

United Nations Department of Economic and Social Affairs

Report on the Project LINK Meeting

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1. Introduction and opening of the meeting

The Fall 2012 Project LINK Meeting was held from October 22-24 2012 in New York, hosted by the United Nations and the University of Toronto. It opened with a joint session of the Second Committee and the Economic and Social Council. Around 90 participants from 40 countries attended the remaining sessions. The agenda comprised the following main themes: the global and regional economic outlook; the way forward after the global financial crisis and the global debt crisis as well as the outlook for commodity markets and international trade, macroeconomic challenges for the global economy and policy alternatives, and global modelling issues. This document summarizes the presentations and discussions.

The LINK Global Economic Outlook prepared for this meeting by the Global Economic Monitoring Unit of DPAD-DESA, the LINK country reports prepared by country participants, and most of the documents presented at the meeting are available on the United Nations website (http://www.un.org/esa/policy/) and the Project LINK Research Centre website at the Institute for Policy Analysis at the University of Toronto (http://www.chass.utoronto.ca/link/).

Mr. Peter Pauly, University of Toronto, welcomed the participants, expressing his thanks to DESA and his colleagues at the University of Toronto for helping to arrange the meeting.

Mr. Rob Vos, United Nations Department of Economic and Social Affairs (UN-DESA), also welcomed the participants highlighting that although improvements in global economic conditions occurred in the first half of 2012, the coming year will present some serious challenges and risks for the recovery of the global economy.

2. Joint session of the Second Committee and the Economic and Social Council: global economic outlook

H.E. Mr. George Talbot (Guyana), Chair of the Second Committee welcomed the participants of the meeting and pointed out that global economic growth continued to be slow as many weaknesses remained. Developed countries have still not recovered from the global financial crisis in 2008/09 and developing countries have seen a sharp slowdown in growth in the course of 2012.

H.E. Mr. Luis-Alfonso de Alba (Mexico), Vice-President of the Economic and Social Council also welcomed the participants of the meeting.

Mr. Rob Vos, United Nations Department of Economic and Social Affairs (UN-DESA) presented the global economic forecast of UN-DESA/LINK, the major downside risks and uncertainties and a set of policy recommendations aimed at getting the world economy back on track.

Mr. Vos noted that four years after the eruption of the global financial crisis, the world economy remains in a precarious situation. At the root of the global woes are weaknesses in major developed economies, many of which have been dragged into a

vicious cycle of increased sovereign risks, continued banking fragility, fiscal tightening, slow growth and rising unemployment. Mr. Vos then illustrated the ongoing jobs crisis in developed economies. In the euro area, the unemployment rate rose to a record high in 2012 as the situation in the debt-ridden economies deteriorated further. In the United States, the unemployment rate remained above 8 per cent for the most part of 2012, the participation rate dropped to a new low and the share of long-term unemployment reached a historical high of about 40 per cent. According to projections by the International Labour Organization (ILO), a full recovery of employment levels is still far away.

Mr. Vos then noted that the weakness in developed economies had spilled over to developing countries in the course of 2012 through lower demand for exports and more volatile capital flows and commodity prices. Growth of world trade slowed markedly over the past year, mainly as a result of weaker demand in Europe as the region fell back into recession. Global financial conditions remained fragile amid ongoing concerns over the prospects for the U.S. and European economies. Many large developing countries, including Brazil, China and India, also experienced homegrown problems which contributed to the significant slowdown of the past year.

According to the UN baseline forecast, growth of world gross product (WGP) is projected at 2.2 per cent in 2012, down from 2.7 per cent in 2011. A gradual recovery to 2.4 per cent in 2013 and 3.2 per cent in 2014 is expected. In many economies, growth will remain well below potential and employment will not fully recover during the forecast period. As in previous years, developing countries will be the main driver of global growth. However, for many developing countries, the recent slowdown implies a much slower pace of poverty reduction and less fiscal space to speed up progress towards the Millennium Development Goals.

Mr. Vos pointed out that the world economy was facing several major downside risks, including an escalation of the euro area crisis, the fiscal cliff in the United States and a hard landing of major developing economies, notably China. In a pessimistic scenario, where these downside risks materialize, the global economy would likely fall back into recession. Also, although global imbalances have narrowed in recent years, they remain sizeable. Moreover, the decline primarily reflects a slowdown in demand in some major deficit countries, rather than a true global rebalancing.

Mr. Vos concluded his presentation by laying out a set of policy recommendations aimed at restoring strong, sustainable and balanced growth. He emphasized that a fundamental policy shift is required to get the world economy back on track, identifying four major areas of reform. First, short-term fiscal policy stances should be changed to provide additional and internationally coordinated stimulus. Second, macroeconomic policies should be reoriented to strengthen the impact on employment and promote structural change for sustainable growth. Third, global financial instability should be attacked at its roots. This requires greater synergies between monetary and fiscal stimulus and faster, more comprehensive regulatory reform of the financial sector. And fourth, sufficient resources should be made available to developing countries, especially those possessing limited fiscal space and facing large development needs.

Mr. Peter Pauly, University of Toronto, provided a general discussion of the Global Economic Outlook presented by Mr. Vos. Overall, Mr. Pauly agreed with the

aggregate picture and the main messages presented in the UN report. At the same time, Mr. Pauly identified a number of global issues that emerged from the crisis. He pointed out that the current global economic situation was not only characterized by a significant output gap, but also by a significant deleveraging process of the private sector. Indeed, global growth has been below potential for several years, creating serious doubts whether this was a long-term problem at the global level. The current situation also confirms that economic recoveries from financial crises are longer, more volatile and involve permanent problems that are not easy to tackle using traditional economic policies. Additionally, Mr. Pauly stressed that the emerging countries slowdown could be mainly attributed to spillover effects from developed countries. He then discussed the major risks of the current economic situation, which are stemming from different sources. On the one hand, political processes tend to take time and negotiations involve many factors that are difficult to assess. On the other hand, the global economy is in a fundamentally slow growth period, characterized by several structural issues.

Mr. Andrew Burns, World Bank, also expressed his general agreement with the main messages presented in the Global Economic Outlook. More specifically, Mr. Burns discussed the current global economic situation emphasizing two main ideas: the role of expectations and the differences between developed and developing countries. On the first issue, Mr. Burns stated that expectations had improved in the European Union since the ECB announced potentially unlimited purchases of bonds issued by euro area members, so-called Outright Monetary Transactions. Furthermore, Mr. Burns expressed general optimism regarding the E.U. prospects. For example, he pointed out that yields had been less volatile than in 2009 and that capital inflows to developing countries had increased in recent months. On the differences between developed and developing countries, Mr. Burns emphasized that current output gap patterns were not the same. This suggests that demand side policies in developing countries were less likely to generate positive economic effects. Moreover, Mr. Burns discussed supply side policies, emphasizing the potential role of structural change in developing economies. Finally, concerning the different risks for the global economic prospects, Mr. Burns stated that economic policies should carefully address priority areas. For example, many developing countries had much higher fiscal space in 2007 than in the current situation. Thus, developing countries should increase their efforts to rebuild fiscal space in the currently relatively calm conditions.

Mr. Moazam Mahmood, International Labour Organization, focused on the employment situation, which he described as the most serious problem of the strong economic adjustments at the global level in recent years. In particular, Mr. Mahmood strongly emphasized that global employment continued to be in bad shape and had not recovered to the pre-crisis level. Moreover, he pointed out that in the euro area, given the weak demand and the lack of exchange rate adjustments, most of the financial turmoil costs were absorbed by labour. He also noted that the level of investment by firms and bank lending were low, showing that bank crises tend to last a long time. As a result, Mr. Mahmood remarked that austerity plans should not be implemented in the current challenging environment and the policy focus should move decisively towards employment creation.

Discussion:

In the subsequent discussion, the first issue raised was the role of uncertainty and the limits of monetary policy in this context. Mr. Vos emphasized the difficulty to break out of the current cycle of uncertainty and weak conditions in the real economy. The recent experience in the euro area shows that austerity policies are self-defeating and that the main policy objective should be to promote job creation and restart growth. In this context, the new G20 focus on jobs and growth is a step into the right direction. However, the existing plans do not explain how job creation could be enhanced.

Responding to a question on spillover effects from economic issues and policies in developed countries on emerging economies, Mr. Vos noted that volatility of capital flows and commodity prices had increased in connection with the quantitative easing measures undertaken in developed economies. The slowdown in many developing economies has led to slower progress in reducing poverty and achieving the Millennium Development Goals (MDGs). These challenges can only be resolved by increased cooperation and coordination between developed and developing countries. In addition, he pointed out that the adverse external conditions pushed developing country's to increase the level of international reserves. While these reserves provide a buffer against shocks, they limit the availability of resources for productive investment. Mr. Vos also highlighted the importance of exchange rate stability for structural growth policies.

Mr. Mahmood responded to the question on global employment challenges by highlighting the fact that both the quantity and the quality of jobs had deteriorated. This applies specifically to the situation of women and young people in the countries most affected by the crisis. To improve the labour market situation, a large jump in investment is required.

Mr. Burns stressed the importance of confidence as a critical factor for a sustained recovery. He noted that the situation in the euro area remained weak. In the United States, the level of confidence was still relatively high, although risks had increased in recent months owing to fiscal uncertainties and sluggish growth. In developing countries, by contrast, firms and households were in much better shape and potential growth remained high. Importantly, the outlook for Sub-Saharan Africa, excluding South Africa, is relatively favourable.

3. World economic outlook

Mr. Andrew Burns, World Bank, said that confidence in an economic recovery deteriorated after the turmoil in May/June 2012, lowering growth prospects by about -0.2 per cent for 2012 and 2013.

Fortunately confidence improved since the enactment of recent policies and financial market jitters eased significantly. In developing countries median corporate default swap (CDS) rates were less than those in the euro area. As sentiments improve, capital flows and bank lending to developing countries both increased.

On the real side, developing country industrial production increased, but remained lower than before the crisis. In high income countries, the euro area was stabilizing, the U.S. improving, but Japan deteriorating. Recent Purchasing Manager Indices

(PMIs) pointed to continuing weak activity, but the historical relationship between PMI and industrial production remains broken.

Lending in the euro area declined in October 2011 due to the introduction of mark-to-market accounting rules, which exacerbated deleveraging. Since the trough reached in February 2012, deleveraging eased slightly. Euro area lending to developing countries has declined too and it remains uncertain whether this decline is over yet. However, capital flows to developing countries are expected to increase to 4 per cent, compared to 8 per cent prior to the crisis.

Growth in developing countries is expected to remain at about 5 per cent, below potential growth. It remains an open question whether potential growth has decreased as a consequence of the global financial crisis. Is potential growth for developing countries still at 8 per cent or has it decreased to 6-6.5 per cent in the wake of the crisis? This remains an open question.

Inflation is slightly on the rise in some developing countries. In this context, the appropriate policy stance depends on the state of the cycle in each particular country. In developing countries where the output gap is zero and policy buffers have decreased, governments should not stimulate demand but rather reduce fiscal deficit to GDP ratio and rebuild buffers for future countercyclical policies.

Therefore, the outlook is cautiously optimistic, but three significant risks remain. First, the impact of the fiscal cliff on the U.S. economy would result in a 2 per cent drop in GDP in 2013. This could affect developing countries through the trade channel and cut their GDP by 0.5 per cent, but financial market contagion could make this effect three times larger. Second, a euro area crisis, where four economies are locked out of financial markets, would have a larger impact with risk premia up everywhere, and could results in a 4 per cent loss in GDP in developing countries. Finally, continued food price rises could fuel inflation. There have been huge price increases for grains since 2005. The price of maize in particular rose as a consequence of the demand for biofuels and the stock/use ratio is very low. Stocks have built up somewhat for wheat and rice, but are still low too. Agricultural markets are relatively closed as only 7 per cent of wheat and rice production are traded internationally, but pass through effect of rising international prices could soon be reflected in local prices.

In concluding, the May-June euro area pessimism has had larger than expected real-side effects and the global economy is much weaker. Financial conditions have improved but may well deteriorate again due to the U.S. fiscal cliff or euro area problems. A significant downturn in the high-income world remains a possibility, but developing countries need to focus on domestic policy needs, including a rebuilding of buffers in many cases. For developing economies, sustained strong growth will depend on productivity enhancements, investments in infrastructure, human capital and governance.

Ms. Rupa Duttagupta, International Monetary Fund (IMF), said that the recent IMF outlook was slightly more pessimistic compared to the other forecasts. The GDP forecast was revised downwards as a consequence of new setbacks. Risks increased sharply. In advanced economies, policies progressed but stronger action was still needed and, in emerging markets, a fine balance had to be found to rebuild policy

room for manoeuvre while supporting growth.

There have been new setbacks. PMIs have declined, mostly in the euro area and exports have slumped. This follows from the continuing euro area financial strains, the end of the boom in emerging markets, and fiscal consolidation in some countries. On the other hand the new Outright Monetary Transactions (OMT) policy of the ECB has had a significant impact on spreads, but not on lending to the private sector. The emerging market slowdown is mostly home grown due to tighter policy - excessive credit in some countries led to real estate bubbles and/or inflation above target and policy reactions – but there is also an impact from falling global demand.

Looking ahead, the outlook is weak and uncertain. Underlying assumptions of the IMF baseline forecast include strong euro area policies to improve financial conditions starting in the second half of 2012. The forecast also assumes there is no fiscal cliff in the United States and advanced countries pursue a 0.75-1 per cent fiscal consolidation in 2012 and 2013. The global recovery continues, but economic growth remains weak at 3.3 per cent in 2012 and 3.6 per cent in 2013. The IMF thinks that potential output has declined, but most of the decline in GDP comes from the demand side.

The inflation forecast is stable for the advanced countries and declining for developing countries.

Risks have increased, especially on the downside. These risks arise from the euro area crisis, the U.S. fiscal cliff and also from a possible decline in emerging countries' potential growth.

Mr. David Turner, Organization for Economic Cooperation and Development (OECD), made some comments on the global outlook, but pointed out that the OECD has not yet finalized their forecast, and that it was very likely to be more pessimistic on the euro area.

He said that there was a great deal of uncertainty about potential output in China. Some forecasters believe it is close to 7 per cent, a large downward revision from previous estimates. If true this would affect everybody.

The OECD is looking at similar downside scenarios as other organizations: the fiscal cliff and a worsening of the euro area crisis. The latter is the largest risk and would entail a sharp rise in sovereign bond yields, user costs, equity premiums, and a drop in bank lending, but not a country default. If one large country were to default, banks across the region would be hit badly and there would be a lot of defaults.

On deleveraging in the advanced economies Mr. Turner noted that the U.S. is much further ahead than Europe and so U.S. rates should decrease going forward, but not in the euro area.

Mr. Jeffrey Herzog, Oxford Economics, said that the key question regarding the euro area was whether there will be enough political will to keep the common currency. The baseline forecast assumes that no country exits the euro area, but mentioned several possible downward scenarios assuming an exit from the euro by Greece ("Grexit") as well as exits by multiple countries. The U.S. fiscal cliff also

represented a serious risk. In China, a potential hard landing would test the resolve of the political system to tackle existing challenges, including the required switch from exports and investment-led growth to consumption-led gorwth. In an upside scenario, several factors such as high cash levels of non-financial corporations and the resulting positive impacts on investment and employment could underpin stronger growth and consolidate the recovery.

Mr. Herzog presented the euro area downward scenarios in more detail. In the Grexit case, GDP would fall by 2 per cent in the euro area and 1 per cent in the U.S.. The case of multiple exits was more on the scale of the Lehman collapse with GDP falling by 8 per cent in the euro area and 5 per cent in the U.S.. Currency depreciation would push inflation up in the euro area and down in the U.S., and with a flight to quality long term rates would rise up sharply in the euro area and drop in the U.S..

The fiscal cliff scenario was better defined as there was more information on what would happen, including announced contingency plans by government departments. There were some possible variants, however. The deadline could be missed in the first quarter, triggering financial market jitters and then policy reactions.

In the case of a hard landing in China, policies could partly compensate for the drop in demand, although the shift from an investment and export-led to a consumption-led growth model will take more time.

The forecast attributed a 50 per cent probability to the baseline scenario and assigned the following probability to the risks that were discussed: 25 per cent for an exit in the euro area, 10 per cent for the fiscal cliff and 10 per cent to a hard landing in China.

Discussion:

Mr. Alfredo Calcagno, United Nations Conference on Trade and Development (UNCTAD), stressed that supply side reforms take time to show results, leading to slow growth in the developed countries and a lack of external demand for developing countries. Furthermore, structural programs negatively affect the demand side in the short run. He also mentioned the IMF study that found that fiscal multipliers are larger than normal in a synchronized downturn and asked why those multipliers could then not be used to stimulate demand. Finally he said that there was also some doubt as to the need for re-building buffers in developing countries.

Questions were also asked on how potential growth was measured and how the various downside scenarios were done, as well as to the policies that should be adopted to complete the economic recovery.

Mr. Burns said that, at the World Bank, potential output is calculated via a production function with capital, labour and total factor productivity, which is a smoothed residual. This is done for the years 1995-2005 to avoid the boom and subsequent crisis with adjustments made by country experts if necessary. He also replied that the reason for tighter policies in developing countries going forward is that the output gap is small and that the required supply side policies include, for example, social safety nets, health systems and infrastructure investments. In the euro area, however, tighter policies and austerity measures are already having negative effects and should be tempered.

Ms. Duttagupta said that the calculation of potential output is done using production function estimates for developed countries. For developing countries, the IMF is using variables such as wages, credit growth and expected inflation. She noted that evidence from those variables tend to support the claim that growth in some developing countries was above potential. Some countries that had been above potential have already seen a slowdown to below potential. Ms. Duttagupta said they are arguing for tighter policies, but not for cuts in social security, etc. On the issue of multipliers she said that their calculations show that previously a 1 per cent consolidation led to a -0.5 per cent contraction in GDP growth over 2 years, but that now this same consolidation leads to a 1 per cent drop. The reason is that the consolidations are simultaneous and there is no offsetting monetary policy available. Consolidation is appropriate for the crisis countries, but should be far more muted for other countries.

Mr. Turner said it was pretty clear how to model the fiscal cliff, but not how to model the break-up of the euro area. As to what needs to be done in the euro area, he said that many of the measures taken so far are for the long run. Mutualisation of debt under strict conditions is necessary. The creation of a banking union is very slow to sort out. The effects of OMT are not clear yet and there is an urgency to break these negative cycles now. Mr. Turner also said that labour market reforms would increase unemployment in the current situation, but that product market reforms would increase growth.

Mr. Vos noted the difficulty of weighting the risks and probabilities, especially regarding the possible exit of Greece from the euro area. He said he believed that euro area leaders will avoid Grexit at all costs, but that OMT is not sufficient to break the cycle. In the case of China, Mr. Vos stressed that moving from investment and export-based growth to consumption-based growth is a difficult and slow process.

Mr. Herzog pointed out that in the wake of the various quantitative easing measures, central bank balance sheets have become a further important signal of monetary policy stances, in addition to the conventional signal function of interest rates, and need to be taken in to account in model simulations and forecasts.

4. Global outlook for commodity markets and international tourism

Mr. William H. Meyers, University of Missouri, discussed the effects of the drought in the U.S. and other countries on crop prices and in context of previous projections that the Food and Agricultural Policy Institute had made. He described the current situation of higher and more volatile commodity prices as likely to be the "new normal." Based on the drought and a moderate projection of the oil prices of slightly less than \$100 per barrel, the projections have changed somewhat between the initial period in February and the current projections created in August.

In February, based on the largest expected corn planting in history and assuming normal yields, prices were expected to fall and stay low. Then, droughts occurred in the U.S., the Black Sea region and in parts of the E.U. and were reflected in a changed outlook for August. Overall there has been a drop in yields of corn per acre

in the U.S. for the past 3 years – bringing it well below previous trends. World supply also declined with low total production and low total beginning stocks. The drops in production in previous years have resulted in increased prices, but the droughts this year resulted in much larger price increases.

For the last 5 or 6 years, ethanol has been the largest driver of corn price increases, but the market may currently has reached saturation so this factor may play a more muted role going forward. If the price continues to rise, then mandates for ethanol production can be changed, but production has been ahead of mandates for the past two years so there is leeway to produce less this year.

Wheat and other grain production has been flat, with the biggest rise coming in maize, and that largely as a result of the ethanol mandates and increasing use as feed for livestock.

In February, most projections for agricultural commodities had prices rising sharply and then coming down slowly. In addition, the fact that maize prices were around the same level as wheat is extremely unusual from a historical perspective.

Mr. Meyers then discussed some issues with changes to U.S. and E.U. farm policy, particularly the abandonment of direct payments to farmers in the U.S. in favour of crop insurance. The E.U. reforms have introduced greater constraints on farmers receiving direct payments such as environmental restrictions as well as capping some of the payments. Neither of those reforms are expected to have significant production effects.

In the future, prices are expected to remain high and volatile. New policies and uncertainties in the oil market in particular and the world economy in general are likely to contribute to these high prices and continued volatility.

Mr. Robert Kaufmann, Boston University, made two presentations on the oil market. First, he presented the current status and outlook for oil prices. He started by noting that although oil prices were similar to their level one year ago, there had been significant bouts of volatility. He stressed that the LINK forecast of \$100 per barrel was too low compared to the average oil price of around \$110 for 2012, but that it was relatively close compared to forecasts made by other institutions.

Looking at fundamentals of the oil market in 2012, he stressed that supply had exceeded demand over several quarters. OPEC raised its production quotas, but spare capacity had decreased as several Gulf countries increased production in order to compensate for sanctions on the Islamic Republic of Iran. While China and India seemed to have only marginally decreased their Iranian oil purchases in reaction to the potential sanctions announced by the United States, the E.U., Japan, South Korea and, to a lesser extent, Turkey and South Africa had made significant efforts to purchase from other producers.

In the short run, high OPEC quotas and higher production should depress the oil price, but the sanctions against the Islamic Republic of Iran and geostrategic tensions in the region create much uncertainty, entailing a price risk premium.

In the longer run, demand in developed countries is forecast to stagnate and decline while developing countries are rapidly increasing their consumption. In the years ahead, developing countries will become the largest consumer of oil, inducing a consumption switchover. On the supply side, Iraq plans to raise its oil output from current 3 million barrel per day (mbd) and become the largest oil producer with 12mbd in 2020. The United States and Canada are steadily increasing their production of unconventional oil. In the United Sates, it could reach 6mbd out of a total production of 11.6 mbd in 2020, and Canada could double its current production to reach 6mbd by 2020. However, its export capacity remains limited so far.

In his second presentation, Mr. Kaufmann discussed the effect of low interest rates on the oil market in the context of the growing financialization of commodity markets. Despite growing non-commercial inventories in the wake of decreasing demand growth caused by the global financial crisis, commercial inventories have declined, oil price and oil price volatility remain elevated in the oil market, including in the market for Western Texas Intermediate (WTI) crude. Since the crisis, the WTI futures market switched from a situation of backwardation (when the price of the futures contract trade below the expected spot price at contract maturity) to contango (when the price of the futures contract trade above the expected spot price at contract maturity). Furthermore, stronger negative correlations have appeared and/or have developed between WTI futures and the U.S. dollar and U.S. bonds and, more surprisingly, a strong positive correlation appeared between WTI futures and the S&P500 index. What can explain these changes in the oil market and in the observed correlations?

Mr. Kaufmann's hypothesis was that these changes were caused by the financialization of commodity markets and by the drop in risk-free interest rate in the wake of the global financial crisis. He used a capital asset pricing model to explain the mechanism at work. Indeed, in the pre-crisis situation with high interest rates, the WTI futures market was in backwardation, generating positive convenience yield for commodity holders and negative capital gains for the holders of future contracts. As interest rates dropped to almost zero in the wake of the crisis, capital gains increased and convenience yields decreased, reducing incentives for commercial commodity holders to maintain large inventories, eventually turning the oil futures market into contango. As a consequence, oil futures contracts started to be correlated with many financial products, including the SP&P500 index.

Mr. Kaufmann then presented a set of econometric specifications he had used to identify causality and indicated that a paper may become available in 2013.

Discussion:

A participant expressed his interest in the hypothesis that was presented, but also stressed the contradiction of framing this as part of the commodity market financialization phenomenon. Indeed, according to the model that was presented, the correlation between WTI futures and the S&P500 index is reversible and would again turn negative or even disappear once interest rates would go up again. The financialization of commodity markets, however, is a structural change in how commodity markets work, anchored in legal and technological factors. As such, the financialization of commodity markets would not disappear with tighter monetary policies.

Mr. Sarbuland Khan, World Tourism Organization (UNWTO), presented an overview of the prospects for international tourism. The presentation began with an overview of the structure and mission of the UNWTO followed by a discussion of recent trends in tourism. He stressed that tourism is one of the larger service sectors in the world economy and that would be over 1 billion tourist arrivals in 2012. The financial crisis reduced arrivals and receipts to some degree, but the sector is resilient and moved back to positive growth between 2010 and 2012. The UNWTO estimates that there have been 22 million more arrivals in the period from January to June in 2012 versus the same period in 2011. Growth is expected to decelerate mildly, but should remain positive at 4.2 per cent in 2012. In 2011 tourist arrivals grew by 5 per cent and receipts were up 3.9 per cent to \$1.03 trillion. In general, emerging market destinations suffered less from the financial crisis and recovered more quickly. The highest growth rates were in South Asia, followed by South East Asia. West Asia and North Africa experienced negative growth in arrivals in 2011, due to the Arab Spring, but they have experienced some positive growth in 2012. Tourism is expected to continue growing, but at a more moderate pace, hitting an estimated 1.4 billion arrivals by 2020 and 1.8 billion by 2030, or an annual growth rate of around 3 per cent. This increase will still be greater in absolute numbers at an average of 43 million per year, compared to 28 million per year in the past 15 years.

He then went on to discuss the interlinkages between tourism and the real economy via employment and job creation, diversification, tax revenues, redistribution, multiplier effects and preservation of cultural heritage. Tourism is a source of foreign reserves for many countries and improves balance of payments issues that many developing countries face. He went on further to cover the WTO's code of ethics for tourism which is made up of ten principles requiring all the actors involved in tourism to comply and act in a "future oriented" manner. This code is also aimed at promoting sustainable tourism and incorporating public and private sectors together in promoting sustainability. An overarching aim is to ensure that international tourism is not seen as extraneous to general economic trends and development and that tourism is incorporated into economic policies of countries and development plans of companies.

5. Regional Outlook

Developed Regions

United States of America

Mr. Pingfan Hong, UN-DESA presented the economic outlook for the United States, partly drawing on the materials of LINK partners, including Global Insight and the Current Quarter Model of the United States Economy by Professor L. R. Klein and S. Ozmucur.

He started with a summary of the main messages for the outlook. The outlook for the U.S. economy in 2013 remains subdued, but the economy may gain some strength in 2014 and the years after. Major weaknesses for the U.S. economy in the short run included business investment and exports, which were decelerating. Unemployment remained elevated. The risk of a fiscal cliff was looming, along with other

uncertainties and risks in the global economy. On the other hand, there were some positive developments: a long awaited recovery in the housing sector seems to gain some traction. The new round of monetary easing by the United States Federal Reserve (Fed) was expected to provide more support to the economic recovery. The process of deleveraging in the financial sector and households that had been depressed demand in the past few years was expected to ease somewhat in the medium turn and boost private spending.

According to the LINK baseline forecast, GDP was expected to grow only by 1.7 per cent in 2013, even weaker than the already anemic growth of 2.1 per cent estimated for 2012. Some pickup was forecast for 2014.

After presenting a number of macroeconomic indictors, Mr. Hong elaborated on two issues: the structure changes in the labour market and the effects of quantitative easing (QE).

An important question economists and policymakers had been pondering is how much of the job loss in this recession is cyclical and how much is structural. According to a study by Edward P. Lazear and James R. Spletzer presented at the annual economic policy symposium in Jackson Hole, Wyoming, in August this year, there are no structural changes, neither industrial nor demographic. No shifts or new skills mismatch can explain the increased rate of unemployment in the latest recession. Some industries, like construction, manufacturing, and retails, experienced disproportionately large increases in unemployment. But those industries that contributed much to the increase in unemployment between 2007 and 2009 were the same that accounted for decreases in unemployment in the recovery. The ratio of long-term unemployed to total unemployment is much higher than it was in prior recessions, but this is not due to any structural change, but rather to the depth of the current recession. They think the persistently high unemployment rates are primarily caused by cyclic factors. Their findings have an important implication for monetary policy, because central banks may be able to reduce cyclical unemployment, but not structural unemployment.

In commenting on the latest QE adopted by the Fed, Mr. Hong said the difference from the previous two QEs was that the new one was open-ended, without defining the total amount and the duration of the assets purchasing programme. The Fed hopes to use this open-ended policy to gain more flexibility, and to provide a more tenacious anchor for public confidence. The debate continues on the effectiveness of these QEs. For example, the intention of these programmes was to lower the longterm interest rates, so as to ease financial costs for households and businesses. Did the QEs effectively manage to lower the interest rates? As discussed by Michael Woodford of Columbia University in a recent study, the yield on 10-year Treasuries has declined since the Fed launched QE1 in late 2008. But this should not necessarily be attributed solely to the Fed's QE programmes. The 10-year yield actually rose over the course of the QE1 and QE2 programs. The general declining trend in long-term bond yields might have more to do with the deteriorating economic conditions that triggered the expectation of deflation, than with the QEs. However, according to the studies of Michael Woodford and a few others, the asset purchasing programmes have indeed had important effects on lowering the costs of financing. He believed the new round of monetary easing would provide more supports for economic recovery in the outlook.

Mr. Hong concluded his presentation by showing a simulation study of the "fiscal cliff" for the United States. In the worst case, if Congress would not do anything, the effects of the fiscal cliff would reduce aggregate demand by about \$550 billion, or about 3.5 per cent of GDP, in 2013. A stand-alone simulation shows that, compared with the baseline, private consumption in the United States would decline by 5 percentage points in 2013, government spending would drop by 4 percentage points, and investment would also decline significantly, and so would import demand. As a result, GDP would decline by 3.8 percentage point in 2013. Even if later in 2013, policymakers are forced to reinstate those tax policies and stop automatic cuts, another 1 percentage point loss would still be entailed in 2014.

Japan

Mr. Kanemi Ban, Osaka University, presented the outlook for Japan. He started with the analysis of recent survey-based indictors. He pointed out business condition indices have been declining in general from March 2012. He further highlighted the distinction between manufacturing industry and non-manufacturing industry. For the latter, the situation recently stabilized while the downward trend was still prevailing for the former one as illustrated by the persistent decline of the industry production index, especially in the sector of transportation equipment. The decline of production could mainly be attributed to the decline of exports volume, which itself was caused by the reduced exports to China and the Europe. Meanwhile, the imports volume maintained the upward trend, increasing the goods trade deficit.

Mr. Ban also reported that employment situation had improved and contributed to the expansion of private consumption. In addition, he reported that the number of public works had been increasing, because of the reconstruction after the earthquake disaster. On the monetary side, he observed that the decline of international commodity price had contributed to the continuous deflation in consumer price. The Bank of Japan had kept the policy rate close to zero for many years and was expected to further loosen monetary policy, in addition to previous rounds of QE. The government debt had reached the highest level among developed countries. The consumption tax rate was scheduled to increase from 5 per cent to 8 per cent in April 2014 and further up to 10 per cent in October 2015. He finished the presentation by discussing the outlook for growth. He predicted GDP growth rate would decline from the 2.4 per cent in 2012 to about 1.5 per cent in 2013 and 2014. This Japanese economy would slow down, despite an expected rebound in exports, mainly because of weaker domestic demand.

Discussion:

There was a comment on the appreciation of Japanese yen vis-à-vis U.S. dollar and the possible effects. Mr. Ban expressed that at the appreciation of the effective exchange rate was not significant. In relation to the funding of public deficit, Mr. Ban expressed that while the business sector was holding a high amount of savings, household savings might be eroded by population ageing. In the longer run, the reduced domestic savings rate could pose a problem for the external balance. To the question of potential growth rate for Japan, Mr. Ban said he believed it was around 1 per cent per year.

European Union

Mr. Peter Pauly, University of Toronto, discussed Dawn Holland's (NIESR) presentation on Western Europe. The euro area was back in recession due to the impacts of three crises: the sovereign debt crisis, the banking crisis and the confidence crisis. The forecast for growth is poor for 2012-2014. Many of the downside risks that were identified in the spring of 2011 also realized. Weak banks are not lending. Lending conditions have tightened in the banking sector, and there is a big discrepancy between funding costs for the banking sector versus the one for the corporate sector and households.

Looking at the future for the euro area, politicians will be forced to choose between deeper integration and partial disintegration. One question is whether there is sufficient will to keep the euro area intact, which will ultimately require the creation of a banking union, the sharing of sovereign credit risk, a fiscal union, and internal devaluations to correct competitiveness imbalances. This will entail a period of high bond yields, high and rising unemployment, in those countries needing to pursue austerity, and probably further bail-outs and debt restructuring. The big question is whether this will be endurable for the region.

On the issue of the banking union, much is agreed in principle, but implementation will take several years. It is important because full implementation would break the negative spiral between sovereigns and banks.

The latest ECB action in the form of the OMT is decisive, in that it is a credible commitment to sharing credit risk. So far it has been very successful in bringing down sovereign bond spreads. The case of Ireland is interesting. Irish bond spreads were close to those of Greece and Portugal through mid 2011, but then came down significantly, highlighting the importance of setting achievable rather than stringent targets.

On the move towards fiscal integration, there is huge political resistance, and next to no progress. Finally the route of internal devaluations is difficult but not insurmountable, requiring a decline in real wages without reducing productivity. Most of the improvement in current account deficits so far has been due to a lack of domestic demand rather than through gains in competitiveness.

If this path is untenable then alternatives include the possibility of some countries leaving the European monetary union (EMU). Two scenarios examine this, the first a Greek exit from the EMU and the second a German exit.

The effect of the fiscal austerity measures in place across the region was also examined. The presentation stressed their significant negative effect on growth. With fiscal multipliers larger than one, austerity measures were self-defeating, all the more if they were implemented in a synchronized manner in several countries or across the entire region.

Mr. Clive Altshuler, UN-DESA, continued the discussion about Western Europe, attributing the sharp decline in regional growth to three major factors: fiscal

consolidation, deteriorated confidence and declining export demand. Confidence matters to explain the depth in the drop of activity, as trade effects alone are not strong enough to generate the observed decline in activity. Using the World Economic Forecasting model, for example, a simulation of further fiscal consolidation in periphery countries shows a GDP decline of almost -0.5 per cent in the euro area as a whole, so trade effects are not sufficient to account for this drop in economic activity. By contrast, a sharp drop in confidence has a very strong effect.

Looking back at 2011 and 2012, there are two similar episodes where there was a flair-up of the crisis during the first half of the year and then confidence declined sharply leading to declining GDP by the end of the year. This means that policies that restore confidence are an important part of the solution.

A lot of significant policy moves were made over the course of 2012. A Fiscal Compact was agreed upon that would replace the Stability and Growth Pact with a stronger and more credible set of fiscal rules. After deploying the long term refinancing operations (LTRO) at the end of 2011 and in early 2012, the ECB upped the ante by announcing the outright monetary transactions (OMT) policy, which amounts to a lender of last resort function, but which requires countries to enter a formal assistance program first: It also addresses the problem posed by the limited size of the European Stability Mechanism (ESM). Finally, work has started on the creation of a banking union, but it is still problematic, because a supervisory mechanism needs to be agreed upon in a context where it remain unclear how European countries intend to handle the remaining toxic banking assets.

Two major problems remain, however. It is still uncertain whether some debt can be mutualised and how growth in the region can be restored. It is conceivable that core countries could maintain some growth momentum, if the crisis atmosphere dissipates and confidence returns, but periphery countries would remain in recession or at best experience low growth for a number of years. Furthermore, unemployment keeps growing along with long term and youth unemployment, leading to a skills loss and a lost generation. Could targeted fiscal stimulus contribute avoid this waste of human capital?

Finally there are also some key medium term issues, particularly whether it will eventually be possible to mutualise some of the high debt levels in the region, and how the relationship between the "ins" and "outs" will evolve as the euro area members become more tightly integrated.

Discussion:

Ms. Delia Nilles, University of Lausanne, Switzerland, said that growth in Switzerland was higher than that of the euro area, but that activity is slowing down, because 60 per cent of Swiss exports are shipped to the E.U. In 2011, the Swiss National Bank adopted a ceiling for the Swiss currency due to massive capital inflows stemming from the weakness of the euro. The resulting intervention amounts to 80 per cent of GDP, and it is unclear how to unwind the situation.

Mr. Pavlos Karadeloglou, European Central Bank, said that the implementation of OMT is quite complicated. It requires looking at lessons learned from other financial market interventions in order to determine whether there should be formal targets or

objectives, and whether conditionality should be imposed. Another issue is the mutualisation of the debt, which he agreed would eventually be necessary, but so far this solution was politically not feasible. He noted that increased competitiveness is important for the crisis countries. However, improving competitiveness includes more than just lowering wages and prices, it also includes non-price competitive issues such as quality or networking.

Mr. Adolfo Castilla, Universidad Antonio de Nebija, Spain, stated that Spain is determined not to exit the euro and pointed out that many indicators were very healthy before the crisis – there was a government surplus and debt was less than 60 per cent of GDP. He attributed the current problems to a lack of confidence and uncertainty in the financial markets, noting that it would make a big difference if long term yields were to come down 200 basis points. In this vein he welcomed the ECB's new OMT policy.

Ms. Lorena Vincenzi, University of Prometeia, Italy, said that the new Italian government has introduced three new fiscal plans that are designed to increase competitiveness and potential output. The burden of fiscal consolidation, however, lies heavily on households, depressing disposable income. In 2009, declining exports had a major negative impact on economic growth, but now it the problem is domestic consumption. In her outlook, Ms. Vincenzi expected some increase in exports and investment. It is possible that Italy will request assistance from the new OMT, but a primary surplus is expected in 2013 and the debt to GDP ratio should decline. Ms. Vincenzi noted that Italy's external debt ratio is only 20 per cent, so the fundamentals do not argue for assistance. The problem is contagion and uncertainty.

Developing Economies and Economies in Transition

Latin America and the Caribbean

Mr. Juan Alberto Fuentes, Economic Commission for Latin America and the Caribbean (UN-ECLAC), provided a comprehensive review of the macroeconomic situation in Latin America and the Caribbean. Economic growth is expected to expand by 3.2 per cent in 2012. This represents a deceleration for a second consecutive year, from 4.3 in 2011 and 6.0 in 2010. This is strongly tied to the slowdown of the Brazilian economy.

In explaining the regional economic performance, Mr. Fuentes explained that the global situation played a key role. The deceleration of China most strongly affected exporters of natural resources, who have a greater fiscal space to react. The moderate dynamism of the U.S. economy benefited somehow to Mexico, Central America and the Caribbean, but these would have less fiscal space in the case of a "fiscal cliff". Finally, the recession in Europe has had varying impacts in the region. In South America, lower exports (Brazil, Chile and Uruguay) and remittances (Ecuador, Colombia) were registered. In Mexico and some Central American countries exports increased, despite the contraction of the European economy.

Mr. Fuentes pointed out that in spite of the slowdown, the region still exhibits good indicators. Inflation is expected to reach 6 per cent in 2012, while unemployment should decline to 6.4 per cent. In addition, Mr. Fuentes stressed that despite the global

financial turmoil, the region maintains its access to international financial markets. The terms of trade suffered a decline in 2012, affecting South American countries the most. On the policy side, no major changes in the overall fiscal balance are expected. Monetary policy rates have been generally stable, though some countries enacted rate reductions. The most notable case is Brazil, which cut the interest rates by more than 500 base points to an historical 7.25 per cent.

In the outlook, Mr. Fuentes showed the estimates of UN-ECLAC. According to these forecasts, there will be a moderate recovery, and regional growth is expected to reach a 4 per cent in 2013. A modest increase in growth in the Caribbean is also expected from 1.6 per cent in 2012 to 2.2 per cent in 2013.

Discussion:

Mr. Alfredo Coutino, Center for Economic Forecasting of Mexico, pointed out that Latin America was able to compensate the global weaknesses by promoting private consumption in recent years. This successful compensation allowed most of the countries to register good economic indicators. However, the region faces several risks in the medium term, particularly concerning the relatively low levels of investments. The main challenge is to move from a consumption-driven to investment-driven growth. This should lead the region to address structural reforms that can provide different incentives for savings and investments.

Then, Mr. Andres Cardenas, Metroeconomica, Bolivarian Republic of Venezuela, depicted the overall macroeconomic situation of the country. Mr. Eustaquio Reis, IPEA/DIMAC, Brazil, said that many investments are trapped in implementation problems. He also commented the remarkable reduction of the interest rates lead by the Brazilian central bank to a historical low of 7.25 per cent.

Mr. Fuentes warned that the evaluation and implementation of policies critically depends on how long the global downturn lasts. He also said that macroeconomic policies are not enough to promote sustainable economic growth. Industrial policies are required to promote diversification, innovation and structural changes in order to increase productive diversification.

Western Asia

Mr. Yasuhiro Yamamoto, Economic and Social Commission for Western Asia (UN-ESCWA), presented the economic situation and outlook for Western Asia. He indicated that elevated oil prices and ongoing political turmoil had been among the most important factors shaping economic performances in the region. Most oil-exporting countries benefitted from record-high oil prices and rising oil output in 2012, especially Saudi Arabia, Iraq and Kuwait. Strong growth in Saudi Arabia was further underpinned by the expansion of domestic demand and a dynamic real estate sector. Public and private investments bolstered growth in Qatar. Economic activity grew more modestly in Bahrain, Oman and the United Arab Emirates as the financial and real estate sectors gradually recovered. Political instability delayed any possible recovery in Yemen. Social unrest and political instability, notably the civil war in the Syrian Arab Republic, weighed on risk perception in the entire region. Neighbouring Jordan and Lebanon were further directly affected by subdued cross-border economic activities, including trade, investment and tourism.

Inflation declined across the region during the first three quarters of 2012 in a context of high commodity prices, but weakening external and domestic demand. In Gulf Cooperation Council (GCC) countries, inflation remained around 3 per cent or below, except in Saudi Arabia. The housing component of the consumer price index was negative in Bahrain, Qatar and the United Arab Emirates, caused by excess capacity and limited domestic demand pressures. In Saudi Arabia, inflation remained above 5 per cent during the first half of the year, driven by strong domestic demand and housing prices growing by almost 9 per cent, and slightly declined thereafter. High commodity prices contributed to keep inflation above 10 per cent in Yemen where the Government could not stabilize prices by increasing subsidies. Inflation in the Syrian Arab Republic may exceed 30 per cent this year as a consequence of ongoing violence and Western sanctions hampering production and trade. In Jordan and Lebanon, the pass-through effect of high food and energy prices maintained inflation above 4 per cent during the first three quarter of the year, a slight decline compared to 2011.

Mr. Pierre Kohler, UN-DESA, completed the presentation about the regional outlook with a few words about Israel and Turkey. The deteriorating external environment increasingly affected economic activity in Israel, while weakening domestic demand contributed to a sharp decline in economic growth in Turkey. In Israel, the consumer price index grew by 2.1 per cent during the first three quarters of 2012, on the back of high food and housing prices, about 1 percentage point compared to last year. In Turkey, demand-led inflationary pressures progressively weakened during the year, but higher food and energy prices as well as value-added tax increases pushed up inflation, which may decelerate from its current level to 7 per cent at the end of the year. Absent a revival of domestic and external demand pressures or a crisis pushing up commodity prices, inflation will likely decline further across the region in 2013.

In the outlook, economic growth in the entire region is estimated to decline from 6.7 per cent in 2011 to 3.3 per cent in 2012. It is forecast to stagnate in 2013 before picking up to 4.1 per cent in 2014.

Africa

Adam Elhiraika, Economic Commission for Africa (UN-ECA), stressed that the economic outlook for Africa remained solid, despite the global slowdown, with a growth forecast of 4.5 per cent for 2013 and 4.9 per cent for 2014. However, economic performances varied across the region, with the main challenges being of a long-term, structural nature. The main drivers of the economic performance were higher commodity prices and production, new discoveries of natural resources, growing domestic demand, increasing diversification and strengthening links with other emerging markets. West Africa will achieve the strongest growth rate due to higher oil output and solid oil prices. The problems of the continent included its reliance on natural resources, high unemployment as well as poverty and inequality. Inflation rates had come down due to higher agricultural output and slowing global growth. Monetary policy was expected to ease in most countries in 2013 and 2014. The main challenges were weak institutional capacities, lacking infrastructure, military conflicts and upcoming elections. Risks to the forecast stemmed from the

euro crisis and the global economic slowdown. The main policy challenges lied in infrastructure investment, greater diversification and the promotion of intra-African trade.

Discussion:

Several country experts then made some country-specific comments and comments about Africa in general. Angola is expected to grow by 8.8 per cent in 2012, driven by the oil sector. Inflation remains a problem, especially for food given its great weight in the overall index. Price increases are also driven by supply constraints. The economy has strong links with the euro area and, in particular, Portugal. However, downside risks are partially offset by the growing economic links with other emerging economies such as China.

Africa's growth remains fragile. The diversification towards China and India is a positive factor, but major structural problems remain, especially the lack of diversification and the reliance on natural resources. In this context, greater diversification is a prerequisite for more intra-regional trade, as exporting natural resources to other African countries is not a feasible strategy.

Ghana is forecast to grow by 8.7 per cent, with new oil output as a major growth driver. Inflation will remain between 8.4-9.3 per cent, with lending rates still high. The balance of trade is still negative, with exports constituting 19 per cent of GDP and imports 29 per cent. One concern in this context is the composition of imports. The fiscal deficit amounts to about 4 per cent of GDP, with a decrease due to data revisions.

In South Africa, the main problems include labour unrest, high unemployment and a weak investment climate. The latter derives from factors such as labour unrest, high labour costs and the lack of infrastructure. However, these weaknesses are not new, the global economic slowdown has only contributed to expose them more prominently. Significant policy measures have already been initiated to address these problems.

A 1 percentage point GDP decline in Europe by 1 causes a reduction in African growth by about 0.5 percentage point, implying a significant exposure of Africa to the economic situation in Europe. Africa needs to focus on economic transformation as well as economic integration in terms of trade linkages. However, monetary integration still seemed to be some way off.

East and South Asia

Mr. Aynul Hasan, Economic and Social Commission for Asia and the Pacific (UN-ESCAP), presented the economic situation and outlook for the countries of East and South Asia. He first noted that in both regions growth had slowed amid increased global turbulences. In the face of the turmoil in the euro area and the slow recovery in the United States, East and South Asia had experienced weaker export demand and volatile capital flows. Despite the slowdown, Asian economies remained a main driver of global growth and an anchor of stability.

While East Asia's export-dependent economies were most strongly affected by the weakening global conditions, China's growth momentum had also slowed. Across the region, merchandise exports weakened considerably, but external balances had remained fairly strong in most economies. Inflows of foreign direct investment and worker's remittances slowed moderately. In response to deteriorating external conditions, many central banks eased monetary policy in the course of 2012. Fiscal policies also became more expansionary, although most governments remained fairly cautious. According to the baseline scenario, growth was projected to pick up slightly in most East Asian economies in 2013.

In South Asia, economic growth decelerated owing to weaker domestic demand and subdued exports. The sharp slowdown of India's economy primarily reflected sluggish fixed investment. In several economies, severe energy shortages had held back growth. Across the region, consumer price inflation had remained high as a set of domestic factors, such as continued high fiscal borrowing, continues to push up prices. Current account balances had deteriorated moderately in 2012. Weak merchandise exports had been partly offset by resilient remittance receipts. Many of the region's national currencies depreciated significantly against the U.S. dollar over the past year. The room for monetary and fiscal policies to fuel domestic demand was limited by the strong inflationary pressures and the persistently high fiscal deficits. In the outlook, growth was forecast to accelerate in India in 2013. Most other South Asian economies were projected to see growth well below potential.

Mr. Hasan then pointed out that overall risks remained tilted to the downside. The major risks included a deterioration of the euro area crisis, fiscal uncertainty in the United States, geo-political risks in oil-producing regions, commodity price increases owing to heightened global financial liquidity and a further growth slowdown in China.

Mr. Hasan noted that most countries in East Asia had sizeable room for policies to stimulate and rebalance economic growth. In addition, policymakers should promote regional cooperation to better share existing risks and opportunities. The region's economies should also continue to play an active role in building a development-friendly global economic environment and in strengthening global governance.

Discussion:

The presentation was followed by comments from the country representatives of China, Taiwan Province of China, India and the Philippines

The country representative of China highlighted that the euro area crisis had contributed to a slowdown of China's exports. Potential growth had declined from about 10 per cent to 8 per cent. Growth was likely to have bottomed out in the third quarter of the year as new investment in infrastructure and monetary easing would stimulate economic activity. However, existing uncertainties holds down growth and the risks for the economy continue to be large. One of the major policy challenges was to increase investment in upgrading technology.

The country representative of Taiwan Province of China noted that 2012 had not been a very good year for the domestic economy, which had suffered from weak exports owing to the crisis in Europe and the slowdown of China. Consumer price inflation

and unemployment remained low. Tourism was a bright spot, showing strong annual growth.

The country representative of India noted that their forecasts were in line with those presented by ESCAP and in the Global Economic Outlook. He pointed out that India's outlook had further worsened in 2012 as the economy was facing serious structural bottlenecks and deficits. He identified four deficits that were holding back growth: the fiscal deficit, the current account deficit, the policy deficit and the trust deficit. Current tensions between monetary and fiscal authorities over the policy direction represented a key obstacle.

The country representative of the Philippines noted that the robust growth of the economy in the first half of 2012 was primarily driven by consumption and increased government spending. The growth target for 2013 was 6-7 per cent. The low level of inflation and the low fiscal deficit provided room for policy stimulus if needed.

CIS and other Economies in Transition

Mr. Robert Shelburne, Economic Commission for Europe (UN-ECE), presented the outlook for the transition economies. He started by describing the major economic characteristics of the region and noted that there was no convergence in real incomes with advanced economies, and the region experienced a sharper slowdown in 2009 than other emerging markets. In South-Eastern Europe, economic growth stood at low levels in 2012 and will remain low in 2013, while the countries of the CIS exhibited more variations. Among them, the Russian Federation was less vulnerable to external shocks than during the global economic and financial crisis, as its private financial sector became a net creditor. The Russian economy was expected to grow by only 3.7 per cent in 2012, with signs of overheating in private consumption, as wages grow faster than productivity. Post-crisis rebuilding of inventory had already been completed, and companies took "investment holidays" for a variety of reasons. The economy, according to the LINK forecast, is expected to grow by 3.6 per cent in 2013, according to the baseline scenario, which assumes a more or less stable global economy, domestic political stability and a possibility of FDI inflows.

6. Global issues

Mr. Peter Pauly, University of Toronto, discussed Dawn Holland's (NIESR) presentation on fiscal consolidation in a time of depression. The paper posits that debt levels in several European countries are unsustainable and that fiscal consolidation is only a question of timing. The two questions arising in this context concern the size of the fiscal multiplier in normal times and how it changes under the current conditions. The multiplier has various determinants for countries as a whole, such as the openness of an economy, access to liquidity and the degree of independence of monetary policy. Within a given country, an important determinant is the formation of expectations. Multiplier are generally less than one due to factors such as import leakage and intertemporal smoothing. In a time of crisis, the multiplier increases for a number of reasons. Policy interest rates are close to zero, there is a heightened liquidity constraint which reduced intertemporal smoothing, and hysteresis is taking hold. The analysis focused on two scenarios, namely a normal one and one with

modified assumptions including impaired interest rate channels and liquidity constraints. In the second case, the analysis found an elevated multiplier that might even be greater than one. This implies that any austerity policies might set off an even greater fall in GDP growth.

Mr. David Turner, Organization for Economic Cooperation and Development (OECD), pointed out that significant imbalances occurred in the run-up to the crisis. More specifically, current account balances widened, trends in relative prices and unit labour costs diverged and fiscal deficits and debt levels increased. Since the start of the crisis, output gaps diverged throughout the euro zone, with the core euro area countries seeing a reduction and the crisis countries a further increase in the output shortfall. At the same time, the current account deficits of the crisis countries narrowed, while their unit labour costs decreased. However, the imbalances in the euro area are far from resolved. The outcome of a quantitative analysis suggested that further adjustments are needed, although these should not come in the form of depressed demand. Instead, a more feasible option is the combination of adjustments in surplus core countries in the euro area and structural reforms to boost productivity and responsiveness of prices and wages in crisis countries. Once a recovery has taken hold, this needs to be accompanied by ambitious fiscal consolidation in order to reduce debt levels.

7. International economic policy issues

Mr. Pavlos Karadeloglou, European Central Bank, discussed the issues of price and non-price competitiveness in euro area. For a significant period, between 2001 and 2009, the euro area was losing price competitiveness in terms of both exchange rates and relative export prices. That trend has begun to reverse since 2010, with particular improvement since 2011. Harmonized competitiveness indicators (HCIs) point to divergences at the country level with Germany driving improvements over the 1999 to 2012 period. Most of the other large countries, France, Spain and Italy show trends more like the E.U. as a whole with competitiveness falling prior to the financial crisis and competitiveness increasing afterwards. This appears to hold true for peripheral countries such as Ireland, Greece and Portugal as well. He said that price competitiveness losses could be observed by way of the changes in current account deficits, with the less competitive countries running significant deficits and the more competitive countries such as the Netherlands and Germany running sizable surpluses as a percentage of GDP. Prior to the crisis export market shares were perpetually falling, but that trend has reversed for the E.U. has a whole since 2009. As with the other measures, export market shares vary widely across countries, which is partly due to differences in price competitiveness.

Mr. Karadeloglou then discussed estimates of revealed comparative advantage in the context of a country's integration into global value chains. Germany has become relatively more integrated for intermediate imports as the other majors and peripheral countries have become less integrated, with some fluctuations over time. Most of the countries have growing revealed comparative advantages in intermediate exports over time with Spain and Greece relatively less integrated and Greece's integration falling significantly since the financial crisis. With regards to trade connections, Germany scored at the top, though connections had fallen since 2009. Portugal and Spain have

increased their trade connections markedly over the time period, by over 70 and 50 per cent, respectively.

Mr. Karadeloglou then examined the degree the divergence in trade performance that can be attributed to cost competitiveness. The main contributions of the paper were in dealing with the aggregation bias as well as creating a complete decomposition of the trade balance based on a number of factors such as natural resource endowments, price and non-price competitiveness and services. The methodology involved combining an examination of the unit value of exports with a trade balance decomposition. Looking at the decompositions for various countries, all components appeared to be negative for Greece whereas most components, except energy, were positive for Germany. The U.S. was estimated to have negative contributions from all components as well, whereas China was similar to Germany with mostly positive for price and non-price and the main negative contribution from energy. The analysis showed that, in general, countries that are price competitive are also competitive on the non-price factors. A few caveats for the approach are that it does not use individual product data.

The conclusion was that the euro area had lost export market share due to a loss of both price and non-price competitiveness, whereas the divergence within the euro area was mostly due to differences in price competitiveness.

Discussion:

There were a number of questions on the definition of non-price competitiveness, and about the connection with price competitiveness. Mr. Karadeloglou responded with an example about the reputation of German cars. Another participant asked what part of the changes in competitiveness result from the establishment of the monetary union, as opposed to from individual country issues. The answer was that effects are difficult to disentangle, as illustrated by the situation in Greece prior the monetary union, whereby the country entered into a vicious cycle of devaluation leading to higher inflation. This process was halted by joining the euro area, but other issues then arose.

Ms. Yanqun Zhang, Chinese Academy of Social Sciences, presented a study on China's impact on GDP growth and inflation in industrial countries. She first provided some background information on the Chinese economy, indicating that it is now the second largest economy in the world. The Chinese economy has recovered strongly from the global financial crisis and has become increasingly important for industrialized countries. She suggested that global integration may lead to a higher divergence of business cycles between emerging and advanced economies.

Ms. Zhang then discussed the main motivation of the study and the methodology applied. The study examined to what extent China's economy affects output growth and inflation in advanced countries, including the U.S., the euro area, and Japan. She used a global VAR (GVAR) model to investigate possible transmission mechanisms, with data on 25 countries and the euro area. For robustness, the results were compared to those generated by global structural macroeconometric models, such as the Oxford Economic Forecasting Model (OEF) 2011 and the model of the National Institute for Economic and Social Research (NiGEM) 2011.

In the GVAR model, the impact of a positive demand shock to China's GDP was examined. This demand shock was constructed to replicate the RMB 4 trillion fiscal stimulus package of 2008/09, which accounted for 3.1 per cent of China's GDP in 2009 and 2.7 per cent of GDP in 2010.

Ms. Zhang then briefly described the main results of the estimations. The demand shock had a positive impact on GDP growth in all industrialized regions, while also pushing up inflation. The impact was biggest for Japan and smallest for the euro area. In general, the impacts generated by the GVAR model were fairly similar, although slightly larger than those generated by the NiGEM.

Discussion:

In the subsequent discussion, participants raised several questions about the main drivers of the results and asked whether the impact on developing countries had also been examined. They also inquired about the duration of the shock and its impact and about how the shocks are propagated in the model and the role of value-added in trade. Ms. Zhang explained that trade linkages play an important role for the results, which explains the comparatively large impact of the demand shock on the Japanese economy. She welcomed the suggestions to look into the impact on developing countries and the role of value-added in trade. She also pointed out that the initial shock has a duration of eight quarters. She also indicated that it was possible to compare demand shocks in China and the U.S. within this framework.

Byron Ganges, University of Hawai'i, discussed how business cycle shocks are transmitted through global value chains (GVCs). The effects of the earthquake in Japan and the floods in Thailand demonstrate the vulnerabilities of GVCs. Drops in trade in 2008-2009 also provide evidence that trade has become more inter-related. The growth of GVCs has also led to higher correlations between business cycles though there are some issues with determining what the channels for transmission are and the methods for identifying GVC trade in the data. With regards to the channels, there are two primary transmission vectors, the composition effect based on the fact that much of GVC production is in durable goods, the purchase of which can be postponed in the case of recession, and the supply chain effect that may be inherent to the structure of GVCs. The speaker used a small panel combined with a demand export equation to estimate the effects based on Chinese customs data on processing and non-processing trade.

Two-thirds of international trade is trade in intermediate goods and East Asia is heavily specialized in durable goods, particularly in electronics. 75 per cent of the inputs came from within the region and over 50 per cent of the exports went to the U.S. and the E.U. Consequently the region is disproportionately exposed to shocks from the U.S. or the E.U.

In examining the composition effect, two questions arose in the context of durable goods trade. Are durable goods more sensitive to shocks via demand fluctuations, or is the income elasticity of exports larger for durable goods? The question for supply chain effects is if income elasticities are bigger for intra-GVC trade as a result of the vertical structure and just-in-time production schedules. Finally GVC also give rise to bullwhip effects, which are potentially larger as a result of rapid inventory adjustments as shocks move up the supply chain. The effects of the bullwhip effect

might vary depending on the level of uncertainty in the particular industry as well as the elasticity of import demand with respect to exports. It is still uncertain whether there are permanent or transitory effects from changes in demand. An examination of Chinese processing trade points to low value added for GVCs.

The model is based on two equations using fixed effects, one for export response to durable versus non-durable another for processing versus non-processing trade. Some issues with the estimation are related to the short sample period, the lack of a good price deflator – the U.S. is used as a proxy – as well as growth rate fixed effects that might overshadow trend growth effects. Overall, the massive structural change China is undergoing make it hard to disaggregate particular effects. An interaction term is used to separate durable and non-durable and processing and non-processing. Durable goods have an effect four times as large as non-durable, but there is no difference between processing and non-processing when industry is accounted for. No bullwhip effects were detected.

Mr. Ganges concluded that the research points to concentration in durable goods as the factor driving sensitivity to shocks rather than something inherent about the structure of GVCs. The implications are that East Asia is now more exposed to external shocks due to its concentration on durable goods.

Discussion:

There were a couple of comments by participants on the role of protectionism during the crisis, both in terms of anti-dumping policies and with regards to exchange rate valuations. There were also questions about the methodology such as whether reexported intermediates are included and what would happen if the dataset extends beyond 2009. Another question was why trade competition has shifted towards durable goods, which may have resulted in trending behaviour. Mr. Ganges responded that his approach did not deal with exchange rate effects, but that these effects had been examined in other research. With regards to the potential changes in trend – fixed effects specifications should deal with that, unless it was a change in trend. In response to the sample period, more recent years weren't used as they may represent a special case. Finally, he responded to the question of whether the effects were more related to changes in final demand, to which he pointed out that trade had shifted more rapidly than final demand.

8. International economic policy issues / global modelling

Matthieu Charpe, International Labour Organization (ILO), presented a two-country model using double Phillips curves, with a focus on the labour market. The ILO uses this model for policy simulations, especially to examine the impact of labour market adjustments, for instance wage declines intended to improve competitiveness, on output and employment in the context of the crisis. In the future, this model will be used to better understand the dynamics behind changes in the labour share of income.

The theoretical model focuses on income distributions and aggregate demand and uses a double Phillips curve to capture feedback effects. The estimation is based on two-country open economy model using the U.S. and Europe as the two countries.

This model relies on Keynesian assumptions, not New-Keynesian (NK) or dynamic stochastic general equilibrium (DSGE) assumptions and it doesn't rely on microfounded behavioural equations.

The first transmission channel is via income distribution effects where there are ambivalent effects of the labour share of income on aggregate demand. Increases in the labour share can stimulate consumption and squeeze profits and investment, but these results depended on whether aggregate demand is wage-led or profit-led. The second transmission channel is via endogenous labour share adjustments, which re proxied by the double Phillips curve. There re equations specified for nominal wages, price and the expectations and the inflation climate. The results of these depend on whether the real wage is assumed to be labour market-led or goods market-led.

The different regimes result in four typologies of economic system depending on the behaviours of aggregate demand and the real wage. Wage-led aggregate demand and goods market-led real wage is stable, as is profit-led aggregate demand with labour market-led real wages. The other two combinations are unstable.

Mr. Charpe presented two sets of results, one with a closed economy, which showed that if there is a wage-led regime then lower wages have a recessionary effect and that labour market flexibility is destabilizing. With the small open economy estimation and a wage-led regime the openness reduces the recessionary effects of lower wages. An estimation of the system with the U.S. and E.U. supports the hypothesis that wage flexibility is greater than price flexibility, implying a wage-led regime.

Discussion:

There were a number of concerns about the specification of the model. Another participant was concerned that there wasn't a consistent framework for the analysis and suggested that it would be better served to examine these issues in a traditional Heckscher-Ohlin framework. Finally a third participant took issue with the lack of micro-foundations. Mr. Charpe responded that with a traditional NK model you cannot examine distributional effects, changes in wages don't result in changes in consumption and savings. Also, examining changes in income distribution in a standard DSGE model requires very strong assumptions. The absence of micro-foundations is certainly regrettable, but it also allows reproducing more realistic outcomes.

Jacques Kibambe Ngoie, University of Pretoria, made a presentation on bifurcation boundaries in economic models. He discussed new methods for examining bifurcation boundaries in light of the increased use of dynamic models with the possibility of nonlinearities. If bifurcation boundaries are found to exist then qualitative properties of dynamic models change and can reduce the robustness of dynamic inference. This is particularly true as one comes close to the bifurcation boundaries where quantitative features of the system are more sensitive to parameter changes. Of particular concern is a shift from a stable to an unstable system (issues of stationarity vs. non-stationarity). Therefore, bifurcation boundaries need to be located to determine if they cross the confidence region.

Two algorithms are constructed to assess the impact of bifurcation boundaries based on the acceptance or rejection of a particular set. The first requires that the resulting sample are independent and identically distributed (iid), whereas the second (a Metropolis-Hastings algorithm) has a probability of acceptance based on a Markov chain, but does not require the iid restriction on the candidate sample. A Bernoulli trial with an informative prior based on the two algorithms can be used for Bayesian estimation of the probability of the existence of bifurcation boundaries.

Discussion:

In the comments afterwards there were concerns that non-linearity was less of an issue these days. Mr. Ingoie agreed, but responded that this remained a interesting and relevant question.

Another concern was that it is not obvious which set of solutions need to be ruled out – in other words, there is not always a reason to expect stationarity. A subsequent participant noted that many phenomena in the global economy are now viewed as non-stationary and that some of these issues have been investigated by econophysics.

Ekkehard Ernst and Christian Viegelahn, International Labour Organization (**ILO**) presented a quarterly forecasting model for employment. The model is a new project in ILO aiming at providing quarterly forecast for employment and serving as the supplement to the annual forecast currently reported in ILO's *Global Employment Trends* report. This presentation covered the results for the United States.

This model is a typical vector autoregressive (VAR) model including growth of GDP, growth of employment and real investment growth. More indicators can be introduced, including hiring expectations, uncertainty and labour market mismatch. For the case of the United States, the quarterly index published by *Manpower Employment Outlook* is used as indicator for hiring expectation. For the uncertainty, ILO has included both economic policy uncertainty index and implied volatility indicator. For the last item, an indicator compiled by ILO based on the levels of job openings and layoffs for 16 sectors has been adopted. Results show that the hiring expectations help improving noticeably the forecast precision for 12 out of 15 sectors. By contrast, the introduction of two uncertainty indictors deteriorates the forecast precision. The authors hypothesized that either uncertainty does not matter for employment decision of employers or there is non-linear relationship that is not captured by the model specification.

ANNEXES

United Nations Department of Economic and Social Affairs Project LINK

UN DESA Expert Group Meeting on the World Economy (LINK Project)

October 22-24, 2012 New York

PROGRAMME

(18 October, 2012)

Monday, October 22, 2012

10:00 – 11:45 **Joint meeting of the Second Committee and the Economic Social Council**

Location: United Nations Headquarters – Conference Room: XX North Lawn Building (1st Avenue and 46th Street, visitors entrance)

"World Economic Outlook"

Co-Chairs:

H.E. Mr. George Talbot (Guyana), Chair of the Second Committee H.E. Mr. Luis-Alfonso de Alba (Mexico), Vice-President of the Economic and Social Council

Introductory Remarks

Ms. Shamshad Akhtar, Assistant Secretary-General, Department of Economics and Social Affairs

Presentation:

Moderator: H.E. Mr. Luis-Alfonso de Alba (Mexico), Vice-President of the Economic and Social Council

"LINK Global Economic Outlook"

Mr. Rob Vos, Director, Development Policy Analysis Division, UN-DESA

Discussants:

Andrew Burns, World Bank Moazam Mahmood, ILO

General Discussion

Moderator: H.E. Mr. George Talbot (Guyana), Chair of the Second Committee

Closing Statement: H.E. Mr. Luis-Alfonso de Alba (Mexico), Vice-President of the Economic and Social

Council

12:00 – 13:15 Lunch

Relocation: ONE UN New York Hotel

13:15 – 15:15 World Economic Outlook (cont.)

Chair: Peter Pauly

Rupa Duttagupta, IMF

Andrew Burns, World Bank

Lead Discussants:

David Turner, OECD

Jeffrey Herzog, Oxford Economics

General discussion

15:15 – 15:30 Break

15:45 – 17:45 Global Outlook: Commodity Markets and International Tourism

Chair: Mette Rolland

Agricultural Commodities

Willy Meyers, University of Missouri

The World Oil Market

Robert Kaufmann, Boston University

"Crude Oil: Commodity and/or Financial Asset?"

Marek Kolodziej, Robert Kaufmann, Nalin Kulatilaka, David Bichetti, Nicolas Maystre, Boston University

General Discussion

Tuesday October 23, 2012

9:30-11:15 **Regional Outlook: Developed Regions**

Chair: Delia Nilles

United States

Pingfan Hong, UN-DESA

Japan

Kanemi Ban, Osaka University

Europe

Dawn Holland, NIESR

Each lead presentation is followed by comments from LINK country experts

11:15–11:30 Break

11:30–13:00 Regional Outlook (cont.): Developing and Economies in Transition

Chair: Roberto Mariano

Africa

Adam Elhiraika, UN-ECA

Latin America and the Caribbean Juan Alberto Fuentes, UN-ECLAC Western Asia

Yasuhiro Yamamoto, UN-ESCWA

Pierre Kohler, UN-DESA

Each lead presentation is followed by comments from

LINK country experts

13:00–14:15 Lunch

14:15–15:45 **Global Issues**

Chair: Stephen Hall

"Fiscal Consolidation During a Depression"

Nikita Bagaria, Dawn Holland, and John van Reenen, LSE, NIESR, & LSE

"Imbalances Within The Euro Area"

David Turner, OECD

Group Discussion

15:45–16:00 Break

16:00–17:30 Regional Outlook (cont.): Developing and Economies in Transition

Chair: Malcolm Dowling

East Asia and South Asia Aynul Hasan, UN-ESCAP

CIS and other economies in transition

Robert Shelburne, UN-ECE

Each lead presentation is followed by comments from

LINK country experts

Wednesday, October 24, 2012

9:30-11:15 International Economic Policy Issues

Chair: Charlotte Du Toit

"Cross-Country differences in the trade balance contributions of price and non-price competitiveness" *Pavlos Karadeloglou, European Central Bank*

"The Chinese Impact on GDP Growth and Inflation in the Industrial Countries" *Christian Dreger and Yangun Zhang , DIW and CASS*

"Global Production Networks and Trade Transmission"

Byron Ganges, University of Hawaii

11:15–11:30 Break

11:30–13:00 Global Modelling

Chair: Aleksander Welfe

[&]quot;Double Phillips Curves and Demand Regimes in the U.S. and Europe"

Matthieu Charpe and Peter Flaschel, ILO & Bielefeld

"Bifurcation Boundaries in Macroeconomic Models" *Jacques Kibambe Ngoie, University of Pretoria*

"Considering Labour Market Mismatch and Hiring Intentions: A Quarterly Forecasting Model for Employment"

Ekkehard Ernst and Christian Viegelahn, ILO

13:00-13:30 **Closing session**

Economic Outlook Reports- Provided by Participants

Australia

Austria

Brazil

Bulgaria

China

Costa Rica

Croatia

Denmark

Germany

Hong Kong

India

Italy

Japan

Korea

Mexico

Nepal

Norway

Poland

Romania

Russia

Slovakia

Slovenia

South Africa

Spain

Switzerland

Taiwan

Togo

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