United Nations
Department of Economic and Social Affairs

Report on the Project LINK Meeting

19 – 21 October 2016
Toronto, Canada

Prepared by:
Global Economic Monitoring Unit
Development Policy and Analysis Division

Table of Contents

Introduction and Opening Remarks

The 2016 Project LINK Meeting was held from 19 - 21 October 2016 in Toronto, Canada. The meeting was hosted by the Department of Economic and Social Affairs of the United Nations and organized by the Project LINK Research Centre at the University of Toronto. The participants included members of international organizations, academicians and policy makers from both developed and developing countries. The agenda of the meeting comprised of the following main themes: the global and regional economic outlook, international policy issues, and modelling techniques. This document summarizes the presentations and discussions that were held during the meeting. Most of the documents presented are available on the United Nations website (http://www.un.org/en/development/desa/policy/proj_link/index.shtml) and the Project LINK website (https://www.rotman.utoronto.ca/FacultyAndResearch/ResearchCentres/ProjectLINK/).

Mr. Peter Pauly, University of Toronto, welcomed the LINK participants and expressed his thanks to UN-DESA and his colleagues at the University of Toronto for organizing the meeting. Mr. Pauly noted that these were challenging times for economists, particularly given the highly uncertain international policy environment. He reminded participants that the Project LINK Meeting brought together an extensive network of international economic experts, including policy makers, applied economists and academic economists. Given the diversity in the backgrounds of the participants, he expressed his anticipation for interactive and productive discussions during the meeting.

Mr. Pingfan Hong, UN-DESA, welcomed the LINK participants on behalf of UN-DESA, and expressed his appreciation to the University of Toronto for their help in arranging the meeting. Mr. Hong noted that the current global economic situation could be broadly characterised by five Lows (global growth, commodity prices, interest rates, inflation, investment) and two Highs (debt, financial market volatility). He reiterated the importance of the Project LINK meeting as a unique platform for participants to exchange their views on the global economic outlook, latest modelling techniques and current policy issues.

Session 1a: World Economic Outlook

Dawn Holland, UN-DESA

Ms. Holland presented the LINK Global Economic Outlook Report for 2017 - 2018. According to the report, world gross product and world trade in 2016 expanded at their slowest pace since the

Great Recession of 2009. World gross product is projected to have expanded by only 2.2 per cent in 2016, with a moderate improvement to 2.8 per cent in 2017 and 3.0 per cent in 2018.

In her presentation, Ms. Holland noted that the global economy remains trapped in a self-propagating low growth cycle, characterized by weak productivity growth, subdued investment, dwindling trade, low inflation and high debt. Low commodity prices have exacerbated these trends in many commodity-exporting countries since mid-2014, while conflict and geopolitical tensions continue to weigh on growth prospects in several regions, such as Western Asia and several parts of Central, East and West Africa.

Ms. Holland then highlighted that productivity growth in the majority of developed economies has slowed markedly since the global financial crisis, mainly reflecting a lack of capital deepening. At the same time, many large developing economies and economies in transition have also experienced a significant slowdown in labour productivity growth. She noted that the extended period of weak investment is a key driving factor behind the widespread slowdown in productivity growth. Weak productivity growth is also restraining wages and progress in poverty reduction, compounding the slowdown in domestic demand.

Ms. Holland then outlined a few risks to the baseline growth forecast. This included forthcoming elections in several countries, spillovers from uncertainties surrounding “Brexit”, adverse implications from negative interest rates, a potential sharper-than-expected policy rate increase in the US and rising trade protectionism.

Ms. Holland warned that in the absence of concerted policy efforts to revive investment and foster a recovery in productivity, the protracted cycle of weak global growth will linger for several more years. She stressed the need for policy measures to target a wider range of objectives, including education, worker training, infrastructure and social protection. She noted that the current overdependence of several developed economies on monetary policy has failed to restore a healthy growth trajectory and called for a more balanced policy mix. This included exploiting available fiscal space and embarking on reforms in the financial, goods and labour markets.

Malhar Shyam Nabar, IMF

Mr. Nabar began his presentation by highlighting several key messages from the IMF’s World Economic Outlook October 2016. He noted that while a slight pickup in growth is expected for 2017, there are high risks for setbacks. Global growth remained moderate and uneven. Growth in the advanced economies remains subdued, amid weak productivity and investment growth. Meanwhile, the growth performance in the emerging and developing economies has been heterogeneous, with many economies still adjusting to lower commodity prices.

Mr. Nabar then provided further details on the growth trends in the advanced and developing economies. For the advanced economies, he highlighted that growth still remains below potential, with labour markets still weak in a few economies. The advanced economies face challenges arising from a shrinking workforce and weak productivity growth. Mr. Nabar also noted that expected nominal interest rates in the advanced economies have been consistently downgraded.

For the emerging and developing economies, Mr. Nabar noted that there has been a recent improvement in sentiments with calmer financial markets. This was also due in part to some recovery in commodity prices, in particular oil. Nevertheless, he cautioned that while external financial conditions have eased, other factors continue to weigh on the outlook for the emerging and developing economies. This includes spillovers from China's ongoing economic rebalancing and persistently weak demand from the advanced economies. Furthermore, commodity exporters continue to adjust to lower revenue, while several developing regions remain mired in conflict.

In concluding his presentation, Mr. Nabar called for a comprehensive and consistent three-pronged policy approach to growth. This approach comprises of monetary policy, fiscal support and structural reforms. He also stressed the need for more effective measures to enhance financial stability, including complete regulatory reform, a more systematic monitoring of capital flows and an improved global financial safety net. He also highlighted the importance of reinvigorating multilateral cooperative efforts in order to introduce more comprehensive policies as well as to address cross-border challenges, such as refugees, epidemics and extreme weather.

Carl Weinberg, High Frequency Economics

Mr. Weinberg's presentation was mainly focused on analysing monetary policy developments in the advanced economies, in particular quantitative easing (QE) measures. Mr. Weinberg pointed out that QE will not last forever as central banks are running out of sovereign bonds to buy. He noted that the Bank of Japan has started to taper QE, the European Central Bank will soon run out of bonds to buy while the Bank of England may end QE earlier than expected. He also predicted that the Fed will be tightening monetary conditions soon, leading to further strengthening of the US dollar. He warned that as central banks taper or end sovereign purchases, yield curves will steepen, leading to tighter global financial conditions. The increase in long-term interest rates will weigh further on the already subdued global growth outlook, amid flat industrial growth in the advanced economies, weak global trade and the collapse in commodity prices.

He also warned that as global commodity prices stop falling, inflation metrics will spike, potentially affecting financial markets. He reminded participants that this is not real inflation, as core CPI and wages in the developed economies continue to rise very modestly. However, the spike in headline inflation may affect inflation expectations, boosting real and nominal long-term bond yields, which is unwelcomed.

Steven Tobin, ILO

Mr. Tobin began his presentation by highlighting that the very high uncertainty in the global economy has led to global growth being consistently underestimated for the past five years. The persistently high uncertainty has also contributed to stalling investment in both the developed and developing economies, despite a growing savings glut.

Mr. Tobin noted that in this environment, creating sufficient job quantity and quality continues to be a challenge worldwide. Global unemployment is expected to rise by nearly 2.3 million in 2016 and a further 1 million in 2017. Vulnerable employment affects 1.5 billion people, accounting for over 46 per cent of employment globally. Mr. Tobin pointed out that nearly 75 per cent of employed people in emerging and developing economies had vulnerable jobs in 2016. He also noted that the youth were being particularly hard hit, with 71 million youth unemployed in 2016, translating to an unemployment rate of 13.1 per cent. He warned that youth unemployment has severe economic and social repercussions, such as skill deterioration, outmigration and social unrest. He further cautioned that a return to fiscal austerity could have negative spillovers on unemployment. Mr. Tobin then stressed the importance of well-targeted employment-oriented stimulus measures in tackling labour market challenges. This included coherent policies to keep individuals, especially the youth, engaged in the labour market.

Byron Gangnes, University of Hawaii

Mr. Gangnes' presentation discussed the key factors causing the global trade slowdown. He first provided an overview of both the cyclical and structural factors that have been mentioned in recent literature. Cyclical factors include exceptional demand weakness, weakness in import-intensive industries and the lingering effects of the global financial crisis. Structural factors include the end of the Great Trade Liberalization period and slowing or pullback from global value chain (GVC) production arrangements. In his presentation, Mr. Gangnes argued that there wasn't convincing evidence that a pullback from GVCs could explain the global trade slowdown. He highlighted that there was no evidence that GVC trade had higher income elasticity than other trade. Furthermore, recent data did not show a pullback from GVC trade. He, however, noted that the rate of growth of intermediate goods trade has slowed, indicating that the adoption effect may have waned. He opined that the global trade slowdown was largely due to weaker demand, in particular subdued investment. He also pointed out to participants that it was too pessimistic to assume that integration was over, given that not all countries and regions are fully engaged in trade or GVCs yet. Furthermore, integration in services may have particular scope for growth. Continued advancements in technology may also facilitate closer trade integration.

Nicolas Maystre, UNCTAD

Mr. Maystre provided comments on the LINK Global Economic Outlook Report for 2017 – 2018. He noted that the global outlook depicted in the report was bleak and there was a possibility that the global growth and global trade figures could turn out lower than projected. He highlighted the persistent weakness in aggregate demand as the key factor weighing on global growth. He also noted several additional risks that could undermine global growth prospects going forward, including banking fragilities in Europe.

Comments and Questions

Participants discussed the issue of persistent low investment resulting in low productivity. It was highlighted that high uncertainty in the global growth, trade and policy environment had shifted risk perception, thus constraining investment appetite. Participants also raised concerns over the likelihood of a banking crisis in Europe, given elevated banking fragilities in countries such as France and Italy. It was noted that banks in these countries were particularly vulnerable to any external shock. It was also mentioned that bank lending in Europe remains constrained as banks are undercapitalised. Participants also highlighted the need to better understand the implications of bank de-risking on financial stability. In addition, participants noted the importance of supply side policies not only to promote stronger growth, but also in preserving debt sustainability.

Session 1b: Brexit - Implications for the World Economy

Adele Bergin, Economic and Social Research Institute, Dublin

Ms. Bergin presented on the implications of Brexit on the Irish economy. She first noted that there was a fairly strong consensus that the UK's decision to leave the EU will have both short- and long-term negative impact on the UK economy. She then highlighted that Ireland had significant linkages to the UK through various channels. This includes trade, migration and FDI. On trade, Ms. Bergin noted that the UK accounts for a significant share of Ireland's exports, but it has been on a declining trend. On migration, she pointed out that migration has acted as an important 'safety valve' for the Irish economy in times of high unemployment. She further noted that the Brexit process could divert immigration to Ireland. On FDI, Ms. Bergin observed that the UK outside the EU would be less attractive to investors given higher uncertainty and reduced EU market access. However, she noted that based on patterns of location choice of new FDI projects in Europe over the past ten years, the expected additional attractiveness of Ireland to new FDI projects following Brexit is likely to be small.

Using the Core Structural Model of the Irish economy (COSMO), she estimated the impact of Brexit on the Irish economy based on three long term Brexit scenarios. The three scenarios are compared to a 'no-Brexit' baseline to isolate the effects on the Irish economy. She noted that the model was designed for medium-term projections and scenario studies, with an explicit modelling of both current production and demand. She further noted that in the model, no balanced budget or solvency rules were imposed, and any potential migration impacts were ignored. The simulation results showed that Brexit could have a strong negative impact on Ireland, affecting GDP, employment, wages, consumption and the government budget balance.

Zsolt Darvas, Bruegel, Brussels

Mr. Darvas presented his views on the impact of Brexit on the UK and Europe. He first highlighted that there were several 'known unknowns' and 'unknown unknowns', that lingered. The 'known unknowns' includes whether the UK will trigger Article 50 by March 2017, what will the UK's negotiation strategy be, response of Scotland and Northern Ireland, and the reaction of the private sector to the new deal. The 'unknown unknowns' includes whether the UK will remain in the EU, whether Brexit will trigger major EU reform, or a potential dismantling of the EU.

Mr. Darvas pointed out that while there was almost a consensus view on Brexit's negative impact prior to the vote, economic sentiments hardly deteriorated following the vote. In addition, UK share prices rebounded quickly. While the pound sterling fell sharply, he highlighted that based on historical trends, the decline was not extraordinary. Furthermore, the UK had an excessive current account deficit, suggesting that the exchange rate was previously overvalued. He questioned the reasons behind the optimism of markets and consumers following Brexit, noting the possibility of short-sightedness, expectations of policy responses and anticipation of a good agreement.

Mr. Darvas outlined several options for the EU-UK agreement. Among them includes 'EU-Lite' options which involve broad single market access such as Switzerland's arrangement, 'Continental Partnership' and within the European Economic Area. He also highlighted the option of the UK signing free trade agreements with the EU and other countries, trading under WTO rules, or unilaterally embarking on free trade. He then further discussed whether the City of London could remain a global financial centre without single market access. Mr. Darvas concluded that EU-Lite options were unlikely, given that these options were inconsistent with the three key demands of Brexiters, namely reduce immigration, eliminate EU budget contribution and to take back control. He pointed out that the long-term impact of Brexit on the UK, EU and the rest of the world depended on the actual EU-UK deal and the transition to it.

Ray Barrell, Brunel University

Mr. Barrell presented his views on the short and long term implications for the rest of Europe. He provided a brief background on the factors that contributed to Brexit. He noted that a minority of the UK population and members of parliament were opposed to EU membership, leading to a promise for a referendum. He pointed out that several important measures need to be considered before the actualization of Brexit. Among them include an interim deal with the EU to cover the period after departure, a potential FTA agreement with the EU and acceptance as a full member of the WTO.

Mr. Barrell discussed several topics with regard to the impact of Brexit on the UK economy. He raised concerns on whether tariff and restriction free access to the single market is likely in the aftermath of Brexit. He also raised concerns whether the UK will be able to sustain growth and quality inducing FDI. He also pointed out that the City of London may need to reorient itself as a global financial centre. Mr. Barrell then brought up a few short and long term issues to consider. He noted that while the geographic aspects of trade and investment cannot change following Brexit, access to them will. Furthermore, in the longer term, he noted that output per person per hour will be lower. While immigration may be reduced, he pointed out that inequality has to fall and education improved in order to reduce social dissatisfaction.

Comments and Questions

Participants concurred that there was significant uncertainty surrounding the long-term impact of Brexit on the UK, Europe and the global economy. The discussion touched on issues such as the likelihood that Brexit negotiations may prove so complex that a full break with the EU is repeatedly delayed, leaving the UK perpetually in a half-in half-out position; offsetting benefits that some of the other EU countries might expect, such as the relocation of a portion of the financial services sector; the impact of the weaker pound sterling on the UK, its main trading partners, and remittance flows.

Session 1c: World Commodity Markets and Energy Modelling

Non-Oil Commodities

Janvier Nkurunziza, UNCTAD

Mr. Nkurunziza presented the prospects for non-oil commodities. He began his presentation by highlighting that developments in commodity prices have implications for growth in the developing economies given the strong co-integrated relationship between the two variables. He noted that the beginning of 2016 marked a reversal of a long downward trend of commodities prices. However, the rise in global commodity prices has been due mainly to supply-side factors, including El Nino, production cuts and a relatively weaker US dollar. These factors are expected to ease going forward. He also cautioned that a further rise in both oil and non-oil commodity prices will be constrained by the increase in shale production, weak OPEC cohesion and slower demand from China. He pointed out that China's share of global commodity imports, such as aluminium, nickel and copper, remains very high. Mr. Nkrunziza noted that the UNCTAD Non-oil Nominal Commodities Price Index is projected to continue its upward trend in the third and fourth quarter of 2016 and to see a moderate increase in 2017.

Agricultural Commodities

William Meyers, University of Missouri

Mr. Meyers presented the Food and Agricultural Policy Research Institute's (FAPRI) outlook on agricultural commodities. His presentation was focused on five key issues, namely the big picture on prices, the near-term outlook for grain markets, the FAPRI outlook as of August 2016, uncertainties in the outlook and a discussion on which farmers are feeding the world. He noted that the World Bank's food, agriculture and energy price indices had recently experienced a modest rebound, but price trends of individual commodities varied due in part to differing supply conditions. With regards to the near-term outlook for the grain markets, Mr. Meyers noted that 2016 - 2017 will likely be the fourth straight year of above-trend yields, placing downward pressure on prices. Apart from increasing production and stocks, he also identified slowing growth in China and other emerging economies, low energy prices and slowing biofuel growth in the US and Europe as key factors weighing on grain prices going forward.

Based on all these aspects, the projections made by FAPRI show a modest upward trend in the prices of maize, wheat, soybeans, Thai rice until 2021. Nevertheless, Mr. Meyers cautioned there are a number of uncertainties that cloud this outlook. This includes changes in exchange rates, implications of "Brexit" on trade, increased export potential of Argentina, and possible changes to trade policies.

Crude Oil

Robert Kaufmann, Boston University

Mr. Kaufmann's presentation explored the effects of combined-cycle generation and hydraulic fracturing on the prices of oil, coal and natural gas. He pointed out that in recent years, the relationship between the prices of crude oil, natural gas and coal have been highly volatile. He attributed this to two key developments. First, is the increase in efficiency of gas-fired combined-cycle generation which he discovered raises the long-run price of natural gas. Second, is the increased production of natural gas due to hydraulic fracturing. However, he found that this factor has a relatively small long-run effect on natural gas prices.

Mr. Kaufmann also discussed the outlook for crude oil prices. He reminded participants that the recent increase in oil prices was mainly due to supply disruptions which are short term in nature. He was of the view that oil prices will remain modest going forward. He highlighted several factors that will continue to constrain oil prices, in particular slowing Chinese demand for oil, the rise of shale production and the US as a marginal supplier as well as challenges in OPEC cohesion.

Comments and Questions

The representative from Namibia highlighted that diamonds and uranium were important exports for Namibia. He also noted that growth in 2016 was affected by drought and a decline in revenue from the mining sector.

Session 2a: Regional Outlook – North America, Europe, Japan

United States

Dawn Holland, UN-DESA

Ms. Holland presented the economic outlook for the United States of America. She first compared the latest economic projections with those made in December 2015, when the Federal Open Market Committee (FOMC) introduced its first interest rate hike since the global financial crisis. She showed that GDP growth projections for 2016 as well as longer-run growth and policy interest rate forecasts had been reduced. The weakness in GDP growth observed since the fourth quarter of 2015 can, to a significant extent, be attributed to a downturn in gross private domestic investment. Ms. Holland noted, however, that the destocking trend, which had contributed considerably to this downturn, could not continue indefinitely.

On the external front, trade volumes declined in the first half of 2016. Capital goods trade fell markedly, reflecting the weakness in global investment. Looking ahead, Ms. Holland projected a mild recovery in US GDP growth in 2017 and 2018. Inflation is expected to reach 2 per cent in 2017 and accelerate further to 2.3 per cent in 2018. The pickup in inflation reflects higher oil prices, but also faster rises in wages. The US unemployment rate will continue to fall gradually, averaging 4.7 per cent in 2018. In this context, Ms. Holland noted that the participation rate had steadily declined since 2013, whereas the employment rate has gradually increased.

Ms. Holland then presented the main policy assumptions for the United States. The FOMC expects a 25 basis points rise of the Federal Funds rate by the end of 2016. The rate is then expected to rise steadily by 50 basis points in 2017 and 75 basis points in 2018. Fiscal policy is expected to remain broadly neutral, with no major shifts on the spending or revenue side. These policy assumptions, however, depend on the outcome of the Presidential election. Ms. Holland then outlined the key economic policy differences between the two main candidates, covering fiscal policy, monetary policy, trade policy and migration policy.

She ended the presentation by underscoring that part of the recent slowdown of the US economy is due to exceptional factors. Growth is therefore expected to accelerate in 2017. While the direction of monetary, fiscal, trade and immigration policy hangs on the election outcome, a move towards a more protectionist trade policy appears likely.

Euro area

Pavlos Karadeloglou, ECB

Mr. Karadeloglou presented the macroeconomic outlook for the euro area. He noted that the economic recovery was projected to continue, albeit at a slightly weaker rate than previously expected due to the Brexit vote. The negative impact of the Brexit vote is, however, likely to be smaller than previously thought. Inflation is projected to pick up gradually. While risks are on the downside for growth, they are evenly balanced for inflation.

Mr. Karadeloglou then showed that survey indicators had remained resilient and at elevated levels despite the Brexit vote. The short-term outlook continued to project moderate growth for the region. Several factors are expected to support the recovery: the very accommodative monetary policy stance, the low prices of oil and other commodities, some fiscal easing in 2016, improving labour market conditions and diminished pressures for corporate and household deleveraging.

Mr. Karadeloglou then noted that underlying inflation had yet to show any clear sign of an upward trend. Survey-based measures of inflation expectations have remained stable and continue to be substantially above market-based measures. Looking ahead, the impact of exchange rate and oil price developments is expected to fade by the end of 2017. On the domestic side, the continuing economic recovery should increasingly lead to upward price pressures in 2017 and 2018, driven by reduced economic slack.

Overall, the risks to the projected real GDP growth outlook are on the downside. Notable downside risks are related to the external environment, including renewed adverse shocks in emerging markets, intensified geopolitical tensions and potentially stronger negative economic effects of Brexit. On the domestic side, banking and sovereign fragilities, as well as possibly intensified concerns about the cohesion and functioning of the EU pose downside risks.

Mr. Karadeloglou then assessed the situation in the United Kingdom after the Brexit vote and potential transmission channels for the euro area. He noted that the long-term consequences of the UK's withdrawal would crucially depend on the arrangements that determine the UK's future relationship with the EU. He highlighted five different transmission channels of the Brexit: uncertainty, trade, cross-border investment, immigration and fiscal issues. According to most empirical studies, Brexit will have a negative overall impact on the UK and the euro area. The UK economy has, however, shown resilience since the vote, with incoming data surprising on the upside. Yet, important longer-term concerns remain, especially since the likelihood of a benign post-exit scenario appears to have declined. The greatest worry is associated with a reduction in potential growth driven by a decline of openness (to weigh on trade dynamics) and lower investment.

Japan

Hung-Yi Li, Consultant

Mr. Hung-Yi Li presented the macroeconomic situation and prospects for Japan. He first illustrated that since 2009 real GDP exceeded nominal GDP by a significant amount due to the persistence of deflation. He then provided a breakdown of the contributions to GDP growth by expenditure category, highlighting that the weakness in GDP growth in the second quarter of 2016 was essentially the result of a downturn in net exports.

Headline and core inflation have been drifting away from the Bank of Japan's target rate. At the same time, the trade deficit has narrowed since 2014 and the current account balance has rebounded. In the first half of 2016, the current account surplus stood at approximately 3.7 per cent of GDP. Employment has been steadily trending upward and the national unemployment rate has fallen to a low of about 3 per cent.

Mr. Li then briefly assessed the latest monetary and fiscal policy actions. On the monetary front, the Bank of Japan introduced a yield curve control, keeping the 10-year government bond yield at

0 per cent. The authorities also issued an explicit inflation-overshooting commitment. On the fiscal front, two supplementary budgets have been introduced for the fiscal year 2016. The consumption tax hike has been postponed until October 2019.

Mr. Li ended his presentation by summarizing Japan's outlook for 2017. Growth is projected to pick up from an estimated 0.5 per cent in 2016 to 1.2 per cent in 2017 as private and public demand strengthens. Inflation is expected to remain subdued despite the Bank of Japan's exceptionally accommodative monetary policy measures.

Canada

Peter Dungan, University of Toronto

Mr. Peter Dungan presented the economic situation and outlook for Canada. He first provided some brief comments on the economy's recent history. Canada took collateral damage from the US credit crunch in 2007/08, although Canadian financial institutions remained sound and quickly began to lend again. Canada's growth pattern looks similar to the one in the US, but the unemployment rate was much less seriously affected. The Bank of Canada raised rates by 100 basis points in 2010 – in retrospect this move may have been premature. By late 2014, Canada's unemployment rate had fallen below 7 per cent.

Mr. Dungan then noted that the oil and commodity price drop in late 2014 hits Canada's extraction industry hard and investment in the sector has been cut back. GDP growth fell close to zero and the unemployment rate began to rise again. The Bank of Canada lowered rates by 50 basis points in the first half of 2015 as 'insurance' – a move that looks wise in retrospect. The authorities are unlikely to raise rates until US rates are higher than Canadian rates. The Canadian dollar has dropped by 15 – 20 per cent against the US dollar, but the impact on net exports has been very slow.

Mr. Dungan then turned to the policy initiatives of the current Government, highlighting the infrastructure spending plan. He noted that a possible housing 'bubble' could deter any further interest rate cuts. He also pointed out that the Federal Government intended to introduce a carbon tax if provinces did not take action.

Session 2b: Regional Prospects – Adjusting to Lower Commodity Prices

Africa

Khaled Hussein, UN-ECA

Mr. Hussein provided an overview of Africa's current economic performance and presented the prospects for 2017/18. He started his presentation by discussing the key messages and findings for the region as a whole. Average growth in Africa has further slowed in 2016 despite a mild recovery in commodity prices. Private consumption and investment remain the main drivers of growth. The slowdown has been broad-based, with GDP growth declining in all of Africa's subregions. The overall performances of the five subregions continue to vary considerably. Inflation has tended to increase amid supply side factors and currency depreciations. Fiscal and current account deficits have stabilized in 2016 after widening markedly in the previous years. Economic growth in Africa is expected to pick up in 2017 despite persistent internal and external headwinds.

Mr. Hussein then took a closer look at the current growth performance in Africa. He noted that average GDP growth was expected to drop from 3.7 per cent in 2015 to 2.1 per cent in 2016. The main factors behind this slowdown are weak global economic conditions, persistently low oil prices and adverse weather conditions. The slowdown in average growth can be largely attributed to weakening economic conditions in large African countries, including Algeria, Angola, Egypt, Nigeria and South Africa. The weak performance in these countries contrasts with strong growth in other parts of the region. Six countries, namely Cote d'Ivoire, Djibouti, Kenya, Rwanda, Senegal and Tanzania are estimated to grow by more than 6 per cent in 2016.

Mr. Hussein then showed that all GDP expenditure components, except government consumption, weakened in 2016. Growth of private consumption and gross fixed capital formation slowed notably, while net exports subtracted from growth. He pointed out that lower oil prices and slowing demand from China have weighed on investment.

Mr. Hussein noted that East Africa continued to be the fastest-growing subregion, mainly due to strong performances in Kenya, Rwanda and Tanzania. Growth in West Africa has slowed notably in 2016 as a contraction in economic activity in Nigeria was only partially offset by rapid growth in Cote d'Ivoire and Senegal. Central Africa experienced a mild slowdown in growth as low oil prices resulted in cutbacks in public investment, especially in infrastructure. The economic situation in North Africa continues to be adversely affected by security problems, low oil prices and a fall in foreign direct investment inflows. Growth in Southern Africa slowed notably in 2016 amid weak performances in Angola and South Africa.

Looking ahead, Mr. Hussein indicated that Africa was expected to see a moderate rebound in growth in 2017. Aggregate GDP is forecast to grow by 3.1 per cent in 2017 and 3.8 per cent in 2018 on the back of a buoyant service sector, an increase in oil prices and stronger infrastructure investment. There are, however, significant downside risks to this forecast, linked to the uncertainties around Brexit, the slowdown in China and security problems.

Comments and Questions

The LINK country representatives from Angola, Ghana, Namibia and South Africa confirmed that the current economic situation was challenging, but expressed some optimism going forward.

Latin America and the Caribbean

Daniel Titelman, UN-ECLAC

Mr. Titelman presented the economic situation and prospects for Latin America and the Caribbean. He first noted that the economic trends in the region continued to be marked by uncertainties and risks in the global economy. External demand has remained sluggish, while financial markets continue to be volatile. Despite a modest increase in 2016, international commodity prices remain low and the region's commodity-exporting countries have seen a further deterioration in the terms of trade in 2016. Against this backdrop and with significant cross-country variation, Latin America and the Caribbean has faced weakening domestic demand, rising fiscal pressures, depreciating currencies, slowing domestic credit and increasing unemployment rates.

Mr. Titelman then illustrated the sharp downward trend in GDP growth in South America over the past five years. The Brazilian economy remains mired in a deep and prolonged recession. In contrast, economic growth has been more robust in Mexico and Central America. The growth slowdown in South America can be attributed to a fall in domestic demand, including investment and consumption. Gross fixed capital formation has been contracting since early 2014. Net exports, by contrast, contributed positively to GDP growth in 2015/16.

Mr. Titelman then showed that international reserves had seen a slight recovery in the first five months of 2016, both in absolute levels and as a share of GDP. The slowing economic activity has led to an increase in the unemployment rate. The increase reflects both a lower employment rate and a higher labour market participation rate.

On the policy front, Mr. Titelman first noted that many Latin American economies had faced rising fiscal constraints. This stands in contrast to a slightly improved fiscal situation in the Caribbean. He then showed that over the past decade the region had made progress in increasing tax revenues. However, the ratio of total tax revenues to GDP is still much lower than in OECD countries. Moreover, income taxes have only a weak redistributive effect. Mr. Titelman then highlighted the key issue of rampant tax evasion in Latin America. According to UN-ECLAC estimates, tax evasion reached $340 billion, corresponding to 6.7 per cent of GDP.

In terms of public debt levels, there is considerable cross-country variation in Latin America and the Caribbean. In the first of 2016, Argentina and Brazil had the highest debt-to-GDP ratios in Latin America. Debt-to-GDP ratios tend to be elevated in the Caribbean, especially in Jamaica and Barbados, where they exceeded 100 per cent in 2015. In view of strong fiscal pressures, many Governments have significantly cut public capital expenditures. Persistently low levels of public investment, particularly in much-needed infrastructure and human capital development, poses a risk to the medium-term and long-term potential growth of the Latin American economies.

Mr. Titelman then turned his focus to monetary developments. He noted that inflation dynamics had diverged between South America and Central America. In South America, inflation has tended to accelerate in 2016, pushing central banks to tighten monetary policy. In most Central American economies, by contrast, inflationary pressures have remained subdued, resulting in more accommodative monetary policy.

Looking ahead to 2017, Mr. Titelman noted that a mild recovery was projected, mainly due to a better performance of South America's economies, including crisis-hit Argentina and Brazil. This recovery will, however, be shallow at best as long-standing structural issues and challenging external conditions persist. For the region to return to a more robust growth path, private and public investment need to be stimulated and productivity growth needs to be promoted.

Comments and Questions

The LINK country representatives from Latin America and the Caribbean complemented Mr. Titelman's analysis by presenting the country-specific situations. The representative from the Bolivarian Republic of Venezuela described the myriad of challenges the country is currently facing. Mr. Titelman then provided more detailed information on the macroeconomic situation in Argentina, underscoring the difficulties the Government faces in bringing the economy out of recession.

The Commonwealth of Independent States

Mr. Jose Palacin, UN-ECE

Mr. Palacin presented the regional outlook for the Commonwealth of Independent States (CIS). He noted that the overall prospects had improved, but were not yet bright. After the exchange rate turbulences of 2015 and early 2016, some calm has been restored. Most of the burden of the adjustment to the new macroeconomic situation (including lower commodity prices) has fallen on consumers across the region. For the energy-producing countries, the boom times are well behind and more fiscal consolidation is needed. Following a decline in inflation, monetary policy has been loosened in several countries. As domestic demand picks up, the external positions have started to deteriorate. The region faces long-standing structural challenges, which need to be addressed by policy makers.

Mr. Palacin then illustrated the mild growth recovery that is projected for the Russian Federation and the CIS region as a whole. He raised the concern that the recession of the past two years could be followed by a prolonged period of stagnation. He also indicated that not all CIS countries have seen an improvement in the economic situation. In the case of the Russian Federation, household consumption further declined notably in the first half of 2016, whereas investment returned to positive year-on-year growth after contracting for more than three years. Mr. Palacin then showed that real wage growth was still negative in many countries in 2016 as households bear the brunt of the adjustment.

Turning to fiscal policy, Mr. Palacin noted that the large revenue losses associated with lower oil prices had led to significant fiscal tightening. The Russian Federation also depleted its reserve fund. Despite these consolidation measures, government debt across the region has increased relative to GDP.

Mr. Palacin then indicated that the Central Bank of the Russian Federation loosened monetary policy only cautiously in response to a significant decline in inflation. This contrasts with the situation in Kazakhstan, where the monetary authorities cut interest rates in anticipation of declining inflation.

On the external front, Mr. Palacin showed that the fall in imports and exports had come to an end. In the Russian Federation, quarterly net capital outflows have shrunk considerably in recent quarters. He then illustrated the decline in remittances from the Russian Federation to other CIS economies, such as Armenia, Moldova, Tajikistan and Uzbekistan.

Mr. Palacin ended his presentation by briefly discussing some of the major structural challenges that lie ahead for the economies of the CIS. He underscored the importance of population ageing in the case of the Russian Federation and the lack of economic diversification in many of the region's countries.

Comments and Questions

The LINK country representatives from several CIS countries, including the Russian Federation and Ukraine complemented Mr. Palacin's analysis by presenting the country-specific situations.

Session 2c: Regional Prospects – Banking system, corporate debt and financial stability in Asia and Pacific

Western Asia

Yasuhisa Yamamoto, UN-ESCWA

Mr. Yamamoto began his presentation with an overview of the major economic and political factors that are affecting the Western Asia region. This includes continued armed violence and conflicts, low oil prices, the anticipated increase in the US Fed's policy rate, very low inflation, and slower economic activity in global growth centres such as China. He noted that in most countries in the region, growth has stagnated or declined. The persistently low oil prices had significantly affected fiscal and current account balances. Mr. Yamamoto highlighted several policy actions that have been undertaken in the region, including new debt issuances and fiscal consolidation measures, including subsidy cuts and tax increases. He also noted that while foreign reserves have declined in Saudi Arabia and the United Arab Emirates, reserves remain at high levels. Finally, he underscored the importance of economic reform measures in Western Asia in boosting the growth prospects of the region.

East and South Asia

Daniel Jongdae Lee, UN-ESCAP

Mr. Lee presented the growth prospects for the East and South Asian economies. He began his presentation by highlighting the need for policy makers to shift their focus towards improving the quality of growth in the region. He noted that given weak external demand, growth in the region has been increasingly reliant on domestic demand, particularly private consumption. He also pointed out that private investment has remained weak despite favourable financial conditions and accommodative monetary policy.

Mr. Lee also discussed the issue of investment sustainability in China. He noted that government infrastructure projects and the property boom have spurred prices and demand for raw materials, cement and steels. Furthermore, new restrictions have resulted in a sharp drop in home sales. He highlighted that the slowdown in private investment growth will likely continue. However, he also reminded participants that the composition of investment is important when assessing the sustainability of investment growth in China.

In his presentation, Mr. Lee noted that compared to other regions, the near-term growth outlook for East and South Asia was relatively positive. In 2017 - 2018, real GDP growth is projected to stabilize at 5 - 6 percent in East Asia and accelerate to nearly 7 percent in South Asia. Nevertheless, he cautioned that risks are tilted to the downside. These risks include renewed financial market volatility arising from China's transition and policy uncertainties in the US and Europe, potential increase in trade protectionism, a sharp spike in global oil prices, a faster-than-expected policy rate increase in the US, and a delay in the implementation of infrastructure projects and reform measures.

He noted that there is a lot of scope for expansionary fiscal policy in many economies, given relatively low public debt. He also reiterated his call for more policy measures aimed at enhancing the quality of growth in the region. He cited the introduction of poverty reduction targets in the Philippines and China as a step in the correct direction. He also highlighted other measures that have been undertaken by other countries, including the introduction of job creation targets and the strengthening of environmental protection guidelines.

Comments and Questions

Participants discussed the issue of improving the quality of growth, highlighting country-specific examples from the region. It was noted that one third of Filipinos lived below the poverty line and measures to lift this segment of society out of poverty should be prioritized. It was also mentioned that China still has a lot of policy space and its efforts to reduce overcapacity will strengthen the quality of its growth going forward. Participants also noted that reviving private investment remains a challenge in a few countries. However, it was also highlighted that the Asian Infrastructure Investment Bank is significantly benefitting many Asian economies as it is facilitating more infrastructure development in the region.

Session 2d: International Finance and Exchange Rates

Stephen Hall, Leicester University

Mr. Hall presented his joint work with Heather Gibson and George Tavlas on measuring systemic risk in the European banking system. He first set the stage by defining systemic stress as circumstances that lead to the failure of a significant part of the financial sector. He pointed out that the financial system has an endogenous capacity to generate crises, particularly through innovation.

Mr. Hall's work is aimed at constructing a measure of systemic risk in the banking system using a general measure of the co-variances between a large number of banks which varies at each point in time. His proposal views systemic stress from a portfolio point of view rather than from the perspective of individual institutions. The higher is the value of the index, the higher the co-variance between banks in the country. The index also captures elevated stress levels associated with certain events.

Based on this methodology, Mr. Hall discovered that systemic risk in Germany is relatively low, but high in the UK and Greece. He noted that banking stress associated with the euro area sovereign debt crisis is still evident. He also highlighted that since the global financial crisis, bank stress levels still remains elevated.

Nicolas Maystre, UNCTAD

Mr. Maystre presented his work exploring the role of real exchange rate undervaluation in promoting growth and structural changes. Using data from the Penn World Table, he constructed an indicator for real undervaluation to control for the Balassa-Samuelson effect. He then conducted regressions of data on economic growth on the measure for undervaluation, spanning the period from 1950 to 2014. His analysis also controlled for real exchange rate volatility and episodes of banking crises.

Mr. Maystre found that real exchange rate undervaluation had supported growth in specific developing countries, particularly in the Asian region. However, he noted that the positive effects of undervaluation appear to have vanished in more recent years. He also highlighted that high real exchange rate volatility is harmful to growth. Mr. Maystre concluded his presentation by pointing out the need to better understand why undervaluation seems to have worked better in promoting growth in certain regions and in certain periods of time. He noted that it would be useful to gain more insights into the role of complementary policies in promoting stronger growth.

Pami Dua, Delhi University

Ms. Dua presented her study which uses an integrated approach to conduct macro stress testing and resilience assessment of the Indian banking sector to various shocks. She outlined a four-pronged strategy which involves the identification of a shock or stress event, the mapping of the impact of stressed macroeconomic variables on the indicators of bank credit quality, examining the impact on expected banking losses, and examining the impact on the indicators of financial soundness.

Ms. Dua investigated the impact of monetary policy and external shocks on the capital adequacy ratio of Indian banks through various scenario analysis exercises. She found that following a shock, Indian banks remained robust with sufficiently strong capital positions in accordance with Basel II.

She noted that the impact and role of monetary policy was significant. She also noted that policy authorities may positively influence the level and quality of capital adequacy to meet higher standards of Basel III Tier 1 capital norms by promoting growth.

Comments and Questions

Participants discussed the methodology used in the estimation of systemic risk of the banking system. It was clarified that the covariance of the stock market value of individual banks is used as a measure of systemic risk. Participants also agreed on the need to better understand the importance of structural policies in supporting economic growth, extending beyond a pure reliance on exchange rate competitiveness.

Session 3a: Income Distribution and Inequality

Zsolt Darvas, Corvinus University, Budapest

Mr. Darvas presented his study on global and regional inequality. His work was aimed at estimating a world-wide Gini coefficient of income inequality and Gini coefficients for various country groups such as the European Union. He pointed out that average country Gini coefficients does not correspond to the Gini coefficient of the combined population of countries, given differences in average income across countries and differences in within-country income distributions. Hence, his findings could offer some useful insights into overall inequality trends across regions.

Using various methods, including two-parameter distribution, Lorenz curve regression, identical quantile income, Kernel density, Mr. Darvas produced various estimates of global and regional Gini coefficients. He noted that regional data from several countries suggested that with an appropriate level of detail about income shares, all methods yield similar results. He also noted that the two-parameter distribution method is easier to implement and relies on an internationally more comparable dataset.

Based on his findings, Mr. Darvas highlighted that global income inequality has been declining since 1989, with an acceleration in the decline observed since 2002. He also pointed out that income inequality also declined in most regions, except Asia.

Dawn Holland, UN-DESA

Ms. Holland presented her joint work with Mr. Arjun Jayadev on linking inequality and poverty in macroeconomic models. Ms. Holland began her presentation by introducing the Global Consumption and Income Project database. She explained that the motivation of their research was to better understand how growing poverty and inequality affects growth. The model is also used to project poverty rates going forward. She added that this ongoing research could also be extended to examining the links between inequality, fiscal multipliers and consumption behaviour.

Ms. Holland outlined the forecasting model used, in which the change in poverty headcount ratio is decomposed into a growth effect and a distributional effect. She noted that poverty projections are made by linking headcount models into the main World Economic Forecasting Model. She also noted that country level projections can be aggregated to construct regional estimates. Ms. Holland reminded participants that these projections were conditional on the model's projections for each country's consumption per capita and labour force. Inequality rates also need to be held constant.

Based on the model's projections, Ms. Holland highlighted that 10 per cent of the global population may remain in poverty by 2030, including 35 per cent in the Least Developed Countries. She then listed several areas for further work that can improve the accuracy of the forecasts. This includes the introduction of appropriate feedback channels and the use of model-based indicators such as fiscal multipliers.

John Perkins, National Institute of Economic and Industry Research, Melbourne

Mr. Perkins presented his work on exploring the effects of shifting long term demographics, income distribution and expenditure on growth. Based on UN population data of 210 countries spanning from 1980 to 2050, Mr. Perkins estimated the life cycle weighted income of a country in order to derive the relative demographic dividend provided by the population age structure. To estimate the effect of income distribution, he assumed a log-linear relationship between expenditure and income, and used this to compute an index of expenditure over time, reflecting changes in the income distribution.

Based on his findings, he noted that the age structure of the populations in the advanced countries may be a key contributing cause of the current economic stagnation observed in these countries. He also noted that increased inequality may also be a factor weighing on growth. For several low income regions, however, Mr. Perkins pointed out that the high population growth rates in these countries are contributing to an ongoing poverty trap.

Comments and Questions

Participants pointed out that there have been previous studies on measuring global inequality and perhaps more work can be done to reconcile both approaches. Participants also commended efforts to model the linkages between inequality, poverty and growth, but also acknowledged the challenges associated with it.

Session 3b: Topics in Macroeconomic Modelling

Alexander Apokin, Centre for Macroeconomic Analysis and Short-term Forecasting, Moscow

Mr. Apokin presented his joint research with Irina Ipatova which explored the effects of a country's R&D expenditure on its total factor productivity (TFP) and technical efficiency. Mr. Apokin explained that the structure and dynamics of TFP is estimated using a three-factor production framework with SFA and DEA methods. TFP and technical efficiency is then modelled as dependents on R&D expenditure and several control variables, including structural, infrastructure and institutional variables. More than 500 regressions for TFP and technical efficiency were then estimated through a cyclic selection procedure. With regards to the R&D expenditure variable, Mr. Apokin noted that there were two different measures, namely one which measured intensity (% of GDP, per researcher), and one which measured overall expenditure (total expenditure, business expenditure).

From the results, Mr. Apokin concluded that there was a large and significant influence of 5- and 10-year lagged R&D expenditures both on TFP and technical efficiency growth. He highlighted that these findings had important policy implications for countries in order to boost productivity growth.

Stefan Schleicher, University of Graz

Mr. Schleicher's presentation was focused on discussing new approaches to energy modelling. He began his presentation by highlighting the two key challenges faced in the field of energy modelling today. First, is the implementation of the Sustainable Development Goals and the Paris Agreement, both representing major global political commitments to limit global warming and to limit the global budget on greenhouse gas emissions. Second, is the rise of emerging and disruptive energy technologies, such as in the areas of buildings and transportation. He stressed that current mainstream models are not able to adequately cope with these challenges and there is a need to deepen structural modelling approaches going forward.

Mr. Schleicher then outlined a three-tier process involved in deepening structural energy modelling, namely the physical layer, the economic layer and the markets and institutions layer. The physical layer involves identifying the functionalities of an energy system, understanding the full energy value chain and its physical interactions with capital stock. It also requires linking emissions to primary energy, where the intensity of emissions depends on the fuel mix. The economic layer involves identifying interactions between the energy system and the economic system. For example, one could estimate the economic impact of improving the thermal structure of buildings through weighing the cost of new investment and estimating the amount of energy saved. The markets and institutions layer involves adding mechanisms for coordination and incentives.

Mr. Schleicher pointed out that there is a need to switch to a different mindset from focusing on looking for sources of cheap and abundant energy to understanding if we do need that amount of energy in the first place. He highlighted that new energy generation technologies have highly efficient transformation and distributions, which potentially contribute towards the objective of a low carbon energy system for 2050 or earlier.

Stefan Kuehn, ILO, Geneva

Mr. Kuehn presented his study on the impact of unemployment benefits on precautionary savings and demand. He first noted that under the assumption of complete markets, unemployment is insured away.

Building on existing literature, Mr. Kuehn's model investigated the impact of a reduction in unemployment benefits in a standard New Keynesian model with heterogeneous households. He then proceeds to derive a Nash wage bargaining equilibrium and also comparing two scenarios, with and without a lower interest rate bound.

Mr. Kuehn noted that a key mechanism of his model is that a rise in the probability to lose one's job and a fall in the replacement wage implies lower consumption and raising savings. Based on his findings, Mr. Kuehn concluded that unemployment benefits are an important source of income. He pointed out that models should abstract from complete markets and take this into account. He also noted that the effects of cuts to unemployment benefits differ significantly.

Hopestone Chavula, UN-ECA

Mr. Chavula presented ECA's macro-model for Africa. He first outlined the process involved in designing ECA's forecasting model. This included drawing insights from UN-DESA's model, researching on the unique characteristics of African economies, reviewing the availability of data and refining model specifications and equation design. He then explained that the model covered six core countries, namely Algeria, Nigeria, Ghana, Ethiopia, Kenya and South Africa. These economies represent just over half of Africa's aggregate GDP and encompass a variety of economic structures and geographic locations. He noted that the other countries grouped as the rest of Africa had more limited coverage of variables. With time, ECA aimed to reduce the number of countries grouped under this bloc with more economies being modelling with greater detail.

Mr. Chavula pointed out that while the model had a common structure, its design and assumptions reflected a high level of country differentiation, taking into account country specific characteristics. For example, the commodity variable incorporates the most important commodities for each country. He also noted that the model captured an economy's unique global linkages through differing weights for trade, FDI and remittances.

Mr. Chavula highlighted a few differences between the ECA's model and UN-DESA's WEFM model. He noted that while both models used the same global exogenous drivers and historic data, the two models operated with different systems, with UN-DESA's model based on Eviews and the ECA's model using a dedicated software. He also noted that ECA's model had greater variable coverage and was more reflective of country-specific characteristics. Currently, the model was only customized for six countries, but there are ongoing efforts to extend it to others.

Concluding Session

Mr. Pingfan Hong and Prof. Peter Pauly spoke at the concluding session of the LINK meeting. They both presented their key takeaways from the presentations and thanked all participants for their insightful contributions to the discussions.

Note: A special meeting was held immediately after the LINK meeting, among all the participants from DESA, UNCTAD and five Regional Commissions, who contributed to the draft of WESP2017. The meeting was focused on the latest draft of WESP2017, taking into account the presentations and discussions at the LINK meeting on the global and regional outlook. Agreement was made among the participants on how to revise the draft of WESP2017, and the timetable for the next phases in the process of producing and launching WESP2017 was reconfirmed.

Programme

Project LINK Meeting 2016

October 19-21, 2016

InterContinental Hotel Yorkville, Toronto

Wednesday, 19 October, 2016	
09:00-09:15	**Opening remarks** *Peter Pauly, University of Toronto* *Pingfan Hong, Director UNDESA*
09:15-10:45	**World Economic Outlook** Chair: Peter Pauly United Nations *Pingfan Hong and Dawn Holland, UNDESA, New York* International Monetary Fund *Malhar Shyam Nabar, IMF , Washington* High Frequency Economics *Carl Weinberg, HFE, New York*
10:45-11:15	***Break***
11:15-12:45	**World Economic Outlook (cont.)** Chair: Peter Pauly *Lead Discussants:* Steven Tobin, ILO, Geneva Byron Gangnes, University of Hawaii

Nicolas Maystre, UNCTAD, Geneva

Open discussion

12:45-14:15 ***Lunch break***

14:15-15:45 **Panel : Brexit - Implications for the World Economy**
Chair: Adolfo Castilla

Panelists:
Adele Bergin, Economic and Social Research Institute , Dublin
Zsolt Darvas, Bruegel, Brussels
Ray Barrell , Brunel University , London

Open discussion

15:45-16:10 ***Break***

16:10-17:40 **World commodity markets and energy modelling**
Chair: Byron Gangnes

Prospects for non-oil commodities
Janvier Nkurunziza, UNCTAD's Special Unit on Commodities, Geneva

Agricultural commodities
William Meyers , University of Missouri, Columbia (Mo.)

The World Oil Market/ "A New Relation Among Coal, Oil, and Natural Gas Prices: Efficiency Gains and Hydraulic Fracturing"
Robert Kaufmann, Boston University

Open discussion

7:00-9:00 pm ***Reception: Desautels Hall, Rotman School of Management, University of Toronto***

Thursday, 20 October, 2016

9:00-11:00 **Regional outlook: North America, Europe, and Japan**
Chair: Stephen Hall

United States
Dawn Holland, UN-DESA, New York

Europe
Pavlos Karadeloglou, European Central Bank, Frankfurt

Japan
Hung-Yi Li, Consultant

Canada
Peter Dungan, University of Toronto

Open discussion : LINK national delegates

11:00-11:20 ***Break***

11:20-12:50 **Regional prospects: Adjusting to lower commodity prices**
Chair: Ingo Pitterle

Africa
Khaled Hussein, UN–ECA , Addis Ababa

Latin America
Daniel Titelman , UN-ECLAC, Santiago

CIS
Jose Palacin, UN-ECE, Geneva

Open discussion : LINK national delegates

12:50-14:10 ***Lunch***

14:10-15:40 **Regional prospects: Banking system, corporate debt and financial stability in Asia and Pacific**
Chair: Suleyman Ozmucur

Western Asia
Yasuhisa Yamamoto, UN-ESCWA, Beirut

East and South Asia
Daniel Jongdae Lee, UN-ESCAP, Bangkok

Open discussion : LINK national delegates

15:40-16:00 ***Break***

16:00-17:30 **International finance and exchange rates**
Chair: Paolo Onofri

"Measuring systemic stress in European banking system"
Stephen Hall, Leicester University

"The role of real undervaluation in supporting growth and structural change"
Nicolas Maystre, UNCTAD, Geneva

"Macro stress testing and resilience assessment of Indian banking"
Pami Dua, Delhi University

Open discussion

Friday, 21 October 2016

09:00-10:30 **Income distribution and inequality**
Chair: Wang Tongsan

"Inequality in the EU and in the world"
Zsolt Darvas, Corvinus University, Budapest

"Linking inequality and poverty into macroeconomic models"
Dawn Holland , UNDESA, New York

"Long Term Demographics, Income Distribution and Expenditure: Effects on Growth"
John Perkins, National Institute of Economic and Industry Research, Melbourne

Open discussion

10:45-11:10 ***Break***

11:10-13:10 **Topics in macroeconomic modelling**
Chair: Alfredo Coutino

"How R&D expenditures influence total factor productivity and technical efficiency?"

Alexander Apokin and Irina Ipatova, Center for Macroeconomic Analysis and Short-term Forecasting, Moscow

"Deepening structural modelling for decoupling energy and emissions from economic growth"
Stefan Schleicher, University of Graz

"Unemployment benefits, precautionary savings and demand"
Stefan Kuehn, ILO , Geneva

"The ECA Macro-model"
Hopestone Chavula, UN-ECA, Addis Ababa

Open discussion

13:10-13:25 **Closing session**

Peter Pauly, University of Toronto
Pingfan Hong, UN-DESA

List of Participants

Suzana Monteiro
Banco Nacional de Angola
Avenida 4 de Fevereiro, 151 - CP 1243
Luanda, ANGOLA
Tel: 244-927-123-233
E-mail: suzycamacho@yahoo.com

Ian Manning
National Institute of Economic and Industry Research
416 Queen's Parade
Clifton Hill
Vic 3056, AUSTRALIA
Tel: 613-948-8444
E-mail: imanning@nieir.com.au

John Perkins
National Insitute of Economic and Industry Research
416 Queens Parade
Clifton Hill 3086, AUSTRALIA
Tel: 613-9534-5495
E-mail: jperkins@nieir.com.au

Sebastian Koch
Institute for Advaned Studies (IHS)
Josefstaedter Strasse 39
1080 Vienna, AUSTRIA
Tel: 43-681-1055-9856
E-mail: koch@ihs.ac.at

Stefan Schleicher
Economics Department
University of Graz
Universitaetsstrasse 15/F4
A-8010 Graz, AUSTRIA
Tel: 43-316-380-7512
E-mail: Stefan.Schleicher@uni-graz.at

Garabed Minassian
Economic Research Unit
Bulgarian Academy of Sciences
3, Aksakov Str.
1040 Sofia, BULGARIA
Tel: 359-2-957-2419
E-mail: minasian@techno-link.com

Erin Bell
Rotman School of Management
Project LINK/Institute for International Business
University of Toronto
105 St. George St.,
Toronto, Ontario M5S 3E6, CANADA
Tel: 416-978-5353
E-mail: erin.bell@rotman.utoronto.ca

Wendy Dobson
Rotman School of Management
Institute for International Business
University of Toronto
105 St. George St.
Toronto, Ontario, CANADA
Tel: 416-978-7792
E-mail: dobson@rotman.utoronto.ca

Peter Dungan
Institute for International Business
Rotman School of Management
University of Toronto
105 St. George St.,
Toronto, Ontario M5S 3E6, CANADA
Tel: 416-978-4182
E-mail: pdungan@rotman.utoronto.ca

Hung-Yi Li
Consultant
, CANADA
Tel: 416-886-9420
E-mail: regopark98@gmail.com

Steve Murphy
Institute for International Business
Rotman School of Management, University of Toronto
105 St. George St.,
Toronto, ON M5S 3E6, CANADA
Tel: 416-978-6652
E-mail: murphy@chass.utoronto.ca

Peter Pauly
Rotman School of Management
University of Toronto
105 St. George St.
Toronto, Ontario M5S 3E6, CANADA
Tel: 416-978-4331
E-mail: pauly@rotman.utoronto.ca

Thomas Wilson
Rotman School of Management
Policy and Economic Analysis Program
University of Toronto
105 St. George St.,
Toronto, Ontario M5S 3E6, CANADA
Tel: 416-978-4458
E-mail: twilson@chass.utoronto.ca

Daniel Titelman
ECLAC
Av. Dag Hammarskjold 3477
Vitacura
Santiago, CHILE
Tel: 562-2210-2330
E-mail: daniel.titelman@cepal.org

Tongsan WANG
Institute of Quantitative & Technical Economics
Chinese Academy of Social Sciences
No. 5 Jianguomennei Street
Beijing 100732, CHINA
Tel: 86-1350-1127-138
E-mail: wangts@cass.org.cn

Peng ZHANG
Department of Economic Forecasting
State Information Centre
58, Sanlihe Road
Xicheng District
Beijing 100045, CHINA
Tel: 86-10-6855-8128
E-mail: siczp@mx.cei.gov.cn

Per Bremer Rasmussen
Danish Insurance Association
Philip Heymans Alle 1
DK - 2900 Hellerup, DENMARK
Tel: 45-40 3 55 65
E-mail: pbr@fogp.dk

Tony Maarsleth Kristensen
Statistics Denmark
Serogade 11
2100 Kobenhavn 0, DENMARK
Tel: 45 3917-3204
E-mail: tmk@dst.dk

Hopestone Kayiska Chavula
Macroeconomic Policy Division
UNECA
P.O. Box 3001
Addis Ababa, ETHIOPIA
Tel: 251-91331-9258
E-mail: HChavula@uneca.org

Khaled Hussein
Macroeconomic Policy Division
UNECA
P.O. Box 3001
Addis Ababa, ETHIOPIA
Tel:
E-mail: khussein@uneca.org

Gyorgy Barabas
RWI
Hohenzollernstr. 1-3
45128 Essen, GERMANY
Tel: 49-201-8149-225
E-mail: barabas@rwi-essen.de

Pavlos Karadeloglou
European Central Bank
Sonnemannstr 20
60314 Frankfurt, GERMANY
Tel: 49-69-1344-7649
E-mail: Pavlos.Karadeloglou@ecb.int

Abubakari Zakari
ClayDord Consult
REDCO Front, Opp Bank of Africa
Near Hollywood Building, Madina
Accra, GHANA
Tel: 233-244-796-541
E-mail: zack792003@yahoo.co.uk

Maria Albani
Bank of Greece
21 E. Venizelos Avenue
10250 Athens, GREECE
Tel: 30-210-320-3606
E-mail: malbani@bankofgreece.gr

Zsolt Darvas
Department of Mathematical Economics and Economic Analysis
Corvinus University of Budapest and Bruegel
Fovam ter 8
H-1093 Budapest, HUNGARY
Tel: 36-30-343-9048
E-mail: zsolt.darvas@uni-corvinus.hu

Pami Dua
Delhi School of Economics
University of Delhi
Delhi 110007, INDIA
Tel: 91-981-015-3341
E-mail: dua@econdse.org

Adele Bergin
Economic and Social Research Institute
Whitaker Square
Sir John Rogerson's Quay
Dublin 2, IRELAND
Tel: 353-1-863-2115
E-mail: adele.bergin@esri.ie

Paolo Onofri
Department of Economics
Prometeia Associazione Per Le Previsioni Economietriche
Via Marconia 43
40122 Bologna, ITALY
Tel: 39-051-648-0932
E-mail: paolo.onofri@prometeia.it

Hye Chong Shim
Analysis and Forecasting Team, Institute for International Trade
Korea International Trade Association
48th Floor, Trade Center
511 Yeongdong-dareo, Gangnam-gu
Soeul, KOREA
Tel: 82-2-6000-5159
E-mail: hshim@kita.net

Yasuhisa Yamamoto
Economic Development and Integration Division
UNESCWA
UN-House, Riad El-Solh Square
Beirut, LEBANON
Tel: 961-1-978-455
E-mail: yamamoto@un.org

Eduardo Loria
Centro de Modelistica y Pronosticos Economicos
Facultad de Economia
National Autonomous University of Mexico
Edificio B. Cubiculo 305
Circuito interior S/N, Ciudad Universitaria
Delegacion Coyoacan, D.F., C.P. 04510, MEXICO
Tel: 52-55-3232-4443
E-mail: quijano6919@hotmail.com

Tjiveze Tjipe
Bank of Namibia
P.O. Box 2882
71 Robert Mugabe Ave.
Windhoek, NAMIBIA
Tel: 264-81-241-2463
E-mail: Tjiveze.Tjipe@bon.com.na

Qazi Masood Ahmed
Institute of Business Administration
Social Policy and Development Centre
City Campus, Garden Road
Karachi - 75350, PAKISTAN
Tel: 9221-3810-4701
E-mail: qmasood@iba.edu.pk

Veronica Bayangos
Center for Monetary and Financial Policy
Bangko Sentral ng Pilipinas
A. Mabini cor. P. Ocampo Streets, Malate
Manila, PHILIPPINES
Tel: 63-2-708-7460
E-mail: vbayangos@bsp.gov.ph

Domini San Diego Velasquez
National Economic and Developent Authority
12 NEDA Bldg, Blessed Josemaria Escriva Drive
Ortigas Center
Pasig City, PHILIPPINES
Tel: 632-634-7921
E-mail: DSVelasquez@neda.gov.ph

Petre Caraiani
Institute for Economic Forecasting
Romanian Academy
Str. Calea 13 Septembrie no. 13,
Casa Academiei
Bucharest, ROMANIA
Tel: 407-2441-5392
E-mail: petre.caraiani@gmail.com

Elena Abramova
Center for Macroeconomic Analysis and Short-Term Forecasting
47 Nakhimovsky Prospekt Room 1308
117418 Moscow, RUSSIA
Tel: 7-499-129-1722
E-mail: EAbramova@forecast.ru

Alexander Apokin
Center for Macroeconomic Analysis and Short-Term Forecasting
Nakhimovskiy prospect, 47
Room 1303
117418 Moscow, RUSSIA
Tel: 7-499-129-1722
E-mail: aapokin@forecast.ru

Kirill Mikhaylenko
Center for Macroeconomic Analysis and Short-Term Forecasting
Nakhimovskiy Prospect 47
Room 1303
117418 Moscow, RUSSIA
Tel: 7-499-129-1722
E-mail: kvm@forecast.ru

Jana Juriova
INFOSTAT, Institute of Informatics & Statistics
Leskova 16
817 95 Bratislava 15, SLOVAKIA
Tel: 421-2-5937-9383
E-mail: juriova@infostat.sk

Franjo Stiblar
Ekonomski Institute Pravne Fakultete
University of Ljubljana
Presernova 21
1000 Ljubljana, SLOVENIA
Tel: 386-1-2521-688
E-mail: franjo.stiblar@eipf.si

Kirsten Thompson
Plus Economics Advisory (Pty) Ltd
404 Albert Street
Waterlook, 0181
Pretoria, SOUTH AFRICA
Tel: 2783-417-9703
E-mail: kirsten@pluseconomics.co.za

Sora Chon
Korea Development Institute
263 Namsejong-ro
Sejong-si 30149, SOUTH KOREA
Tel: 82-44-550-4042
E-mail: sora@kdi.re.kr

Sejin Hwang
Korea Development Institute
263 Namsejong-ro
Sejong-si 30149, SOUTH KOREA
Tel: 82-44-550-4145
E-mail: hwangsejin@kdi.re.kr

Adolfo Castilla
Universidad Antonio de Nebija
Campus Dehesa de la Villa
Calle Pirineos, 55
28040 Madrid, SPAIN
Tel: 34-64-986-1159
E-mail: acastillag@telefonica.net

Faiza Awad Mohamed Osman
Director General
Ministry of Finance and National Economy
P.O. Box 298
Nile Street 1
Khartoum, SUDAN
Tel: 249-912-118-049
E-mail: faiza_amohamed@hotmail.com

Stefan Kuehn
International Labour Organization
Route des Morillons 4
1203 Geneva, SWITZERLAND
Tel: 41-76-776-0631
E-mail: kuehn@ilo.org

Nicolas Maystre
Macroeconomic and Development Policies Branch
Division of Globalization and Development Strategies
UNCTAD
Palais des Nations
Room: E.10013
1211 Geneva 10, SWITZERLAND
Tel: 212-963-4739
E-mail: nicolas.maystre@unctad.org

Janvier Nkurunziza
Special Unit on Commodities
UNCTAD
Palais des Nations
8-14 Avenue de la Paix
CH-1211 Geneve 10, SWITZERLAND
Tel: 41-22-91-74546
E-mail: Janvier.Nkurunziza@unctad.org

Jose Palacin
UNECE
Palais des Nations
8-14 Avenue de la Paix
Geneva, SWITZERLAND
Tel: 41-22-917-1643
E-mail: jose.palacin@unece.org

Daniel Samaan
Internatioal Labour Organization
Route des Morillons 4
1211 Geneva, SWITZERLAND
Tel: 41-22-799-7539
E-mail: samaan@ilo.org

Steven Tobin
International Labour Organization
4 route des Morillons
Geneva, SWITZERLAND
Tel: 41-797-733-776
E-mail: tobin@ilo.org

Shou-Yung Yin
Institute of Economics
Academia Sinica
128 Sec 2 Academia Road
Nangang, Taipei, 11529, TAIWAN PROVINCE OF CHINA
Tel: 886-96-063-0103
E-mail: syyin@econ.sinica.edu.tw

Ray Y. Chou
Institute of Economics
Academia Sinica
128 Academia Rd., Section 2
Nankang, Taipei 11529, TAIWAN PROVINCE OF CHINA
Tel: 886-95-526-5332
E-mail: imfacrc@gmail.com

Daniel Jeongdae Lee
Economic and Social Commission for Asia and the Pacific
United Nations Building
Rajadamnern Nok Avenue
Bangkok 10200, THAILAND
Tel: 66-02-288-1892
E-mail: lee75@un.org

Valeriy Heyets
Institute for Economics and Forecasting
National Academy of Sciences of Ukraine
26, Panas Myrny St.
Kiev-11, 01011, UKRAINE
Tel: 380-44-280-1234
E-mail: gvm@ief.org.ua

Ray Barrell
Brunel University London and NIESR
7 Walton Place
London SW3 1RH, UNITED KINGDOM
Tel:
E-mail: ray.barrell@brunel.ac.uk

Stephen Hall
Department of Economics
University of Leicester
University Road
Leicester LE1 7RH, UNITED KINGDOM
Tel: 44-0116-252-2827
E-mail: s.g.hall@le.ac.uk

Clive Altshuler
Consultant
2540 Shore Blvd Apt 4K
Astoria, NY 11102, USA
Tel: 212-433-0573
E-mail: rclive94@outlook.com

Alfredo Coutino
Center for Economic Forecasting of Mexico (CKF)
P.O. Box 38521
Philadelphia, PA 19104, USA
Tel: 215-219-6214
E-mail: acoutino@ckf-forecasting.com

Byron Gangnes
Department of Economics
University of Hawaii at Manoa
2424 Maile Way, Saunders 542
Honolulu, HI 96822, USA
Tel: 808-956-7285
E-mail: gangnes@hawaii.edu

Dawn Holland
DPAD/ UNDESA
United Nations
405 E 42nd Street
Room S-2589
New York, NY 10017, USA
Tel: 212-367-4924
E-mail: hollandd@un.org

Pingfan Hong
Development Policy Analysis Division
United Nations
S-2522
405 E 42nd Street
New York, NY 10017, USA
Tel: 212-963-4701
E-mail: hong@un.org

Robert Kaufmann
Department of Earth & Environment
Boston University
675 Commonwealth Ave.,
Boston, MA 02215, USA
Tel: 617-353-3940
E-mail: kaufmann@bu.edu

William Meyers
Food and Agriculture Policy Research Institute
University of Missouri-Columbia
1705 Birmingham Ct
Columbia, MO 65203, USA
Tel: 573-356-0243
E-mail: meyersw@missouri.edu

Malhar Shyam Nabar
International Monetary Fund
700 19th St. NW
Washington, DC, USA
Tel: 202-623-9024
E-mail: mnabar@imf.org

Poh Lynn Ng
DPAD, UNDESA
United Nations
Room S-2513, United Nations Secretariat Building
405, E 42nd Street
New York, NY 10017, USA
Tel: 917-363-4531
E-mail: ng6@un.org

Suleyman Ozmucur
Department of Economics
University of Pennsylvania
3718 Locust Walk
Philadelphia, PA 19104-6297, USA
Tel: 215-898-6765
E-mail: ozmucur@econ.upenn.edu

Ingo Pitterle
Development Policy and Analysis Division
United Nations
S-2631
405 E 42nd Street
New York, NY 10017, USA
Tel: 212-367-9552
E-mail: pitterle@un.org

Carl Weinberg
NYU and High Frequency Economics, Ltd.
100 Summit Lake Drive
Valhalla, NY 10595, USA
Tel: 914-773-2121
E-mail: carl@hfetoday.com

Andres Cardenas
METROECONOMICA
Ed. Manzanarez 11, PH,
Calle manzanares Este, Urb. Manzanares
Caracas 1080, VENEZUELA
Tel: 58-212-941-5848
E-mail: andres.cardenas1@gmail.com

Cristina Rodriguez
METROECONOMICA
Edif.Manzanares 11, PH
Calle Manzanares Este. Urb. Manzanares
Caracus, Edo.Miranda 1080, VENEZUELA
Tel: 58-212-941-5848
E-mail: lcrodriguezb@yahoo.com