDP on stimulus efforts (weighted average by country size). China was the main driver of the stimulus spending in Asia as it had a stimulus package worth 12.7 percent of its 2008 GDP. Among the G20 countries, besides China, countries such as Saudi Arabia, Korea and the United States announced relatively large stimulus packages. In terms of absolute size, the US package stands out as 5.6 per cent of its 2008 GDP is close to $ 800 billion. Meanwhile, among the

G20 countries, Russia, UK, Indonesia, Mexico, Brazil, and France all had stimulus packages less than 2 per cent (Figure 1).

Figure 1: Overview of global economic stimulus in response to the 2008-09 Crisis (as a % of 2008 GDP, weighted averages)

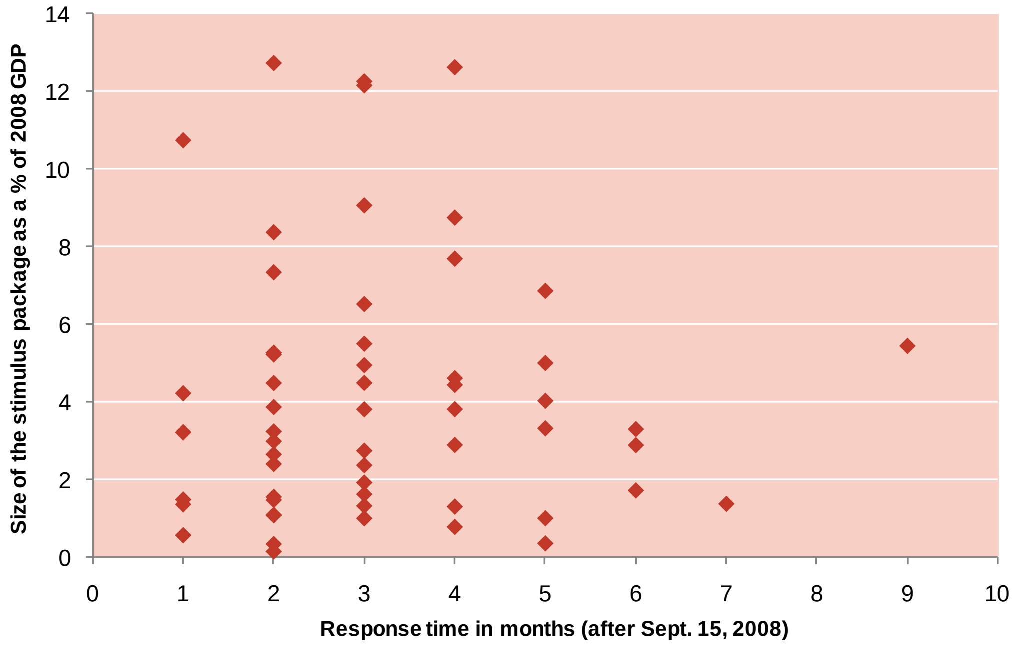


Note: Panel A is based on 65 countries. Source: IILS.

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.

Despite all the difficulties in determining the exact size of fiscal stimulus, what is clear is that most major economies responded to the crisis within 5 months of the collapse of Lehman Brothers in September 15, 2008 (Figure 2). This is especially the case with the advanced economies where the financial sector went through a period of considerable stress. At first it seemed that the emerging economies would emerge from the crisis relatively unscathed, giving credence to the view that indeed, they had "decoupled" from the advanced world. However, in the early months of 2009, it became clear that the emerging economies had to intervene to cushion the fall in economic output and employment. Hence, within the first few months of 2009, most developing and emerging economies had announced their fiscal interventions.

Figure 2: Response to the crisis (in months)



Source: IILS based on 65 countries.

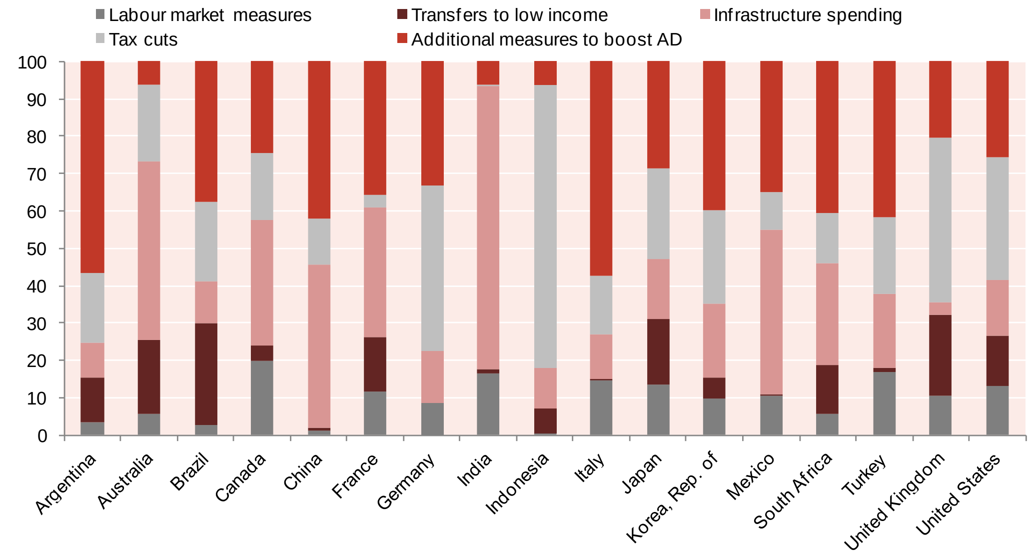
Past experience of fiscal stimulus spending in response to a major financial and economic crisis reveals that stimulus needs to be timely, targeted, and temporary in order to be effectively implemented. Timely means that the stimulus should stimulate new spending quickly enough so that businesses do not have to cut back on production or lay off workers due to weak demand. Targeted means that the stimulus should be aimed at people who are most likely to experience hardship in a weak economy partly because they are most likely to spend quickly the bulk of any resources they receive. Temporary indicates that the stimulus should expire once the economy improves so as to avoid incurring long-term deficits that weakens the economic sustainability.[1] In reality, however, it is difficult for fiscal stimulus to be effectively implemented in timely, targeted, and temporary manner often because of the political process that precedes the delivery of the stimulus.

Such fact points to the need for enhancing the scope and effectiveness of automatic stabilizers, the fiscal policy tools that respond immediately and symmetrically to business cycle fluctuations. Automatic stabilizers have a natural advantage over discretionary policy not only because they are automatically implemented and withdrawn but also because the public debt automatically remains stable over the business cycle. However, placing the right automatic stabilizers in the economy in advance to economic shocks is another policy challenge that countries need to ponder upon, particularly in consideration of their associated costs. While automatic stabilizers have an important place in combating economic fluctuations, it is often difficult to optimize these tools and place them in advance.

There were several transmission channels through which the financial and economic crisis of 2008-09 spread to the rest of the world. This is to say that countries were affected differently. Not surprisingly the fiscal stimulus efforts differed in their composition and focus. For example, China spent considerable amount in the rebuilding efforts in Sichuan, a province that was badly hit by an earthquake in 2008. Likewise, Brazil injected support to its troubled auto sector, as it comprises 5 per cent of the GDP. Similarly, Germany focussed on tax cuts and labour market measures to cushion the fall in economic output and employment. Despite these differences, it is still possible to group fiscal stimulus into the following five categories: i) labour market measures; ii) transfers to low-income individuals and households; iii) infrastructure spending; iv) tax cuts; and, v) additional measures to boost the aggregate demand (AD). As Figure 3 illustrates, most countries in the G20 allocated their stimulus spending in each of these five areas, albeit with different emphasis.

[1] The Four Pieces of Effective Fiscal Stimulus, Center on Budget and Policy Priorities. 2008. http://www.cbpp.org/cms/index.cfm?fa=view&id=863

Figure 3: Decomposition of Spending in Different Categories (as a % of total package)



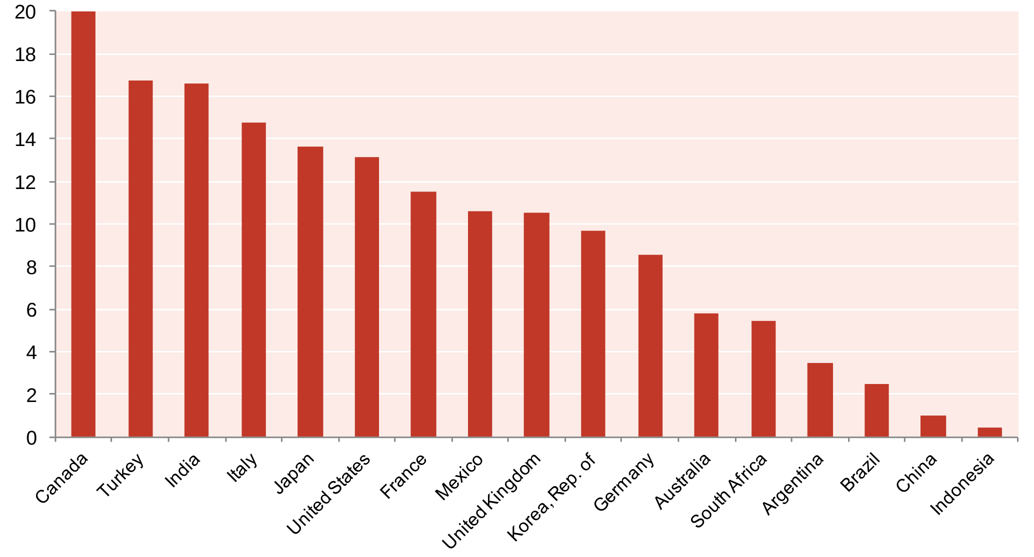
Note: AD refers to aggregate demand. Source: IILS.

Broadly speaking, advanced economies in the G20 focussed mostly on tax cuts while developing and emerging economies focussed on infrastructure spending - at 40 per cent or above for the US, Germany, and the UK; Indonesia's at 75.6 per cent of the total stimulus is an exception. Several advanced economies also spent considerable resources on infrastructure upkeep and development, but the share of the total spending was relatively small when compared to developing and emerging economies (Figure 3). Meanwhile, advanced economies also spent considerably more on labour market measures than the developing and emerging economies. The category titled 'additional measures to boost the AD' includes everything that could not classified neatly into the other four categories, and not surprisingly seems to be one of the larger components of the spending. But this also reflects the varied nature of countries' priorities of the areas that needed government support – signifies a targeted approach to the stimulus spending.

2. Labour market measures

Among the G20 countries, most of the advanced economies such as Canada, Italy, Japan, the US, the UK, Korea and Germany, spent around 10 per cent or more of their total stimulus on labour market measures (Figure 4). In some cases like that of Germany, the 9 per cent of its stimulus going to labour market measures masks the true size of its' labour market measures because it does not capture the spending on pre-existing measures like Kurzarbeit programme. So it would be grossly misleading to say that Germany focussed less on labour market measures than other advanced G20 countries. This is especially pertinent because Germany's unemployment rate, unlike most other advanced economies, barely budged because of the crisis.

Figure 4 : Labour market measures as a share of total stimulus



Source: IILS.

During the crisis, a number of countries reinforced their automatic stabilizers, which proved extremely effective in reducing the impacts of the crisis on employment. The success of these initiatives, however, lies in the fact that countries used these measures strategically to better target the sectors more in need. As such, efforts were concentrated in areas with large spill-over effects on job creation. In general, automatic stabilizer played a key role in mitigating the fall in GDP and employment (see Box 1).

Box 1 Reinforcing automatic stabilizers

- ***Brazil:*** A number of automatic stabilizers were reinforced during the crisis. In addition to well known social assistance programs, there was an extension of unemployment insurance benefits by two months for redundant workers employed in sectors most affected by the crisis.
- ***Germany:*** In Germany, automatic stabilizers were the principal means through which the crisis was addressed and played a significant role in lessening the negative impacts of crisis. This included easier access to short-time work, improvements to unemployment assistance, pension guarantees, extra resources to the PES as well as a series of initiatives targeted to low-income households. The OECD estimates that automatic stabilizers were at least three times more important than the fiscal stimulus packages that Germany put in place. Automatic stabilizers are estimated to have had a fiscal impact of 2.5 per cent of GDP in 2009 and in 2010.
- ***Indonesia:*** Although to a lesser extent, automatic stabilizers were also effectively used in Indonesia during the crisis, mainly through social assistance programmes. Community-based programmes targeting poor and vulnerable households and workers were the most targeted by the government. Indeed, during the crisis the government increased the allocation of some of this programmes – from IDR 58 trillion in 2008 to IDR 66 trillion in 2009.

In some instances, macroeconomic policies proved to have important employment multipliers because they were targeted to employment-intensive sectors. For example:

- *Brazil*: The reduction in the industrial production tax (IPI) gave an important boost to job creation due to the strong employment content – both forward and backward linkages – of the automobile industry. The initiative is estimated to have saved up to 60,000 jobs and the Instituto de Pesquisa Econômica Aplicada (IPEA) estimates that each R$1.00 spent on cars has a multiplier effect of R$3.76 on aggregate output.

- *China*: A number of macroeconomic policies were put in place in China in an effort of boosting domestic demand to stimulate economic growth and address the effects of the crisis on the labour market. For example, a monetary policy measure was put in place that lowered the benchmark lending rate by five times and the required reserve rate successively five times. A credit of ¥7 trillion was channelled through the banking system to counter the impact of the credit crunch. Moreover, a tax reform was carried out, with a transition to value added tax, and taxes on the refined oil, medical and health systems. Between the fourth quarter of 2008 and the third quarter of 2009 four sets of investment funds were disbursed, totalling ¥384 billion. Of this, ¥37.5 billion were for housing, ¥104.3 billion for rural infrastructure, ¥87.1 billion for social services, ¥57.3 billion for the environment, ¥39.6 billion for independent innovation, and ¥54.2 billion for industrial restructuring.

- *Indonesia:* stimulus spending focused on cutting personal income taxes in an effort to boost domestic consumption which ended up having strong spillover effects in related sectors. In fact, preliminary estimates show that more than 30 per cent of the jobs created between February 2009 and August 2010 were due to the stimulus package – 1.2 million out of 3.7 million jobs.[2]

Meanwhile, among the measures to keep workers tied to the labour market included:

- *Canada*: The Work-Sharing Programme helped companies and workers to continue working together productively through difficult times. The Work-Sharing Programme pre-dated the financial and economic crisis and was enhanced in an attempt to limit job losses. In particular, the programme duration was extended by 14 weeks, then recently by an additional 26 weeks. Work-sharing agreements can now last up to 78 weeks.

- *Japan*: The Employment Adjustment Subsidy Programme (EASP) – one of the largest, in budgetary terms, and most extensive of Japan's programmes to counteract the employment crisis – was used to retain workers and avoid job losses. Companies struggling to retain workers through measures such as temporary operations closures, vocational training and the transfer of employees to other companies are eligible for subsidies to cover part of wages and other costs related to the workers concerned. As part of the emergency employment package developed in response to the crisis, the Ministry of Health, Labour and Welfare substantially expanded the programme in a number of ways, notably by relaxing eligibility requirements, with workers no longer needing to have been covered by employment insurance for six months. The subsidy rate was also raised, especially for SMEs, rising in gradual steps to reach 90 per cent of wages for SMEs and 75 per cent for larger firms. In addition, subsidies for workers in vocational training were increased to ¥6,000 per day for SMEs and ¥4,000 per day for larger enterprises. These changes resulted in a big increase in the numbers of firms applying for subsidies and workers covered. The programme is likely to have contributed significantly to restraining the rise in unemployment since the beginning of the crisis in the face of the drastic decline in GDP and the ratio of active job openings to applicants.

- *Korea*: In 2009 the Korean government introduced a comprehensive package of measures designed to retain and create jobs through a Grand Social Consensus between the social partners and civic groups. Based on this accord, subsidies for SMEs rose from two-thirds to three-fourths of wages, while for large enterprises subsidies increased from one-half to two-thirds of wages. Nearly 30 per cent of workplaces with 100 or more employees participated in a job-sharing scheme, which is estimated to have retained a minimum of 90,000 jobs. Job retention efforts were

[2] Source: Indonesia: Reinforcing Domestic Demand in Times of Crisis, *Studies on Growth with Equity*, IILS, ILO 2011.

complemented by a KRW5.3 trillion (US$4.4 billion) commitment targeting about 810,000 beneficiaries (table B5.3). The government is also targeting 250,000 households with incomes below 120 per cent of the minimum level considered necessary to cover basic costs of living, and assets below a certain threshold in the "Hope Work" programme which is aimed at providing temporary jobs to low income households and supporting the recovery of local economies.

- *Germany*: Employment stability was achieved largely through initiatives and measures aimed to adjust working time. Indeed, at the enterprise level the adjustment of work hours to rising or declining output took place thanks to a number of mechanisms including reductions in overtime, fewer regular working hours, and working-time accounts. These three measures alone accounted for over half the reduction in hours worked. The success of these measures is grounded in effective social dialogue – as they are often a product of negotiated worker–employer agreements or firm-level pacts—but in that it was reinforced by government support. Germany's short-time work programme (Kurzarbeit) was the most widely used means by which firms were able to stabilize employment through working-time reductions – the programme accounted for one-third of the reduction in hours. Early indications are that the programme has led to a number of successes with regards to stabilizing employment, providing income support, and limiting the displacement effects (firms that did not need the programme used it less).

- *Brazil*: one of the measures aimed to provide direct support to employment was directed towards rural farming – representing 16 per cent of the labour force. Indeed, to bolster activity in the agricultural sector, the Government announced the Plan Safra 2009/2010 that granted R$107.5 billion (US$59.4 billion) to 4.1 million rural units, among which R$15 billion (US$8.3 billion) was allocated to family farms. The aim of the funding was to address credit constraints, enhance diversification and strengthen insurance against price declines.

3. Social protection measures

Crisis tends to present an opportunity to either introduce new social programmes or revamp the old ones to help families and individuals endure the crisis. One of the most effective ways of putting money in the hands of people is conditional cash transfer schemes. During the crisis, social and cash transfers not only assisted those in need, but by putting cash in the hands of those most likely to spend it, helped to shore up household consumption. For this reason, countries that strengthened the policies towards income transfers managed to recover faster than others.

In case of Brazil, the strengthening and extension of the CCT programme, Bolsa Familia, helped 1.4 million additional families to benefit from the scheme, which supplements income, reduces poverty and provides improved food and nutritional security. Meanwhile, social protection linked to formal employment has a long tradition in Argentina – until 2009, between 4 and 5 million children whose parents are unemployed or work in the informal sector have not been covered by family allowances. These families, often the poorest and most vulnerable, have had to rely on other, less comprehensive government programmes for assistance. To cover this gap, the Argentine government created a new programme, Asignación Universal por Hijo para Protección Social, which consolidates the transfers currently provided through different social programmes into one major child benefit programme administered by ANSES. In October 2009 the new programme extended child benefits to unregistered workers earning less than the minimum wage, the unemployed, domestic workers and self-employed workers with very low incomes. As of 1 December 2009, 2.7 million children and adolescents were registered, about 55 per cent of the eligible target population. Of these, 1.34 million were not previously receiving any social transfer payments. If the programme achieves universal coverage, the total cost of the non-contributory component would equal about 1 per cent of GDP.

Meanwhile, in the United States, the American Recovery and Reinvestment Act (ARRA) allocated an estimated $48 billion to the Supplemental Nutrition Assistance Programme (SNAP) which provides assistance to low-income families in the form of food vouchers. Almost all (97%) of SNAP benefits are redeemed in grocery stores and at Farmer's markets within 30 days, providing a timely, and much needed economic stimulus by helping low-income families purchase food. As of April 2009, monthly benefits for the 32.2 million recipients of SNAP increased by $80. The average SNAP household now receives $294 in monthly benefits, which is a 19 per cent increase in benefits over 2008. According to the Department of Agriculture, every $5 in new SNAP benefits generates $9.20 in total community spending.

On the health front ARRA provides for premium reductions for health benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985, commonly called COBRA. COBRA gives workers and their families who lose their health benefits the right to purchase group health coverage under certain circumstances. If the employer continues to offer a group health plan, the employee and his/her family can retain their group health coverage for up to 18 months by paying group rates. The COBRA premium may be higher than what the individual was paying while employed but generally the cost is lower when compared to private, individual health insurance coverage, which for American not qualifying for Medicaid or Medicare is the only alternative. Eligible individuals pay only 35 per cent of their COBRA premiums and the remaining 65 per cent is reimbursed to the insurance provider through a tax credit. To qualify, individuals must lose their job involuntarily and must occur during the period that began 1 September 2008 and ends on 28 February 2010. The premium reduction applies to periods of health coverage that began on or after 17 February 2009 and lasts for up to 15 months.

B. Effectiveness of stimulus measures

The overall result of global fiscal stimulus measures seems to be positive in a sense that most countries around the world have observed growth in their real GDP in 2010, following its steep decline in 2008 and 2009. Reversing its 0.6 per cent decline in 2009 in the aftermath of the crisis, the world output is projected to grow at 4.2 per cent in 2010. Even in advanced economies where the crisis hit the hardest, the output growth is projected to recover from -3.2 per cent in 2009 to 2.3 per cent in 2010. Among the advanced economies, the large stimulus-supported US economy – where fiscal stimulus is estimated to have boosted real GDP growth by about 1 percentage point in 2009 – has led the recovery while the recovery of European and Japanese economies has been relatively slower. Furthermore, emerging and developing economies have led the global recovery as their output is expected to grow even more rapidly from 2.4 per cent in 2009 to 6.3 per cent in 2010. Among these economies, China and India showed particularly outstanding recovery at 8.7 per cent and 6.7 per cent growth respectively in 2009.[3] Overall, the global economy is on the way back to its pre-crisis level at a relatively fast pace. However, the speed of global recovery differs from one country and region to another and such multi-speed recovery is expected to continue in the near future.

1. Impact of fiscal stimulus depends on the use of policy levers and country characteristics

Fiscal multipliers provide a quantitative summary of the effect of fiscal measures on aggregate activity, expressing the magnitude of the increase in GDP in a given year in relation to the ex ante cost of the measure. Although it is difficult to calculate fiscal multipliers in a conclusive manner, a review of major literatures reveals common lessons on the fiscal stimulus. To begin with, the composition of the stimulus matters in a number of ways. A macroeconomic model using the OECD countries finds that short-run multipliers from increased government spending generally exceeds those from revenue measures because direct spending by government does not suffer from leakage to savings at the first round stage and estimated multipliers tend to be slightly higher than 1.0. With respect to multipliers from revenue measures, a personal income tax cut tends to have a slightly larger effect than other forms of tax cuts. Also, the multiplier tends to increase slightly between the first and second years of stimulus. It is particularly relevant for tax measures for which the effects tend to build up more slowly as they feed through the economy indirectly via consumption expenditures.

According to a recent NBER working paper, four country characteristics – level of development, exchange rate regime, openness to trade, and public indebtedness – determine the real effects of fiscal stimulus. First with regard to the level of development,

[3] World Economic Outlook (WEO): Rebalancing Growth, IMF, April 2010 http://www.imf.org/external/pubs/ft/weo/2010/01/index.htm

the output effect of an increase in government consumption is larger in industrial than in developing countries. Second, the fiscal multiplier is relatively large in economies large in economies operating under the predetermined exchange rate but zero in economies operating under flexible exchange rates. Third, fiscal multipliers in open economies are lower than in closed economies. Fourth, fiscal multipliers in high-debt countries are also zero.

Meanwhile, one of the disadvantages often cited against using discretionary fiscal policy is the problem of timeliness, both in terms of the measures being implemented when they are most needed and then being subsequently adjusted or removed. Thus, infrastructure investment, because of its typically long implementation and gestation lags, scores poorly in this regard unless there are projects which are "shovel-ready" or there are repair and maintenance programmes that can readily be brought forward. However, there are exceptions, as it was the case in Indonesia where spending on infrastructure was spent within months on pre-existing infrastructure projects (Box 2).

The magnitude of the current downturn is likely to have reduced concerns regarding timeliness, both because it appears that political decision-making can be more rapid during a period of crisis and because the downturn is expected to last a number of years. Nevertheless, an important issue in the current context is how long any stimulus should be sustained, since an abrupt phasing out of a positive stimulus has an adverse impact on the growth rate of output.[4]

[4] The Effectiveness and Scope of Fiscal Stimulus, OECD http://www.oecd.org/document/2/0,3746,en_2649_34573_2082818_1_1_1_1,00.html

Box 2: Infrastructure investment and employment creation: The Indonesian case

Indonesia's stimulus package contained up to IDR12.2 trillion for infrastructure development, including the improvement of highways, ports, bridges and irrigation systems. At the end of 2009, 93.1 percent of the government's stimulus package had been disbursed, creating an estimated 1 million jobs.

The budget allocation from the 2009 stimulus package includes IDR6.6 trillion for the Department of Public Works, which will be invested in water resource development, roads and sanitation systems. Water resource development alone is to receive IDR1.5 trillion and is responsible for creating 250,000 jobs. The Departments of Public Works at the regional level are expected to create close to 70 per cent of the employment opportunities funded by the stimulus package. Results of a sample survey indicate that the programme opened job opportunities for disadvantaged groups. For example, 60.6 percent of beneficiaries had a maximum of six years of schooling; 47 percent of the jobs created went to youth (15 to 29 years); and 67 per cent of the sample had been unemployed before joining the programme.

To ensure timely implementation of the stimulus package and to benefit from existing administrative structures, many current or ongoing public works schemes were given additional funding. In addition, new programmes funded through the Fiscal Stimulus Package followed standard administrative procedures and much of the funding was broken into small grants that went to small local contractors and local labourers. To enhance the employment outcomes of the infrastructure component, the government has advocated using local contractors, labour and resources.

The United States

In the US where the collapse of housing market commenced the global crisis, the fiscal stimulus is generally agreed to have worked well such that it prevented an economic catastrophe. In response to the crisis, the US quickly implemented $787 billion worth of fiscal stimulus and it is estimated that this stimulus boosted real GDP growth by about 1 percentage point in 2009.[5] Shortly after the injection, the real GDP in the US grew at 2.2 per cent in the third quarter of 2009 and at 5.6 per cent in the fourth quarter of 2009. The projected GDP growth in 2010 is 3 per cent.[6]

With respect to the fiscal stimulus effect on the labour market, the stimulus is estimated to have created between 2.5 million to 3.6 million jobs, with more conservative figure suggesting 2.7 million jobs.[7] However, such job spurring effect of the stimulus seems to be inadequate as the labour market remains weak and unemployment high. Compared to approximately 3 million jobs created, 7 million jobs have been lost and 8.8 million people

[5] World Economic Outlook (WEO): Rebalancing Growth, IMF, April 2010
http://www.imf.org/external/pubs/ft/weo/2010/01/index.htm
[6] World Economic Outlook (WEO): Rebalancing Growth, IMF, April 2010
http://www.imf.org/external/pubs/ft/weo/2010/01/index.htm
[7] Economists agree: Stimulus created nearly 3 million jobs, USA Today. 20110.
http://www.usatoday.com/money/economy/2010-08-30-stimulus30_CV_N.htm

have been placed involuntarily on part-time jobs due to the crisis. As a result, the unemployment is projected to remain high in 2010 at 9.5 per cent, though it may decline a little bit to 8.25 per cent level in 2011.[8]

Europe

Dramatically affected by the global financial and economic crisis, Europe resorted to a substantial amount of macroeconomic stimulus to support its recovery. The European Commission proposed an EU-wide fiscal stimulus package worth 200 billion Euros or 1.5 percent of the bloc's GDP to be made up of 1.2 percentage points of budget spending and 0.3 percentage points of central EU funding.[9] Under the title of the European Economic Recovery Plan (EERP), the fiscal stimulus was launched to restore confidence and bolster demand through a coordinated injection of purchasing power. The overall fiscal stimulus including the effects of automatic stabilizers, however, is estimated to be greater at 5 per cent of GDP in the European Union (EU).[10] It is estimated that the fiscal stimulus will increase GDP in the EU area by 0.7 per cent in 2010 and 1.6 per cent in 2011.[11] The recovery is on its way, albeit slow, with the stimulus efforts mainly channelled through the EERP. The GDP in advanced economies within Europe is projected to grow at 1 per cent in 2010 and at 1.75 per cent in 2011 whereas emerging economies expect 3 per cent growth in 2010 and 3.5 per cent growth in 2011.[12]

Despite the recovery in Europe, it seems that the private demand has not yet taken its firm hold in the economy and, at the same time, sizeable current account and fiscal imbalances in countries like Greece, Ireland, Lithuania, Portugal, Spain, and United Kingdom are adding pressures and risks to the economic recovery in the region.

In terms of employment, countries like France, Germany, Italy, and the Netherlands each implemented work sharing programmes as part of their fiscal stimulus programmes in order to have employers retain skilled workers rather than laying them off. In France, Activité/Chômage Partiel saved 183,000 jobs by June of 2009. In Germany, Kurzarbeit programme preserved 1.42 million jobs during the same time period. In Italy, Cassa Integrazione Guadagni (CIG) recouped 716.8 million work hours between January and October of 2009, and, in the Netherlands, Deeltijd WW saved 36,000 jobs by the third quarter of 2009.[13] However, the stimulus effect on employment had been inadequate to

[8] World Economic Outlook (WEO): Rebalancing Growth, IMF, April 2010 http://www.imf.org/external/pubs/ft/weo/2010/01/index.htm

[9] Europe's Fiscal Stimulus Plans, Reuters http://www.reuters.com/article/2009/03/17/eu-summit-stimulus-idUSLH44404720090317

[10] Economic Crisis in Europe: Causes, Consequences, and Responses, European Commission. 2009. http://ec.europa.eu/economy_finance/articles/article15893_en.htm

[11] Preliminary literature review on the effectiveness of stimulus measures at the IILS

[12] International Monetary Fund (IMF). 2010. *World economic and financial surveys. World economic outlook April 2010: Rebalancing growth.* Apr. 2010. (Washington, D.C.). http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/text.pdf

[13] Preliminary literature review on the effectiveness of stimulus measures at the IILS

offset the negative impact on the labour market. The employment rate in the EU declined by 2.1 per cent (or 4.7 million people) in a year between 2008 Q4 and 2009 Q4. In January 2010, the unemployment rate in the EU area reached 9.5 per cent (or 23 million people) with countries in the Baltic, Ireland, and Spain showing the largest increases in unemployment levels. As a result, the employment targets set in the Lisbon Strategy in 2000 for 2010 – including an overall EU employment rate of 70 per cent – seem a little bit far-fetched given the labour market situation. In the first quarter of 2010, the employment has slipped back to its 2005 level at 63.7 per cent and the unemployment is higher than at any time during the Lisbon period at 10.2 per cent.[14]

Asia

The recent global financial and economic crisis was essentially a trade crisis in contrast to the Asian crisis of 1997-1998 that started out as a disruption of financial markets in the region. Specifically, the global crisis did not hit the region with full force until the financial crisis spread to the real economy in the industrialized countries, affecting demand for imports from Asia and thus the region's exports in Asia. The collapse of external demand and world trade has predictably had a pronounced adverse impact on the output growth in the region, a significant part of which has traditionally relied on exports for growth. The impact was especially noticeable for the highly open and generally more successful economies of East and Southeast Asia. The plunge in exports, which peaked in the fourth quarter of 2008 and first quarter of 2009, also dragged down business and consumer confidence, dampening private investment and consumption.[15] In this scenario of weak aggregate demand, governments had to act as the consumer of last resort to prevent economic meltdown and in light of the region's consequent need to grow as fast as possible policymakers have usually given much higher priority to maximizing output growth. Plunging external demand, compounded by feeble private domestic demand, left expansionary monetary and fiscal policy as the default policy option.

Despite the severe initial impact on output, the region has staged a spectacular V-shaped recovery reminiscent of its rebound from the Asian crisis. The developing Asia as a whole grew by an estimated 5.2% in 2009, a much better performance than the rest of the world. The region's growth will accelerate further to 7.5% in 2010. Even more remarkably, the People's Republic of China (PRC) grew by an estimated 8.7% in 2009 and is projected to grow by 9.6% in 2010.[16]

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[14] Labour Market Impacts of the Global Economic Crisis and Policy Responses in Europe, European Trade Union Institute. 2010.
http://www.socialwatch.eu/wcm/labour_market_impacts_and_policy_responses.html

[15] Did Fiscal Stimulus Lift Developing Asia out of the Global Crisis? A Preliminary Empirical Investigation, ADB Economics Working Paper Series. 2010.
http://www.adb.org/documents/working-papers/2010/economics-wp215.pdf

[16] Did Fiscal Stimulus Lift Developing Asia out of the Global Crisis? A Preliminary Empirical Investigation, ADB Economics Working Paper Series. 2010.
http://www.adb.org/documents/working-papers/2010/economics-wp215.pdf

The developing Asia's V-shaped recovery owes much to the sizable and effective fiscal stimulus measures implemented by the region's governments. For example, domestic spending has bounced back because the fiscal stimulus in the region was bigger and worked faster than in the West. Although monetary policy also contributed to the recovery in some countries, fiscal policy is likely to have played a greater role since it has a more direct effect on aggregate demand. Tax cuts and higher government spending were directed solely toward reviving sagging demand. Such fiscal measures go a long way toward explaining developing Asia's turnaround.

One key to understanding the effectiveness of fiscal stimulus measures in developing Asia is the relatively healthy state of government finances because such financial stability allowed governments to implement a sizable fiscal expansion. The IMF notes that the emerging market countries with lower public debt and better budget balances going into the crisis were able to accommodate the economic downturn better by letting their fiscal positions ease more substantially.[17] With the notable exception of India, public debt to GDP ratios is significantly lower in the developing Asia in comparison to industrialized countries. For instance, most countries in developing Asia other than India have debt-output ratios below 60 per cent with the nine major regional economies averaging 32.9 per cent in 2007. The ratios stand in stark contrast to the G7 average of 84.1 per cent. The only countries with any risk of seemingly unsustainable debt were India and Philippines, averaging at 61.94 per cent and 65.25 per cent respectively in the period of 2004-2008 respectively.[18] In sum, years of fiscal prudence have given the region a relatively high degree of fiscal freedom with plenty of scope to pursue expansionary policies to cushion even large external shocks.

In terms of composition, the Asia's fiscal stimuli were heavily focused on public spending, specifically infrastructure endowments, which had the effect of increasing direct private demand for goods and services to compensate for the significant loss of foreign demand.[19] It seems that tax cuts did not have much positive impact on the region's output, partly because tax cuts were a much smaller part of the region's fiscal stimulus packages with their overwhelming emphasis on higher spending. Partially due to its greater focus on government spending, spending measures seem to have helped the developing Asia achieve its V-shaped recovery.

Looking ahead, the regional challenge seems to be two folds. First, the region's currently low public indebtedness relative to the industrialized countries should not lull the region

[17] Emerging Market Countries and the Crisis: How Have They Coped?, IMF. 2010. http://blog-imfdirect.imf.org/2010/04/19/emerging-market-countries-and-the-crisis-how-have-they-coped/

[18] Did Fiscal Stimulus Lift Developing Asia out of the Global Crisis? A Preliminary Empirical Investigation, ADB Economics Working Paper Series. 2010. http://www.adb.org/documents/working-papers/2010/economics-wp215.pdf

[19] Asian Development Bank (ADB). 2010. *Asian development outlook 2010*: *Macroeconomic management beyond the crisis*. (Mandaluyong City, Philippines). pp. 1-8 ("Highlights"), 4-24, 43-47, 76-91, 133-139, 144-148, 170-176, 201-205, 217-221, 261-262, 266. http://www.adb.org/documents/books/ado/2010/

into self-complacency about debt sustainability. While there is no universal consensus on the threshold public debt-to-GDP ratio for sustainability, the threshold is universally believed to be lower for developing countries than it is for industrialized countries. Second, the region is faced with the structural policy challenge of rebalancing its growth towards domestic sources of growth and demand. Such policy redirection may very well impose substantial additional demand on the region's fiscal resources in the medium and long term.

In labour markets, the strong V-shared economic recovery certainly helped most countries to alleviate the unemployment levels. In fact, the unemployment rate is on a declining trend in most major Asian economies including Indonesia, Philippines, Singapore, and Thailand. Only in Korea and Malaysia did the unemployment rate rose marginally or stayed stagnant. Despite such strong comeback from the global crisis, Asia still bears the problem of unemployment as well as the quality of employment opportunities. It seems that the quality of employment is diminishing. In Cambodia, workers in manufacturing and construction sectors made close to 1,600 Rials per hour in 2007 but only slightly higher than 1,000 Rials in 2009. In China, rural wages of the farm used to be near RMB 1,125 in 2007 but was lowered to around RMB 975 in 2009. After September 2008, 82.4 per cent of Chinese workers retained their jobs, but only 8.6 per cent of workers who lost their jobs succeeded in finding another job. The fiscal stimulus measures seem to be far less effective in combating the poverty in Asia as the estimated figure of 14 million more people in Asia is expected to enter poverty in 2010.[20]

Latin America and the Caribbean

The Latin America and the Caribbean (LAC) region is recovering fast and strong from the global crisis, rivalling the strong economic performance of Asia. Most countries in the LAC region did not observe huge drops in GDP to begin with, and these small drops in GDP are now returning fast to their pre-crisis levels, albeit at varying speeds across the region. The overall GDP growth rate in the LAC region fell from 5.3 per cent in 2007 to 2.2 per cent in 2009, but it is projected to bounce back to 3.1 per cent increase in 2010.[21]

Although fiscal expansion policies certainly played their part in the recovery, there were a number of factors that contributed to the recovery in the LAC region. In addition to accommodative policies that helped to underpin domestic demand, good fundamentals (e.g. sound financial systems and solid balance sheets) helped the region recover and re-attract capital flows. In fact, how the LAC countries were able to obtain a sufficient fiscal space to implement fiscal measures when the global crisis hit owes much of explanation to

[20] Asian Development Bank (ADB). 2010. *Asian development outlook 2010*: *Macroeconomic management beyond the crisis*. (Mandaluyong City, Philippines). pp. 1-8 ("Highlights"), 4-24, 43-47, 76-91, 133-139, 144-148, 170-176, 201-205, 217-221, 261-262, 266. http://www.adb.org/documents/books/ado/2010/

[21] *World economic and financial surveys. Regional economic outlook. Western Hemisphere: Taking advantage of tailwinds.* May 2010. (Washington, D.C.). http://www.imf.org/external/pubs/ft/reo/2010/whd/eng/pdf/wreo0510.pdf

years of stockpiling international reserves during its period of expansion since the early 2000s. Furthermore, higher commodity prices and external demand supported growth in many regional economies in light of their dependence on commodity-related earnings. On the future fiscal front, the sluggish recovery in advanced economies calls for keeping existing stimulus in place until domestic recoveries are firmly entrenched, especially where the economy is below potential. Nevertheless, the reversal of policy stimulus will need to proceed as soon as risks of domestic overheating or adverse debt dynamics become a concern.[22]

Considering circumstances of the LAC region in its totality, some suggest that the effects of fiscal stimulus itself may have been relatively limited in a sense that its small multipliers added little to GDP growth of the region. IMF suggested that the recovery in the LAC countries was led mostly by "strong domestic consumption and the inventory cycle."[23]

In the labour market, fiscal stimulus has helped ease the impact of job loss. In major LAC economies, the unemployment rate has been relatively stable with the unemployment steadily decreasing in many countries. In Argentina, the unemployment rate fell from 8.7 per cent in 2007 to 7.3 per cent in 2009. In Brazil, the unemployment rate fell from 9 per cent in 2007 to 7.9 per cent in 2009. In Uruguay, the unemployment level fell from 9.1 per cent in 2007 to 6.8 per cent in 2009. In Venezuela, the unemployment level decreased from 8.4 per cent in 2007 to 6.1 per cent in 2009.

Sub-Saharan Africa

Although at the onset of the crisis many economists underestimated its likely impact on Africa on the premise that advanced and developing countries had decoupled, it became clear by early 2009 that the crisis had caused a serious setback for most countries on the continent. The global financial and economic crisis hit the continent mostly through real channels, such as deteriorated terms-of-trade, reduced demand for exports, decline in FDI, remittances, tourism, and possibly also aid inflows.[24] In light of such transmission channels, middle income and oil-exporting economies were hit hard in the region and it is

[22] International Monetary Fund (IMF). 2010. *World economic and financial surveys. World economic outlook April 2010: Rebalancing growth.* Apr. 2010. (Washington, D.C.). http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/text.pdf

[23] *World economic and financial surveys. Regional economic outlook. Western Hemisphere: Taking advantage of tailwinds.* May 2010. (Washington, D.C.). p. 19 http://www.imf.org/external/pubs/ft/reo/2010/whd/eng/pdf/wreo0510.pdf

[24] Kasekende, L.; Brixova, Z; Ndikumana, L. 2010. "Africa: Africa's counter-cyclical policy responses to the crisis," in *Journal of globalization and development.* Vol. 1., Iss. 1, Art. 16. (Berkeley: The Berkeley Electronic Press). pp. 1-2, 4, 6-10. http://www.afdb.org/fileadmin/uploads/afdb/Documents/Financial-Information/Africa's%20counter-cyclical%20policies%20-%20JGD%20vol%201(1)%2016%20Dec%202009.pdf

estimated that the output loss of the global crisis for Sub-Saharan Africa (SSA) had been around US$40-50 billion in the period of 2008-2009.[25]

Compared to previous periods of crisis, however, SSA is recovering faster and stronger owing much to the fiscal packages adopted in emerging SSA economies such as in South Africa. One study concluded that stimulus efforts in the region were, on the whole, fitting, well-timed, and aimed at enhancing long-term domestic demand and business growth.[26] Also it seems that fiscal packages announced in developed countries worth close to US$2 trillion have helped to smooth the losses in SSA, offsetting about a quarter of losses due to the global crisis.[27] Overall, the region managed to avoid an output contraction in 2009 as it grew 2.1 per cent that year. Its growth is projected to accelerate to 4.75 per cent in 2010 and to 6 per cent in 2011.[28]

Unfortunately fiscal policies have not had the same degree of positive effect on job growth as they did on GDP growth in SSA. South Africa, for instance, had seen its employment decline by 2,473,000 jobs between the third quarter of 2009 to the first quarter of 2010.[29] It is expected that Africa in general will be faced with shorter work weeks, greater temporary employment, and greater vulnerability in coming years, leading to decreasing labour force participation.

A major policy challenge for most SSA countries is their limited fiscal space to manage fiscal stimulus. A study suggests that a fraction of stimulus efforts in the developed economies would have significantly positive effects in SSA countries if they were implemented in the region. For instance, US$50 billion goes to areas such as debt relief, consumption, productive investment, or infrastructure development, it would significantly

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[25] A fiscal stimulus to address the effects of the global financial crisis on sub-Saharan Africa, National Institute of Economic and Social Research & Overseas Development Institute. 2009. http://homepageone.s3.amazonaws.com/cms%2F20090327094226-Fiscal.pdf

[26] Kasekende, L.; Brixova, Z; Ndikumana, L. 2010. "Africa: Africa's counter-cyclical policy responses to the crisis," in *Journal of globalization and development*. Vol. 1., Iss. 1, Art. 16. (Berkeley: The Berkeley Electronic Press). pp. 1-2, 4, 6-10. http://www.afdb.org/fileadmin/uploads/afdb/Documents/Financial-Information/Africa's%20counter-cyclical%20policies%20-%20JGD%20vol%201(1)%2016%20Dec%202009.pdf

[27] A fiscal stimulus to address the effects of the global financial crisis on sub-Saharan Africa, National Institute of Economic and Social Research & Overseas Development Institute. 2009. http://homepageone.s3.amazonaws.com/cms%2F20090327094226-Fiscal.pdf

[28] International Monetary Fund (IMF). 2010. *World economic and financial surveys. World economic outlook April 2010: Rebalancing growth.* Apr. 2010. (Washington, D.C.). http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/text.pdf

[29] Kucera, D.; Roncolato, L.; von Uexkull, E. 2010. *Trade contraction in the global crisis: Employment and inequality effects in India and South Africa*. Employment Sector, Employment Working Paper no. 54. (Geneva: ILO). pp. 12-15. http://www.ilo.org/employment/Whatwedo/Publications/lang--en/docName--WCMS_144887/index.htm

help the long-run growth of output level in SSA and in return have positive effects on world GDP through global trade.[30]

Middle East and North Africa

The Middle East and North Africa (MENA) region had been growing out of its downturn at a good speed however the popular uprisings in the region, starting with Tunisia, has stopped economic recovery on its tracks. But up until the recent uprisings, however, the MENA countries have been recovering from the global crisis at a fast pace owing much to the rising demand of oil as well as the rising prices of oil. For many MENA countries, the fiscal policy played a critical role in cushioning the impact of the global crisis and supporting the region's recovery. Countries including UAE, Egypt, Tunisia, and Saudi Arabia all implemented countercyclical fiscal policies involving infrastructure investments that successfully played out to boost domestic demand, consumption, and investment. As a result, the projected GDP growth for the MENA region is 4.5 per cent in 2010 and 4.8 per cent in 2011, though these figures are likely to change depending on how the popular uprisings are resolved in the region.[31]

The labour market conditions are particularly troubling in the MENA region to the extent that recent popular uprisings seem to be closely linked to the high unemployment situation, especially among youth. The average unemployment in the MENA region is the highest in the world, but the youth unemployment is much higher than the world average in comparison to the adult unemployment with approximately one in five youth unemployed in the labour market.[32] It is of critical importance that the MENA countries take labour market measures to relieve the problem of youth and adult unemployment in order to bring stability to the region.

C. Austerity measures

So far, this paper shows that indeed, fiscal stimulus measures have managed to cushion the fall in global economy and mitigated the employment loss. However, fiscal spending along with non-discretionary measures and direct balance sheet support to financial institutions, have led to a sizeable worsening of public finances in many countries. For the G20 countries, the general government balance is expected to deteriorate by 3.5 per cent of

[30] A fiscal stimulus to address the effects of the global financial crisis on sub-Saharan Africa, National Institute of Economic and Social Research & Overseas Development Institute. 2009. http://homepageone.s3.amazonaws.com/cms%2F20090327094226-Fiscal.pdf

[31] International Monetary Fund (IMF). 2010. *World economic and financial surveys. World economic outlook April 2010: Rebalancing growth.* Apr. 2010. (Washington, D.C.). http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/text.pdf

[32] *Global Employment Trends for Youth, ILO. 2010.* http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_elm/---trends/documents/publication/wcms_143349.pdf

GDP, on average, in 2009.[33] For the OECD countries, the deficit is projected to widen from around 1.5 per cent of GDP in 2007 to nearly 9 per cent in 2010, while the gross government debt increases from about 75 per cent of GDP to about 100 per cent.[34] Across the board countries have seen their budget deficits grow and resources diminish in wake of the financial crisis. As a result, there is increased political pressure to reduce spending and adopt consolidation measures.

As Table 1 shows, most advanced economies have adopted fiscal consolidation measures. Perhaps the most obvious measure to balance public finances is by raising taxes. For many, such as Denmark, Estonia, and Greece, this means increased excise taxes on goods such as tobacco, alcohol, and fuel. For others, such as the United Kingdom, Portugal, Latvia, and Estonia, politicians have chosen to increase VAT. Lastly, Hungary, Spain, and Latvia, for example, have also chosen to increase income taxes. Additionally, freezing or cutting programs and social benefits are frequently employed. Denmark in particular has chosen to freeze unemployment aid, student financial aid, welfare, foreign aid, as well as cut the duration of unemployment and amount of family benefits. Reductions in healthcare have also occurred, as seen in France, Italy, and Estonia. Alternatively, the United States has chosen to cut or reduce 120 programs over three years that are deemed ineffective, duplicate or wasteful in nature.

Lastly, perhaps hardest hit of all is the public sector, as it has seen cuts on several fronts. For example, Greece alone has initiated a 10% reduction in general government expenditure on salary allowances, a public sector recruitment freeze in 2010, as well as reductions in operating costs, pension fund subsidies, public sector special committees, and most drastically the number of the public bodies/entities linked to local authorities. Similar measures, for example, can be seen in France, Hungary, Ireland, Italy, Portugal, Spain, and the UK.

[33] Meeting of the Deputies, Group of Twenty
http://www.imf.org/external/np/g20/pdf/020509.pdf
[34] The Effectiveness and Scope of Fiscal Stimulus, OECD
http://www.oecd.org/document/2/0,3746,en_2649_34573_2082818_1_1_1_1,00.html

Table 1: Fiscal consolidation measures in selected countries		
	Details of consolidation measures	**Projected consolidation period**
Denmark	Freeze in several social benefits, reduction of unemployment benefits duration, introduction of ceiling on family benefits.	2010-2013
Estonia	Increase of VAT (2 pp) and excise taxes, social benefit decreases (health, pensions), operating spending cuts, (temporary) increase in second pillar pension contributions, land sales, discretionary spending cuts	2011-14
France	Cuts in public pensions, health care and public administration; raise of retirement age (from 60 years to 62 years by 2018), increase in taxes on capital, increase in top income-tax rate by 1 percentage point	2010-2013
Germany	Consolidation from additional taxes, cuts in spending on social security and labour market policies, and cuts in military and administrative expenses.	2010-2014
Greece	10% reduction in general government expenditure on salary allowances, public sector recruitment freeze, and drastic reduction in the number of the public bodies/entities linked to local authorities.	2010-2014
Hungary	Cuts to the public sector (reduction of wages, elimination of certain benefits), six-year tax for financial institutions, reduction of bureaucracy for investors, ban on foreign exchange mortgages	
Ireland	Tax increases, spending cuts (public sector wages, social welfare benefits)	2009-2010
Italy	Public sector hiring freeze and public sector wage cuts, cuts in health care spending, reduction in transfers from central to regional and local governments.	2010-2012
Latvia	Increase of VAT by 3pp, introduction of capital income tax, increase of personal income flat tax rate by 3pp.	2009-10
Portugal	Reduction in public sector pay and hiring, Increase of VAT and taxes on high income earners	2010-2013
Romania	25% reduction in public sector wages, 15% reduction in pensions and unemployment benefits	
Spain	Cut in public sector's jobs and pay, introduction of new income tax, cuts in public pension.	2010-2013
United Kingdom	Abolishment of the child trust fund and cut of employment programmes; civil service recruitment freeze; increase in VAT by 2.5%.	2010
United States	Freeze of non-security discretionary funding for 3 years by cutting/reducing 120 programs that are ineffective, public sector pay freeze.	start 2011

Source: World of Work Report, 2010.

Conclusion

Weak labour market persists in many developed countries, casting doubts regarding the effectiveness of stimulus measures. The overall fiscal stimulus of the G-20 countries is estimated to have saved between 7 and 11 million jobs, representing 29-43 per cent of the

G20s total unemployment in the first half of 2009.[35] Even in the US where the relatively large fiscal stimulus had been implemented, the multiyear $787 billion stimulus program passed by the US Congress in 2009 is estimated to boosted employment by 2.5 million to 3.6 million jobs, relatively disappointing figures in comparison to 7 million jobs that have been lost and 8.8 million involuntary part-time workers resulted since the start of the crisis. In the other OECD countries that emerged from the recession at the end of 2009, unemployment had peaked in Australia, Japan, Korea, Mexico, and Poland, while the remaining OECD countries experiencing continuously rising levels of unemployment. The duration of unemployment has also worsened worldwide. In the US, 41.2 per cent of residents had been unemployed for over 6 months in January 2010, up from 22.4 per cent a year before. In Spain, the same figure was 29.3 per cent at the fourth quarter of 2009, up from 19.4 per cent a year before. Therefore, currently one major concern around the problem of unemployment in advanced economies is that temporary joblessness might turn into long-term unemployment.

However, because of rising government deficits and sky-rocketing public debt, several governments have embarked on fiscal austerity measures to rein in public spending and get the public finances in order. Cutting or reducing certain programmes, while improving fiscal balances in the short run, could undermine the fragile recovery underway. In fact, spending on labour market programmes can help job seekers to find new employment opportunities more rapidly, while at the same time sustaining disposable income and demand – which can help fiscal balances in the long run.

[35] United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2010. *Economic and social survey of Asia and the Pacific 2010*: *Sustaining recovery and dynamism for inclusive development.*(Thailand: UN Office). pp. 29-30.

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Appendix

Table A: Sample of studies on the effectiveness of stimulus measures

Author(s)	Country/Time Coverage	Assessment	Main Findings
Verick and Islam (2010)	60 countries (2008-2009)	Positive	Fiscal stimuli have proven more effective in creating jobs when they focus on capital expenditures for employment-intensive infrastructure and labour market measures. The US in 2009 enacted ARRA to restore employment mostly through tax cuts with a goal to create 3.5 million jobs by Q4 2010. By Q3 2009, 300,000-1.5 million jobs were made; 8.4 million jobs were lost since 2007.
van Doorn, Suri, and Gooptu (2010)	20 countries (1995-2010)	Mixed	A nation's original fiscal stance determines how it can respond during a crisis. Hungary, for example, now has greater foreign exchange risks because its external debt surpassed its domestic debt prior to the crisis. Brazil, India, and Egypt have less risky exchange rates by accumulating more domestic debt than external debt before the economic downturn hit.
UNESCAP (2010)	37 countries (1990s – 2009)	Positive	Between 7 and 11 million jobs were saved due to the G20's 2009 fiscal policies, representing 29-43 per cent of the G20's total unemployment in the first half of 2009. In comparison, the Asian region's policies were successful overall in offsetting the loss of exports and kept regional 2009 GDP dropping at 4.2 per cent instead of 7.8 per cent, a possible outcome had the fiscal policies not been enacted.
IMF (2010a)	186 countries (1970-2010)	Mixed	Fiscal stimuli have provided an essential impetus for recovery in developed and developing countries alike. Following a decline of 0.5 per cent in 2009, the world output is projected to increase by 4.25 per cent in 2010. However, growth and recovery in the job market have varied across countries of different socio-economic levels, even with similar fiscal responses.
Arpaia and Curci (2010)	27 EU countries (1980s-2009)	Positive	During the crisis, many EU countries implemented reforms to combat the discouraged worker effect and keep workers in the labour market, such as decreasing the average hours worked per week. This made the early reduction in economic activity less drastic than originally projected.
EEAG (2010)	27 countries (1990s-2009)	Mixed	The EU's stimulus measures succeeded in curbing deflation and preventing a second great depression. For example, Germany, the EU's largest economy, started to see its levels of investment and domestic demand recover by the end of Q2 2009; however, consumption and GDP began to drop after an initial increase brought about by fiscal stimulus measures.
ILO (2010a)	EU (2006-2009)	Mixed	As a result of the European Globalization Adjustment Fund (EGAF) component of the European Economic Recovery Plan (EERP), 25,000 people received support in the form of skills training, job and career search help, promotion of entrepreneurship, and training for self-employment. This allowed many EU citizens to find jobs after losing work due to outsourcing.
Wyplosz (2010)	Eurozone – 16 countries (1996-2009)	Negative	Fiscal policies played a small role in Eurozone's recovery, due to the pre-existing Stability and Growth Pact and 3 per cent public deficit ceiling limiting their use. Budget balances as a percentage of GDP were less in France, Germany, and Italy compared to the UK and US, implying that less government funds went towards fiscal stimuli in the former three countries than the latter two.

Kandil and Morsy (2010)	34 emerging countries (1970-2009)	Positive	The presence of international reserves allowed emerging economies to be in a good position to weather the economic crisis and have their stimulus measures succeed, while at the same time avoiding a crowding-out effect. For example, China and Brazil have managed to weather the crisis well due to a rapid increase in export prices, robust demand, and constant capital inflows.
World Bank (2010a)	14 emerging countries (Mid-1980s-2009)	Positive	Due to China's economic activity, its monetary and fiscal stimuli, and its inflow of foreign capital, the East Asia and the Pacific region overall has recovered from the crisis and had its employment, exports, and output return to pre-crisis levels. The region is doing so well that many national governments are beginning to end support policies.
ADB (2010)	32 countries (1990s-2010)	Positive	Asia, the first region to recover from the global financial crisis, experienced a strong and fast V-shaped recovery due to large monetary and fiscal stimulus packages. These heavily increased the demand for goods and services and promoted growth, which is projected to reach 7.5 per cent in 2010, which is up from 5.2 per cent in 2009.
Bhaskaran and Ghosh (2010)	3 countries (1981-2009)	Mixed	Indonesia, the Philippines, and Thailand were resilient during the global recession thanks to timely stimulus measures. For example, starting in 2008 Indonesia injected RP 1 trillion into its economy, which successfully increased liquidity and prevented a dramatic depreciation of its currency.
IDB (2010a)	4 Latin American countries (Q2:2008-Q1:2009)	Positive	Decreased economic activity, employment, tax rates, and export prices brought about due to the downturn ended Latin America's period of expansion that began in 2002-03 and thus decreased its fiscal surplus. MERCUSOR was still able to respond by implementing measures that showed positive impacts, such as increased government spending, tax cuts, and infrastructure investment.
IMF (2010b)	North and South America – 28 countries (1970s-2010)	Mixed	The North American and Latin American regions experienced different outcomes due to their fiscal stimuli. The recoveries in the US and Canada are propelled by fiscal stimuli, giving the former a 5.6 per cent GDP increase by Q4 2009 and the latter resilient fiscal credibility, increased demand, and 3 per cent growth in 2010. In most of Latin America, government fiscal stimuli had small multipliers that did not contribute much to growth.
Kucera, Roncolato, and Uexkull (2010)	India and South Africa (1960-2010)	Negative	Fiscal stimuli did not contribute much to GDP or job growth in India or South Africa. India's employment growth rate was 1.7 per cent in Q4 2009 but only 0.2 per cent in Q1 2010. South Africa experienced 3 negative quarters of growth in 2009 and observed positive growth in Q4 2009 (0.7 per cent), but growth decreased again in Q1 2010 (-1.3 per cent). Employment in South Africa declined by 770,000, 833,000, and 870,000 in Q3 2009, Q4 2009, and Q1 2010 respectively.
Kasekende, Brixova and Ndikumana (2010)	56 African countries (Mid-1980s – 2009)	Mixed	Most of Africa had favourable pre-crisis macroeconomic standings. Thus, much of the region was able to deliver well-timed, domestic demand and supply-side focused counter-cyclical stimuli that promoted a better business environment. However, due to their lack of resources, they should look internationally for support to coordinate and establish a long-term mutually-beneficial outcome.

Ndikumana, Kamara, Couchane and Mafusire (2010)	41 countries (1986-2009)	Positive	Even with short supply of national resources, African nations enacted a variety of well-timed and targeted policies. Some nations were successful in stimulating domestic demand while offsetting declining exports and supporting local businesses.
World Bank (2010b)	18 countries (1980-2010)	Positive	Most Middle Eastern nations improved their near and long-term outlooks. Others, such as Egypt and Tunisia, spent stimulus money on infrastructure and support for SMEs to create new jobs. Unlike the public sector, the private sector has received less support and it is uncertain whether this sector will continue to recover when Saudi Arabia's 400 billion dollar stimulus package expires in 5 years.
ILO (2010b)	Germany (2006-2009)	Positive	Germany's labour market-targeted measures left favourable impacts on employment. Germany's *Kurzarbeit* reduced working hour program had 1.43 million participants by mid 2009. Working time reduced on average by 30.5 per cent, which counted for 432,000 fulltime jobs. If these job losses had occurred, Germany's unemployment rate would have risen by 1 percentage point.
IMF (2010c)	Germany (mid-1970s-2010)	Mixed	The economic downturn was contained in Germany by the government's automatic stabilizers and fiscal stimulus. Additionally, Germany's extensive labour market programmes, such as the *Kurzarbeit* short-term subsidy programme, which compensated employers for retaining workers during the crisis, successfully encouraged many employers to refrain from layoffs.
ILO (2010c)	Russia (1992-2010)	Negative	Despite the rapid pace at which stimulus packages were adopted, hiring has yet to catch up. In September 2009, Russian public employment services have placed 61,300 out of 328,300 employees in public sector jobs, a 50 per cent increase from 2009 target. However, the ratio of unemployed to 100 labour market vacancies stands at 212.
Park and Lommen (2010)	China (2008-2010)	Mixed	China's timely and effective fiscal stimuli allowed it to experience a stronger and faster V-shaped recovery than expected. However, pressing national issues remain for China to solve in the medium-run, such as aging population, lack of domestic growth, absence of effective social protection, inflexible exchange rates, and unbalanced growth sources, all of which need stimuli.
Yongding (2009)	China (1978-2008)	Mixed	In 2008, the Chinese government issued a RMB 4 trillion stimulus package and RMB 200 billion worth of local government bonds. While succeeding in reviving and stabilizing the economy and keeping growth positive, these actions have not insured China against long-term consequences, such as investment overdrive, decreased efficiency, and slow infrastructure investment.
Zhu and Orton (2010)	China (2003-2010)	Positive	Chinese fiscal policy responses were effective in curbing the negative impacts of the global financial crisis. The GDP growth maintained high during the crisis, reaching levels of 9 per cent in 2008, 8.7 per cent in 2009, and 8 per cent in 2010. On the labour side, 97 per cent of 150.7 million migrant workers from rural China found jobs in urban areas.
Shimizu and Orton (2010)	Japan (1985-2010)	Positive	Japan implemented effective labour market stimuli. Japan's crisis response employment measures created 90,000 new local government jobs and granted 2.34 million workers wage subsidies by July 2009. Furthermore, 2.55 million temporary Japanese workers were covered under the unemployment insurance by April 2010.

ILO (2010d)	Republic of Korea (2006-2009)	Mixed	Korea's stimulus helped retain jobs and allowed new labour market entrants to find employment. It raised SME subsidies from 2/3 to 3/4 of wages and gave large enterprises a subsidy increase from 1/2 to 2/3 of wages. 30 per cent of workplaces with 100 or more employees participated, which saved at least 90,000 jobs. Internship programmes at public institutions and SMEs gave employment to 90,000 young Koreans, 80 per cent of whom went on to work fulltime.
OECD (2010)	Korea (1996-2010)	Positive	Korea's fiscal stimulus package from 2009 greatly increased national consumption and decreased unemployment levels. By the end of 2009, this measure created at least 300,000 jobs in the public sector.
ACTU (2009)	Australia (2008-2009)	Mixed	Australia's fiscal labour market measures had mixed results on employment. Its fiscal stimulus package was successful in decreasing national unemployment down to 5.7 per cent by late 2009. However, over 140,000 job-seeking Australians remain out of work. Therefore, the economic stimulus and infrastructure investment should not end.
Commonwealth of Australia (2009)	Australia (1980s-2009)	Positive	By the end of Q2 2009, the Australian stimulus package had succeeded in stabilizing the national market and minimizing the rise in unemployment. The unemployment rate was 5.8%, 1.9 points higher than in Feb 2008. However, without the stimulus, the Treasury estimated that an additional 210,000 jobs would have be lost.
ILO (2010e)	Australia (2007-2010)	Positive	Australia's fiscal stimulus measures increased national growth levels and strengthened the labour market. It increased GDP by 1 per cent between 2008 and 2009 and unemployment declined by 0.5 per cent from a high level in July 2009 (5.8%) to a lower mark in February 2010 (5.3%), as a result of the stimulus.
ILO (2010f)	Indonesia (2006-2010)	Positive	Of the IDR 12.2 trillion infrastructure package, IDR 6.6 trillion went to the Department of Public Works for the creation of water systems, sanitation systems, and roads. IDR 1.5 trillion devoted to water systems alone was responsible for creating 250,000 jobs in 2009.
ILO (2010g)	Argentina (1996-2009)	Positive	Argentina's measure to reduce tax credits for capital goods, infrastructure firms, and SMEs in an effort to temporarily reduce their tax and social security burden succeeded in retaining 330,547 employees of those 169,000 employers that registered for the programme.
Zandi (2010)	United States (2008-2009)	Positive	The ARRA has dampened the negative impact of the recession on GDP and employment. The most economic activity per federal dollar spent has come from the extension of unemployment insurance benefits and social programmes like food stamps and work-share. Infrastructure spending is another measure generating higher economic activity.
Taylor (2009)	United States (2006-2008)	Negative	The US government's early response to the 2007 crisis worsened the situation by focusing on liquidity and bank credit market problems rather than risk, providing no help to other than banks and creditors. Measures such as term auction facilities, cash infusions, and interest rate cuts failed to substantially increase consumption, but it increased dollar inflation and raised oil prices.
Burtless (2010)	United States (2007-2010)	Mixed	The ARRA was successful in allowing most state governments to maintain pre-crisis levels of employment in government and educational institutions, in spite of the massive decrease in tax revenue. This did come at the cost of decreased wages and working hours though. The bill also gave a 9 month subsidy for the unemployed that covered 65 per cent of former employers' healthcare.

US Government (2010)	United States (1940s – 2009)	Mixed	Due to US stimulus packages, the decline in national GDP slowed from -6.4 per cent in Q1 2009 to -0.7 per cent in Q2 2009, and then turned around to 2.2 and 5.7 per cent in the last two quarters of 2009. The rate of job losses also has been reduced substantially, from a high of 691,000 in Q1 2009 to a low of only 69,000 in Q4 2009.
Executive Office of the President and Council of Economic Advisors (2010)	United States (2007-2009)	Positive	The ARRA was able to slow down the rate of job and output loss while also returning GDP to positive levels. In Q2 2009, 2-3 per cent was added to GDP, and in Q4 2009, 1.5-3 per cent was added to GDP. Employment significantly increased under the ARRA, specifically between 1.5-2 million jobs by the end of 2009.
Joint Economic Committee – US Congress (2010)	United States (1950s-2010)	Mixed	By Q1 2010, the ARRA increased GDP by 1.7 to 4.2 per cent and decreased the national unemployment rate by 0.7 to 1.5 percentage points. This resulted in the creation of 1.2-2.8 million jobs since the ARRA was enacted a year prior.
Mishel and Shierholz (2010)	United States (2007-2010)	Positive	Unemployment insurance should not be reduced, as it both creates jobs and aids those without one. The unemployment insurance measures in the ARRA retained 1.7 million current jobs and created 1.2 million new jobs by July 2010.
Weller (2010)	United States (1950s-2010)	Mixed	The ARRA allowed the private sector to start recovering prior losses in investment, production, and hiring. The US in Q2 2010 experienced a 2.4 per cent growth rate and gained 630,000 new private sector jobs during the first 7 months of 2010. However, unemployment remains high and 7.7 million jobs remain lost since 2007.
Flaherty (2010)	Canada (2000-2010)	Positive	As a result of Canada's stimulus package, in 2009 both aggregate employment and GDP levels increased. Since its inception in July 2009, the Canada Action Plan has created 135,000 jobs out of its target of 225,000. The GDP increased by 0.9 per cent in Q3 of 2009 and by 5 per cent in Q4 of 2009. Canada also experienced the smallest decline in GDP out of all G7 nations, since the crisis began.
ILO (2010g)	Canada (2007-2010)	Positive	The earnings protection and work sharing components of Canada's Action Plan were successful in saving many Canadian jobs during the crisis. In 2009, 13,500 workers received C$3,323 in financial assistance for unpaid wages due to company closures and termination. Also in 2009, 6,000 work sharing agreements were signed by Canadian employees, securing the employment of 167,410.
ADB (2010)	Asia (4 G20 members and 10 other developing countries)	Positive	The countries in developing Asia rolled out the stimulus measures quickly and decisively in general, proactively using fiscal policy for countercyclical purposes during the global crisis. The stimulus packages are tilted toward higher spending, in particular infrastructure investments, consistent with the region's long-standing pro-growth orientation. Partly helped by the healthy public finances situation in the initial stage, evidences suggest that the stimulus efforts to boost sagging demand have been effective and contributed to the region's remarkable recovery.
The Brookings Institution (2009)	G-20 Countries (2008-2009)	Positive	The article finds that fiscal stimulus played a crucial role in stabilizing the world economy, looking into G-20 economies that make up a large portion of the world economy. It suggests that while legitimate questions regarding the effectiveness of fiscal stimulus exist, the world economy would have been even worse had there not been stimulus packages.

NBER (2010)	44 Countries (22 high-income + 24 developing) (Quarterly dataset of government expenditure between Q1 of 1960 and Q4 of 2007)	Mixed	Using the panel SVAR methods, the research finds that the effect of government consumption is very small on impact, with estimates clustered close to zero. It supports the notion that fiscal policy may be rather slow in impacting economic activity, raising questions as to the usefulness of discretionary fiscal policy for short-run stabilization purposes. The medium- to long-run effects of increases in government consumption vary considerably depending on the level of development, exchange rate flexibility, openness to trade, and debt of the central government.
OECD Economic Outlook, Interim Report (2009)	34 OECD Countries (2008-2010)	Mixed	The report verifies the use of fiscal stimulus in virtually all OECD countries. As for the effectiveness of fiscal stimulus, the report suggests after its own review of relevant literatures that the fiscal multipliers are around unity for government spending and about half that for tax measures under normal circumstances. The report further suggests that the multipliers may be reduced in the current conjuncture because the propensity of households and businesses to save is likely to be increased, thus reducing multipliers, tax cuts in particular.
OECD Economic Outlook, Volume 2010 Issue 1 (2010)	34 OECD Countries (2008-2010)	Mixed	Noting that most OECD countries introduced fiscal packages during the recent crisis, the report recognizes the potentially important role of discretionary fiscal policy during a large and protracted shock. At the same time, the report warns that implementing fiscal stimulus may be slow and may result in a pro-cyclical rather than counter-cyclical. Looking at past experience, estimates of discretionary fiscal policy show pronounced counter-cyclicality only in some countries (Australia, Canada, Denmark, and the US) while policy has been generally pro-cyclical in Austria, Belgium, Hungary, the Netherlands, Poland, Portugal, and the UK. The report also notes that fiscal policy was poorly prepared to deal with the crisis this time around because many countries were in a financially constrained condition prior to the outbreak of the crisis.
Kandil M; Morsy H.	34 Emerging Countries	Mixed	The paper suggests that the evidence shows the frequent existence of a pro-cyclical fiscal impulse with the fiscal stimulus, but it also suggests that the scope for countercyclical policy increases with an increase in the availability of international reserves. In some cases, contractionary fiscal policy could stimulate growth in the short run, if fiscal tightness lowers the cost of borrowing and debt service, and mitigates concerns about debt sustainability. On the other hand, high inflation increases concerns about the impact of fiscal spending on inflationary expectations and the cost of borrowing, countering the effectiveness of the fiscal stimulus on output growth in the short run.
Barrell R.; Holland, D.; Willem te Velde D.	Sub-Saharan Africa & Africa (45 Countries)	Positive	The research suggests that fiscal stimulus packages worth close to US$2 trillion implemented in the developed countries have helped to smooth income losses in the Sub-Saharan Africa in 2009-2010 by offsetting about a quarter of losses due to the financial crisis. It suggests that further stimulus by developed countries – either directly or indirectly injected into the SSA economies – would have positive impact on the SSA economy.

Table B1: Measures aimed at stimulating labour demand

	Additional spending on infrastructure	Increase in public employment	Incentives/subsidies to hire	Access to credit for SMEs	Subsidies and tax reductions for SMEs
Africa and the Middle East					
Bahrain	X			X	
Egypt	X	X			
Jordan	X	X	X	X	
Kenya	X	X			
Saudi Arabia	X				X
South Africa	X	X	X		
Tanzania	X			X	
Turkey				X	X
Americas					
Argentina	X		X	X	X
Bahamas	X	X			
Barbados			X	X	
Belize	X			X	
Bolivia	X			X	
Brazil	X			X	
Canada	X	X		X	X
Chile	X	X	X		
Colombia	X			X	X
Costa Rica	X			X	X
Dominica		X			X
Dominican Republic	X			X	
Ecuador	X				
El Salvador		X			X
Grenada		X		X	
Guatemala	X				
Honduras	X			X	X
Jamaica				X	X
Mexico	X	X	X		X
Nicaragua	X				
Paraguay	X	X		X	
Peru	X			X	X
Saint Lucia	X	X			
United States	X	X		X	
Uruguay			X	X	X

Asia					
China	X		X	X	X
India	X				
Indonesia	X			X	
Japan	X	X	X	X	X
Korea	X	X	X	X	
Malaysia	X	X	X		
Nepal	X				
Pakistan	X	X		X	
Philippines	X	X		X	
Thailand	X	X		X	X

Table B2: Supporting jobseekers and unemployed

	Additional training measures	New employment measures for migrant workers	Working time reductions	Partial unemployment with training and part-time work	Wage reductions	Extension of unemployment benefits	Sector Specific packages or measures
Africa and the Middle East							
Bahrain	X	X				X	
Egypt							X
Jordan	X						X
Saudi Arabia	X						X
South Africa	x						X
Tanzania							
Turkey	X		X	X		X	
Americas							
Antigua and Barbuda						X	X
Argentina	X		X	X	X	X	X
Bahamas	X					X	
Barbados						X	X
Brazil			X	X	X	X	
Canada	X			X		X	X
Chile	X			X		X	
Costa Rica	X		X				X
Ecuador		X					
Guyana							X
Jamaica	X		X		X		
Mexico						X	X
Nicaragua	X						
Peru							X
Saint Kitts and Nevis						X	
Saint Vincent and the Grenadines						X	
United States	X		X			X	X
Uruguay				X			
Asia							
Cambodia		X				X	
China	X	X					
India	X	X	X			X	
Indonesia	X						X
Japan	X	X		X		X	
Korea, Rep. of	X				X	X	
Malaysia	X						X
Pakistan	X						X
Philippines	X	X	X				X
Thailand	X					X	

Table B3: Expanding social protection and food security

	Income tax reductions	Increased access to health benefits	Changes in old-age pensions	Changes to minimum wages	New protection measures for migrant workers	State aid to buy and rent housing	Additional assistance for families with small children	Introduction or increase of food subsidies
Africa and the Middle East								
Bahrain					X			X
Egypt		X	X		X	X		X
Jordan		X	X	X	X			X
Kenya				X				X
Saudi Arabia								X
South Africa	X	X	X			X	X	X
Tanzania								X
Turkey								
Americas								
Antigua and Barbuda			X					X
Argentina		X	X				X	X
Barbados		X			X			X
Belize		X						
Bolivia				X			X	
Brazil	X			X	X	X		
Canada	X					X		
Chile						X		
Colombia	X			X		X		
Costa Rica						X		X
Dominica		X		X				
Dominican Republic		X		X		X		X
El Salvador		X				X	X	X
Grenada							X	X
Guatemala				X				
Honduras	X	X		X		X		X
Jamaica		X		X				X
Mexico				X		X		X
Nicaragua								X
Panama	X							
Paraguay						X		
Peru						X		
Saint Kitts and Nevis				X				
Saint Lucia								X
Saint Vincent and the			X					X

Grenadines								
United States		X				X	X	X
Uruguay						X		
Venezuala				X				
Asia								
Cambodia			X					
China		X	X			X		
India		X	X		X			X
Indonesia	X		X			X		X
Japan		X			X	X	X	
Korea, Rep. of							X	
Malaysia						X		X
Nepal				X	X			
Pakistan		X	X	X	X	X	X	X
Philippines	X	X					X	X
Thailand					X		X	

Table B4: Social dialogue and rights at work

	Consultation on crisis response	Agreements at national level	Agreements at sectoral level	Changes in labour legislation	Increased capacity of labour inspection
Africa and the Middle East					
Bahrain			X	X	X
Egypt				X	
Jordan	X			X	X
Kenya		X			
Saudi Arabia		X			
South Africa	X	X	X		X
Tanzania	X				
Americas					
Antigua and Barbuda	X				
Argentina		X	X	X	
Bahamas				X	
Barbados	X	X			
Belize				X	
Bermuda			X		
Brazil			X		X
Canada		X			
Costa Rica				X	
El Salvador		X			
Guyana	X				
Jamaica			X		
United States			X		
Asia					
Cambodia	X		X		
India	X	X	X	X	X
Japan		X	X	X	
Pakistan	X	X	X	X	X
Philippines		X	X		
Thailand	X	X			X

Table B5: Youth employment measures in response to the crisis

	Labour Market Training	Employment services	Employment Subsidies	Entrenpeneurship Promotion
Argentina	X			
Australia	X		X	
Belize				X
Canada		X		
Chile			X	
China		X		
Colombia	X			
Costa Rica	X			X
Czech Republic		X		
Dominican Republic				X
Egypt	X	X		
El Slavador	X			
France	X	X	X	
Grenada	X			
Hungary	X		X	
India	X			
Italy				X
Japan		X	X	
Jordan	X	X		
Kenya		X		X
Korea	X	X		
Malaysia	X			
Nepal	X			
Netherlands	X	X		
Nicaragua	X	X		
Pakistan	X	X		X
Phillipines	X	X	X	
Poland			X	
South Africa		X		
Suadi Arabia	X			
Ukraine		X		
United Kingdom	X	X	X	
United States	X	X	X	