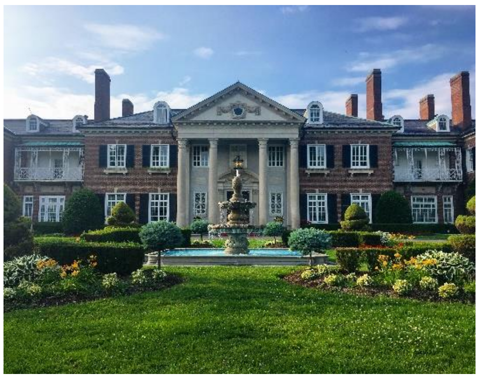
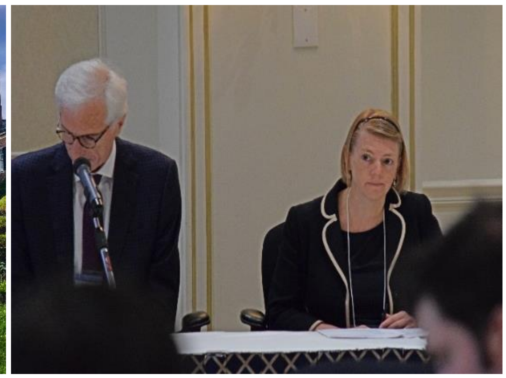
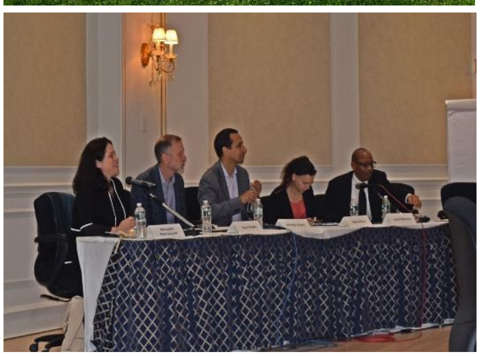
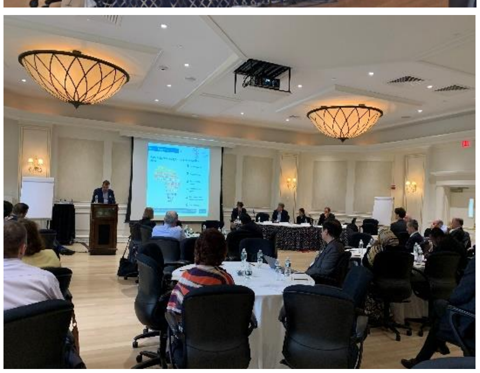
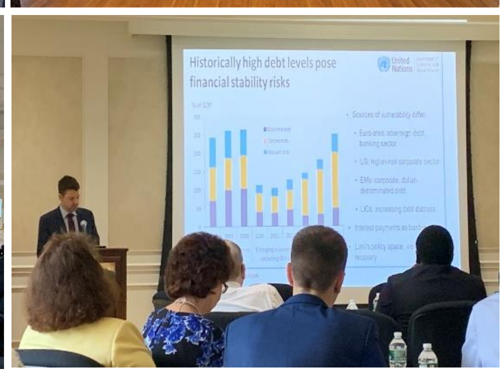
LINK 2019 Report

UN DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
GLOBAL ECONOMIC MONITORING BRANCH
GLEN COVE, NEW YORK
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Day 1 – Monday, 17 June 2019

Session 1 - World Economic Prospects

9:15-10:50	World economic prospects: Risks and development challenges

Ingo Pitterle, UN/DESA

Mr. Pitterle outlined the key features of the global economic situation and then broadened the perspective by linking current macroeconomic trends to sustainable development challenges. He first noted that the world economy had lost momentum amid persistent trade tensions, heightened policy uncertainty and a series of country-specific factors. Global growth remains highly uneven, with several large economies in Africa, Latin America and Western Asia performing poorly. At the same time, risks are tilted to the downside. Main risk factors are a further escalation of trade tensions, a shift in sentiment on financial markets, a downturn in major economies and accelerating effects of climate change. In view of slowing economic activity and low inflationary pressures, many central banks have eased monetary policy in the first half of 2019. This shift has helped stabilize global financial markets and capital flows to emerging economies, but may fuel further debt accumulation, raising medium-term risks to financial stability. Weak economic performance exacerbates development challenges, particularly in commodity exporters and conflict-affected countries. In several African and Latin American countries, the number of people living in extreme poverty increased between 2014 and 2018. Based on current trends, many developing countries will find it difficult to eradicate poverty by 2030. Mr. Pitterle concluded his presentation by laying out broad policy recommendations to address short-term macroeconomic vulnerabilities and boost medium-term inclusive growth.

Wenjie Chen, IMF

Ms. Chen noted that the expected pick-up in global economic activity in the second half of 2019 was predicated on several factors, such as a resolution of trade tensions, an orderly Brexit and stabilization in some stressed emerging market economies. She pointed out that a further escalation of trade tensions would not just affect economic activity in the United States and China, but also impact other countries through global supply chains. For many emerging market and developing economies, the prospects of catching up look dim given a weak medium-term outlook for energy and other commodity prices. In her policy recommendations, Ms. Chen emphasized the need to avoid policy missteps, for example in monetary policy, and enhance financial and macroeconomic resilience. She also stressed the importance of structural reforms to address fundamental development challenges, such as population ageing and lack of economic diversification among commodity exporters.

Patrick Kirby, World Bank

Mr. Kirby also presented a subdued outlook for the world economy, highlighting a series of interrelated risk factors. He noted that elevated policy uncertainty and low confidence had already been weighing on trade and investment worldwide. In many emerging market economies, investment has remained weak in the past decade, slowing productivity growth and hampering progress towards the sustainable development goals. Despite recent loosening of monetary policy, global financing conditions could tighten abruptly. Such a shift would pose significant challenges for emerging and developing economies, especially those with high levels of debt. Mr. Kirby then discussed current conditions and policy issues in low-income countries. He indicated that fragility, conflict and violence are widespread, affecting more than half of all low-income countries. In these situations, it is difficult to implement policies to boost growth and reduce poverty. The rapidly increasing effects of climate change present additional challenges, particularly for agriculture-based economies.

Paul Ashworth, Capital Economics

Mr. Ashworth documented a marked slowdown in global industrial production and noted that there were few signs of a turnaround. He then illustrated the lack of policy space in major economies to counter an economic downturn. On the monetary side, the room for interest rate reductions is limited. On the fiscal side, high levels of public debt and institutional arrangements constrain policy space. However, very low bond yields among developed economies raise the question as to whether the limits to fiscal policy are as rigid as thought. Mr. Ashworth stressed that so far there have been no signs of financial market contagion, with investors clearly differentiating between countries according to fundamentals. He then discussed alternative explanations of the global shifts towards protectionism and the longer-term outlook for the Chinese economy. Several factors will likely reinforce the ongoing slowdown of growth in China, including adverse demographic trends and declining labour productivity growth.

Carl Weinberg, High Frequency Economics

Mr. Weinberg noted that current forecasts of global growth still seem too optimistic. He documented a high and rising level of inventories in major economies, which could weigh on economic activity going forward. The sharp downturn in world trade since mid-2018 also indicated a more pronounced slowdown in global growth. He raised concerns about financial stability in a world of negative interest rates and wondered how a recovery could be supported if banks in developed economies are reluctant to lend. A key question is why many emerging market economies cannot borrow more cheaply given abundant liquidity and exceptionally low interest rates in developed economies. In this regard, he suggested a potential role for the World Bank as intermediary to mobilize new resources for developing countries.

Session 2 – Accelerating Development Progress in Africa

11:15-12:30	Keynote address: Accelerating development progress in Africa

Cristina Duarte, former Minister of Finance, Planning and Public Administration, Cabo Verde

After briefly addressing the economic challenges that African countries are facing, the moderator of the session, ASG Eliott Harris, introduced the keynote speaker, Ms. Cristina Duarte. In her speech, Ms. Duarte reflected on Africa's economic growth experience over the last 20 years, which has been at times referred to with optimistic notes, such as "Africa rising". She pointed out, however, that economic growth has not improved Africa's structural issues, mentioning several examples such as the high absolute and relative number of poor, the high share of labour engaged in low-value agriculture, fragmented markets with low intra-African trade, physical infrastructure deficits, and over-dependency on primary commodity exports.

She then discussed why policies have not delivered a vital transformation of African economies. She suggested that a lack of long-term state building vision prevented a country from building institutional capacities. Consequently, policy management has invited rent-seeking activities and eroded credibility of the state. Losing credibility, policy management invited further rent-seeking activities and erosion of existing institutions. She also stressed that the focus must be shifted from getting the right policy mix (e.g. debt management) to countries securing true ownership of their resources, such as natural, fiscal and financial resources. However, ownership requires solid frameworks, including solid fiscal planning and budgeting frameworks, strong revenue authorities and strong health and educations systems. Thus, institutions need to be developed and strengthened.

The institutional infrastructure requires leadership, skills and partnership with civil society to ensure that economic growth can deliver development that copes with numerous challenges, such as demographic transition, labour-intensive sectoral development, climate change, technology, investment in skills and human development. It requires shifting the focus from economic growth to income distribution and SDG 16. She also emphasized that illicit financial flows are very costly across the continent. Properly directed, the amount of illicit flows could have financed development strategies considerably, in the order of $50 billion. Providing universal energy access, for instance, would cost only $24 billion. In a way, Ms. Duarte claimed, Africans can be said to be paying interest on their own money, since a considerable amount is placed abroad. Finally, the example of Cape Verde shows that a country without natural resources can become a middle-income country, relatively quickly even, with institution-based growth and development. Though less politically visible, the institutional base is the key intangible asset for development.

Following the keynote address, **ASG Elliott Harris** initiated the panel discussion by giving the floor to **Mr. Khaled Hussein**. Mr. Hussein highlighted that African countries do have significant amounts of financial resources; the key issue is how these resources are allocated in order to promote economic growth and sustainable development. Furthermore, Mr. Hussein mentioned the African countries need to reach a double-digit growth in order to make meaningful progress towards the 2030 Development Agenda. He also highlighted that the new African Continental Free Trade Area is a major step to promote growth, regional integration and sustainable development. He, however, also emphasized that Africa faces enormous challenges. In particular, there is an urgent need to create jobs, amid high population and labor force growth. Furthermore, Mr. Hussein called this situation as "demographic trap", and African countries needs to redouble their job creation efforts in the coming decades before this can become a real "demographic dividend". By the end of his intervention, Mr. Hussein reiterated that, regarding the financing gap in Africa, the main problem is the allocation of resources, rather than the availability of resources. He also highlighted Africa's massive infrastructure gap, which significantly increase transportation costs across the continent.

Ms. Charlotte du Toit talked about how to overcome development barriers in South Africa, noting that the country suffers from eroding institutions. In her talk, Ms. du Toit emphasized some major constraints holding back South African economic prospects, including energy constraints, high and rising unemployment and increasing government debt. She also mentioned how policy uncertainty and low business and consumer confidence are affecting investment, which have shown a weak performance in the last decade. Then, Ms. du Toit described the recent trends regarding poverty –close to 50% of the population- and inequality. South Africa is actually one of the most unequal countries in the world. Importantly, Ms. du Toit emphasized that the poor economic growth in South Africa is not primarily a weak global growth story. Then, **Mr. Zakari Abubakari** presented the economic and development situation in Ghana. He described the Government's priority development areas, while highlighting that policy trade-offs exist. In terms of economic development, he pointed out that Ghana is pursuing industrial transformation with measures such as One District One Factory and business regulatory reform. Ghana faces several challenges still, including widening inequality, unreliable infrastructure and corruption, but, at the same time, it has many opportunities as well, according to Mr. **Abubakari**, such as political stability and a youthful population.

Ms. Susana Monteiro presented the situation in Angola. She reported that Angola's economic growth returned to be positive in 2019. She pointed out, however, that the situation remained challenging due to financial difficulties, a rising debt burden, unstable foreign reserves, the quality of public expenditures, and the timing to introduce VAT. She emphasized the importance of leadership issues for effective policy implementation, as well as in tackling illicit transfers/outflows by measures to strengthen anti-money laundering and combating the financing of terrorism (AML/CFT). Then, **Ms. Faiza Awad Mohamed Osman** presented the situation in Sudan, emphasizing that the country is facing critical development challenges with the rising poverty rate. The country's external and fiscal imbalances forced a substantial devaluation of the national currency. The resulting high inflation and a shortage of banknotes have deepened household economic hardships, which in turn has prevented the implementation of strategic policy reforms. She also emphasized that corruption is deeply connected to illicit resource outflows.

At the end of the panel discussion, ASG Elliot Harris made some final comments regarding the structural barriers to progress in Africa and gave the floor for a final intervention of Ms. Duarte. She reiterated that the role played by institutions is crucial in Africa. She also suggested, as an illustrative example of policy reforms, that by and large subsidies could be replaced with significant increases in social expenditures, pointing out that the present subsidy policies in Africa were inefficient without competent regulatory authorities.

Session 3 – Risk Scenarios

13:30-14:45	Risk scenarios

Alex Mackle, Oxford Economics

Mr. Mackle presented several scenarios and their estimated impact on global growth, using Oxford Economic's Global Economic Model. He highlighted that trade tensions remained the biggest concern for businesses. An escalation of the trade war, which include further US measures vs. China, Mexico, and the EU, as well as disruptions to the global auto sector, could take 1 percentage point off 2021 global growth. Mr. Mackle also noted the rising concerns over a possible recession in the US. He warned that a US recession triggered by domestic developments could be as harmful for the global economy as a spike in trade tensions. Nevertheless, he noted that there were some upside risks to the outlook. A resolution of the trade dispute and looser policy in China could support a 0.9 percentage point boost to global growth.

Pavlos Karadeloglou, European Central Bank

Mr. Karadeloglou presented the findings of a recent ECB analyses on the implications of rising protectionism on the countries involved, Europe, and the rest of the world. He highlighted that the impact of tariffs on economic activity in the country imposing tariffs depends on two key factors, namely whether imported goods can be substituted by domestic production, and whether trading partners retaliate. He also noted that in a trade dispute involving two countries, third countries may temporarily benefit from rising protectionism. However, an increase in uncertainty, coupled with financial stress, could also amplify the adverse impact of rising protectionism on economic activity. He concluded that in isolation, the repercussions of the tariffs implemented in 2018 pose only a modest adverse risk to the global and euro area outlooks. However, he cautioned that if trade tensions were to escalate once again, the impact would be larger.

Amit Kara, National Institute of Economic and Social Research

Mr. Kara presented on the economic effects of Brexit, modelled with the NiGEM model. He noted that under the government's proposed deal, the UK economy will be around 4% smaller in 2030 relative to a scenario where the UK stays in the EU. This implies a per capita GDP loss of 3% or around £1,090. He also highlighted that under an orderly no-deal scenario, the GDP loss is 5.5% over the same period. He explained that the bulk of the loss in output occurred through three main channels, namely productivity, migration and trade. Mr. Kara emphasized that GDP per capita will expand under all scenarios in the long term, but people will be permanently less well-off compared with the counterfactual Stay scenario.

Session 4 – Mitigating Financial Risks

14:45 - 16:00	Mitigating financial risks

Ray Barrell, Brunel University/LSE Centre for Macroeconomics

Mr. Barrell presented his work exploring the relationship between banking concentration and financial crises in a country, to assess the broader policy question of whether liberalizing financial markets makes a banking system more or less fragile. He found that an increase in banking concentration reduced crisis incidence. So less liberalized markets are less likely to have financial crises. He highlighted that capital was a strong defence against crises, and raising capital requirements can be calibrated to offset the impact of liberalization. Mr. Barrell also cautioned that rapid growth in real house prices is a common problem in many countries. He noted that bad lending often takes place in the upturn phase, and the implications of a downturn on financial stability and the real economy depends on insolvency rules. He concluded that macroprudential policy should be calibrated using capital to offset excess house price growth and changes in market power.

Linda Goldberg, Federal Reserve Bank of New York

Ms. Goldberg presented her findings on the shifting drivers of global liquidity. She found that there have been large changes in the sensitivity of global liquidity to global factors in the post global financial crisis period. In particular, changes in US monetary policy have had a stronger impact on loan and bond flows. She explained that global liquidity became much more responsive to changes in US monetary policy due to policy convergence across the advanced economies through 2013. Ms. Goldberg also highlighted that the responsiveness to global risk conditions converged across types of international debt participants. Notably, it declined for cross-border loan flows, as lending market shares shifted towards lower-sensitivity banking systems, particularly better capitalized banks. In addition, regulatory changes also reduced incentives to take on risky positions.

Zsolt Darvas, Bruegel/Corvinus University of Budapest

Mr. Darvas presented his work on monetary policy normalization of major central banks and financial risk. Based on his analyses, he stresssed that premature withdrawal of monetary stimulus can be very damaging, and found that there were strong interactions between monetary policy and financial stability policy. However, he cautioned that the interest rate is too broad and quite ineffective in dealing with the build-up of financial imbalances. He highlighted that this problem is even more severe in the euro area. Mr Darvas called for macroprudential policy to play a stronger role. He noted that in a few euro area economies, existing vulnerabilities have led to the introduction of several measures, including capital buffers for systemically important institutions, countercyclical capital buffers, debt-to-income ratio limits, and loan-to-value ratio limits.

Session 5 – Labour Markets, Productivity and Growth

16:20 - 18:00	Labour markets, productivity and growth

Carl Weinberg, High Frequency Economics

Mr. Weinberg predicated his presentation on Solow's neoclassical economic growth model, and its assumptions on (a) exponential growth of labour force; (b) saving of a constant proportion of income; the economy should achieve a stable exponential growth path. Since in some modern advanced economies the (a) assumption on exponential labour force growth is not always met, the author explains the consequences of such a situation. As Mr. Weinberg notes: "We shall show (…) that deflation should be expected as the constant condition of an ageing and depopulating economy, just as inflation is the constant companion and natural consequence of an economy where population is growing. The reason for this, in the simplest possible terms, is that demand naturally tends to fall faster than output as an economy depopulates, leading to persistent excess supply. It is the exact logical and analytical obverse of the case of an economy with a growing population, where demand growth tends to exceed output growth generating persistent excess demand."

Based on the above assumptions, Solow's growth model, and linking consumption to population instead of labour, the author shows that as population ages demand falls faster than output and the economy is continuously in deflation. The author goes into examples from the Japanese economy which seem to confirm the above modelled predictions. For example, new house construction in the first quarter of 2019 was at half their 1990 level. Similarly, auto sales have halved since then. Finally, Mr. Weinberg argued that even investment in new technology will not be able to offset the decline in the workforce, since even as the output would be boosted the demand will remain in decline.

Stefan Kuehn, ILO

Mr. Kuehn's presentation explored the importance of economic equality, both from the angle of economic growth and, more importantly, social justice. The ILO constitution (Treaty of Versailles from 1919), notes that "…universal and lasting peace can be established only if it is based upon social justice". Social injustice can be disruptive for peace, and so also for the economy.

He distinguished 3 dimension of inequality. (1) The first dimension is the share of income attributed to labour versus capital. As capital income is much more concentrated, a decline in the labour share of income is associated with rising inequality. It is also indicative of less bargaining power to labourers. (2) Horizontal inequality is expressed through unequal opportunities and discrimination, for example, by age or ethnicity. (3) Vertical inequality refers most commonly to pay gaps, across occupations, sectors, firms, skills, gender, etc.

The author concluded by presenting recent data and research on inequality by the ILO. It was noted that compared to 2004 the income share of labour remains in decline only for the top decile of the income distribution. The female share in labour incomes remains always below 50 per cent. It is also noted that a higher female share in labour income is associated with a lower level of overall inequality.

Michał Podolski, UN/DESA

Mr. Podolski summarised ongoing research on extreme poverty with relation to GDP growth. Based on UN/DESA estimations of the 2017 extreme poverty headcount (daily budget below $1.90/per person, 2011 PPP) the current global distribution of extreme poverty was presented. As of 2017, extreme poverty has become increasingly an African phenomenon. As a per cent of the population, the poverty remains globally in decline, including in Africa. Nevertheless, from the perspective of the total number of people in extreme poverty, poverty levels continue to rise in Africa. Based on recent patterns in economic growth and income inequality, extreme poverty will not be eradicated by 2030. As over 1/3 of the African population remains in extreme poverty, this headcount is around 5 times higher than for the rest of the world without Africa.

The relationship between economic growth and poverty reduction varies considerably with developments in inequalty. The cases of the United Republic of Tanzania and Zambia were discussed in detail. Per capita output in both countries grew at an average rate of 3.4-3.5 per cent annually in 2001-2017. In the same period, the extreme poverty headcount rate fell in the United Republic of Tanzania by 40 percentage points, while it increased by 8 percentage points in Zambia.

Economic developments of the United Republic of Tanzania differed from Zambia with respect to income distribution. In the United Republic of Tanzania, the bottom of the income distribution benefited substantially from the growth. By contrast, the share, as well as the total income of people in the bottom of the income distribution, fell down in Zambia.

In both countries, agriculture remained the largest and fastest growing sector of the labour market, by number of people employed. The main distinguishing factor was the value added per worker in that sector, which might be directly linked to poverty reduction.

Pami Dua, University of Delhi

Ms. Dua presented results from a study on developing and developed Asian countries over the period 1980-2014. Productivity was presented as the most important long-term factor determining economic development. Combined with a structural shift, which allowed the release of labour force from low-productivity agricultural sectors towards higher productivity industrial and services sectors, multiple Asia-Pacific economies achieved a spectacular progress in development.

The services sector recorded the largest productivity increase compared to other sectors, notably within the transport and communications sectors. Industrial productivity also showed important gains. Capital deepening, measured as capital stock per worker, was found to have a high elasticity of productivity in developing countries. The elasticity of capital deepening is inversely proportional to the level of development – lower in developed than developing countries. Trade and financial openness have also positive and significant impacts on productivity. Human capital has positive and significant impacts on productivity across all sectors, therefore, human capital building should be further encouraged.

Day 2 – Tuesday, 18 June 2019

Session 6 – Forecast Accuracy and Methods

09:00 – 09:50	Forecast accuracy and methods

Pete Richardson, Llewellyn Consulting

Mr. Richardson presented on "Nowcasting and the use of big data in short-term macroeconomic forecasting: A critical review". His presentation focused on the use of Big Data for economic forecasting and provided a review of several empirical studies based on Big Data sources, including those using internet search, social media and financial transactions related data. The motivation behind the review was based on the analysis of the OECD's international forecasting record during and after the financial crisis. In line with the recent developments in nowcasting techniques, those forecasts, providing GDP growth estimates for the euro area and individual G7 economies for the current and next quarter, are based on statistical models using high frequency economic indicators. These models combine information from "soft" indicators, such as business sentiment and consumer surveys, with "hard" indicators, such as industrial production, retail sales, house prices, etc. Their predictive performance is weaker when hard indicator information is absent. To compensate for that, a number of studies focussed on the possible usefulness of a wider set of data sources, including Big Data sets. A range of studies have emerged, originally focussing mainly on labour market indicators, but then widening to include housing, tourism, retail sales and consumption, housing markets, inflation expectations and financial markets, for a range of countries. Nonetheless, challenges remain in use, interpretation and analysis of such data; there are also concerns about their capture, curation, storage, sharing, visualization, and about privacy.

Big Data sources could usefully augment existing nowcasting and other indicator-based approaches as part of the general selection of variables, including forecasting models in use and under development at the UN. However, there are certain constraints, including the limitations of the available data sets, time series are very noisy an uneven, the often qualitative nature of the information they incorporate, and the frameworks used for empirical testing.

Ullrich Heilemann, University of Leipzig

Mr. Heilemann presented on "The accuracy of international forecasts and forecasters". The presentation focused on the accuracy of the growth and inflation forecasts for 19 countries published by the International Monetary Fund, the Organisation for Economic Cooperation and Development and a number of German research organisations, in the period 2001–2015. The speaker stated that numerous institutions provide macroeconomic forecasts several times a year for a large number of countries. The accuracy of these forecasts is of interest from a cognitive perspective as well as from that of users and producers. Studies of international forecast accuracy are mostly limited to forecasts of international and supranational organisations or authorities and are usually done by those institutions themselves. The studies of international forecasts by national institutions are rare, largely limited to the Consensus Economics Forecasts (CF), a compilation of forecasts by private institutions. Their findings differ according to the set of countries and periods examined, research interest and measures employed, while a conclusive picture is missing. Analyses of the accuracy of the international forecasts by German institutions are so far lacking completely. This is surprising given the importance of international development for the German economy, in particular regarding recessions. The speaker then presented in-depth comparison of different forecasts' accuracy, and also interpreted the importance of macroeconomic variables such as income level, export performance and others, as well as the possibility of "home bias" for large economies. According to the speaker, the accuracy of both growth and inflation forecasts is modest, even for OECD-countries; the bias of the growth forecasts is clearly positive, while the bias of the inflation forecasts is negative and low; no "home bias" was detected. Exclusion of the Great Recession reduces the average errors in both growth and inflation forecasts by up to 50 per cent.

The speaker concluded that notable improvements in forecast accuracy can be expected, above all, from an earlier recognition of crises and turning points.

Session 7 – Assessing the Economy Beyond GDP

09:50 – 10:40	Assessing the economy beyond GDP

The moderator, **Sweta Saxena**, initiated the session with a remark on the importance of a new mindset to gauge linkages between economic activities and human wellbeing. She emphasized the timeliness of the topic, as GDP was increasingly being questioned as a measure of wellbeing. She stressed that the biggest shortfalls in the SDGs – at least in the Asia Pacific region – are in the areas requiring investment in people and planet, rather than in prosperity.

Alessandra Alfieri, UN/DESA

Ms. Alfieri made a presentation on "Environmental accounts and environmental capital". In her presentation, she reported the progress that has been made in building a guideline on the System of Environmental-Economic Account (SEEA). The SEEA is an accounting framework to capture the economic contributions of nature and to track sustainable development. Environmental capital is a crucial concept in the SEEA to measure economic benefits yielded from the stock of renewable and non-renewable natural resources. As an accounting approach, the SEEA can integrate environmental data into the existing SNA. Inputs from the environment (eg timber, water) feed into the economy, which returns residual impacts on the environment (eg emissions). The SEEA 2012 version consists of the

SEEA Central Framework (SEEA-CF) and the SEEA Experimental Ecosystem Accounting (SEEA-EEA). The ongoing revision of the SEEA-EEA is scheduled to be completed by 2020. The SEEA-EEA may change the boundary between the ecosystem account and the existing SNA, which may change the definition of GDP. She concluded the presentation by reporting that 80 countries were now compiling the SEEA, which can be used for modelling exercises. They are also experimenting with the development of global databases.

Milorad Kovacevic, UNDP

Mr. Kovacevic made a presentation on "Human development index and wellbeing". In his presentation, he reported the concept and the use of the Human Development Index (HDI). The compilation of HDI started 30 years ago for annual reporting in UNDP's Human Development Report (HDR). A crucial feature of HDR is the use of data, aiming at "reducing the dominance of GDP". Based on Amartya Sen's Capability Approach, human development is broadly defined as "a progress of enlarging people's choice and freedom to live long, healthy and creative lives." The Capability Approach is the basis for an alternative measurement of wellbeing, as opposed to the traditional utility-based measure, by defining wellbeing as a person's "functioning space" subject to a "capability set" as a constraint. The HDI measures the capacity set, proxied by a series of indicators on nutrition, health care, social, cultural, political factors, work and conducive environment (educational attainment, access to resources). Several other indices on the Capability Approach have been created with different focuses on the capacity set, including the Gender Development Index, the Gender Inequality Index, the Multidimensional Poverty Index, and the Inequality-adjusted HDI. He concluded the presentation by pointing out that HDI has been a useful communication tool to initiate dialogue among governments, social advocates, and the wider public.

Session 8 – Climate Risks

11:00-12:55	Introducing climate risks into economic models

Gernot Wagner, Harvard University

Mr. Wagner gave a presentation on "Applying asset pricing theory to calibrate the price of climate risk". He first pointed out the standard view, which implies that the price per tonne of CO_2 emitted should rise over time. If, for example, $40 per tonne of CO_2 is viewed as the lower bound, prices would be expected to rise over time subject to tail risks and proper preference calibration. However, using a financial economics approach, if there is trading of climate risk, optimal prices would actually be expected to decline over time, because uncertainty about the future is higher today than it will be as that future date approaches. The results of this alternative analysis suggest that greater risk aversion implies a higher initial optimal price level; the optimal CO_2 price declines over time as uncertainty dissipates; greater risk aversion leads to higher risk premiums relative to expected damages;

and there are enormous social costs of delay. The author's estimates indicate that every year of delay in introducing an adequate price on carbon increases the total economic costs by over 2 per cent.

Gregor Schwerhoff, World Bank

Mr. Schwerhoff's presentation was titlted "Evaluating climate change adaptation strategies with a macrostructural model". He presented analysis that had as its objective identifying policies to achieve debt sustainability and to address natural catastrophe risks, using Jamaica as a case study. There are four hurricane management strategies, namely adaptation, insurance, a contingency fund and debt repayment. The results of the analysis suggest that risk management constitutes an intertemporal transfer of resources. The main conclusions imply that it is very important to model the disruptive nature of events; the financing of risk management plays a critical role; and the use of insurance payments has an important effect on outcomes.

Amit Kara, NIESR

Mr. Kara first highlighted the place of the model in the sense that the climate change literature provides the input for shocks to the model, with NiGEM generating the response to these. There are several climate change channels, namely temperature, migration, commodities and uncertainty. In a scenario analysis, the first case considered the effect of higher CO_2 prices on commodities. The results indicate a significant increase in commodity prices – especially coal, with tangible impacts on production and consumption. The second scenario used the production function to examine the effect of higher temperatures on productivity. The results suggest that there would be a marked decline in the fossil-fuel intensity of the energy sector. A further scenario examined issues tied to uncertainty and confidence.

11:00-12:55	Climate risks: Country perspectives

Juan-Rafael Vargas, Universidad de Costa Rica

Mr. Vargas gave an overview with a historical perspective on how Costa Rica developed an awareness for the need to integrate preparedness regarding natural disasters into policy making. Major events that prompted this approach included severe earthquake and volcano damage in 1910 and 1963, prompting strict regulation on building codes and creation of a National Emergency Commission. In the 1970s and 1980s, the country took significant measures to have the policies and institutions in place to deal with natural disasters. Among the noteworthy policy results is the increase in the forest coverage of the country from 34% in the 1960s to 54% today. The first hurricane to cross over the country in 300 years hit in the year 2017. The institutions, including a nationwide health system, were already in place, which helped to prevent the spread of dengue fever experienced in some neighbouring countries.

Dilli Raj Khanal, Institute for Policy Research and Development, Nepal

Mr. Khanal highlighted that Nepal is one of the most vulnerable countries regarding climate change. This derives form the threat of melting glaciers, more frequent droughts and floods, significant threats to the biodiversity of the country, and problems in water management and agriculture. Policies to address these issues include the support of international climate agreements, an emphasis on green growth and a separate climate budget. The key lessons of the national experience include, among others, viewing climate finance as a cornerstone and the need to emphasise policy coordination.

Dominique Ting, National Economic and Development Authority, Philippines

Ms. Ting stressed the high degree of vulnerability of the Philippines to climate change. There has already been significant damage and loss of lives because of climate-change-related events, compounded by the effects of the El Nino-phenomenon. The sectors that are especially prone to the fallout from climate change are agriculture and fisheries. In terms of the effects, these include a tangible threat to biodiversity, especially regarding coral reefs. As a consequence, the country has already taken various measures to integrate climate change into policy plans. But the success of natural risk reduction programmes depend on community early warning systems, which are currently only set up in some areas.

Session 9 - Energy and Climate Policy

14:00 – 15:15	Energy and climate policy modelling

Stefan Schleicher, University of Graz

Mr. Schleicher began by presenting recent data on energy demand and greenhouse gas emissions, emphasizing how the current trajectories are not aligned with the Paris Agreement goal. Less than 1/3 of the rise in global energy demand in 2018 was met by renewables. He proceeded to showing a few examples of future low-emissions energy systems, highlighting how there is a plethora of tools beyond renewables and electric vehicles. Mr. Schleicher also asserted that there is a need for a radical transformation of our energy systems together with a deepened structural energy modelling approach, since most conventional modelling is not adequate for the radical transformation that is necessary. This approach is based on modelling 3 “layers”: physical aspects which identify the energy services required (e.g. thermal, mechanical and specific electric functionalities); economic aspects (e.g. technology investment), and markets and institutions (e.g. energy standards). Implementing this approach requires shifting the focus from searching where to get cheap and plentiful energy to thinking what it is needed for, he stressed.

Robert Kaufmann, Boston University

Mr. Kaufmann argued that there are causal relations among electric vehicles, rooftop photovoltaic systems, its installation costs and charging stations, such that a virtuous cycle might be started by seeding the system and taking advantage of feedback loops that accelerate the transition to low-carbon technologies. His evidence shows that these causal relations are created both by a 'learning by doing' effect and by the psychology of decision making (e.g. influence from neighbours). This means that, to maximize the use of photovoltaic systems and electric vehicles, policymakers must make use of the spatial and psychological nature of decision making, namely by maximizing people's local and personal exposure to these technologies, and thus initiate feedback loops that accelerate the transition to carbon free sustainable technologies. For example, policy can be designed so that rebates are higher in areas with a low uptake of targetted technology.

Milan Elkerbout, Swedish Environmental Research Institute/CEPS

Mr. Elkerbout began his presentation by explaining the evolution of carbon pricing discussions in the European Union's climate policy – from very dominant, to less dominant during the 2008 financial crisis, to reform and revival since 2013 with prices recently becoming more promising. He explained how the Kyoto protocol was a very top-down climate governance system that led to only modest emissions reduction targets per country. The price of carbon virtually collapsed in 2009 with an oversupply of allocations. Allocations are conceptually easy to devise but hard to implement in practice. For example, compliance can be difficult when electoral prospects risk being hurt by climate policy. These complications arise from the legislator also being the supply side. Mr. Elkerbout asserted that the problem can be overcome if the legislator interferes predictably on supply. Looking forward to the future of the E.U.'s Emissions Trading System, Mr. Elkerbout believes that, while it can incentivise innovation, its biggest effect lies in disincentivizing use of carbon-intensive assets, as was observed in the United Kingdom recently.

15:15 – 15:55 Panel discussion: Accelerating energy transition

In his opening remarks, the moderator, **Mr. Shantanu Mukherjee**, provided a current picture of energy access, sources and efficiency globally. He pointed out how energy constitutes the bulk of carbon emissions and how, worryingly, the pledges made towards the Paris Agreement are insufficient to reach the Paris target. In fact, the expansion of fossil fuel production capacity continues. Presently, the world is on track to surpass 1.5 degrees Celsius increase in temperature in 2040. The actual target would imply reaching net zero emissions by 2040 and, thus, very steep cuts in the amount of carbon dioxide emitted per year from now until then. Mr. Mukherjee then showed some scenarios where this target is reached, with and without carbon capture and storage. He concluded by asking the panel their views on most urgent policies, management of trade-offs, role of global standards, and ways towards concrete action.

Ms. Amy Jaffe highlighted how we are already on the way to tremendous changes, pointing to scope for low-level policy making to be targeted towards higher yield transitions. For example, focusing regulation on the truck fleet rather than passenger cars; treating buildings as potential power-storage units. She emphasized specifically the role of improvements in automation. New automated systems at UPS, for example, eliminated many miles from delivery routes by using algorithms to optimize which packages go where and in which order. However, new issues are posed by the management of such large amounts of data, including energy use.

Mr. Gernot Wagner emphasized high-level policy making and argued that a price for carbon is needed; and the question is on how best to do it. For instance, the price could be implicit from given regulations or explicit in the form of a tax. Currently prices are not nearly in the vicinity of where we need to be. In the US, Mr. Wagner suggested that political momentum might change substantially after (and as a result of) the current Administration. Several US states are unilaterally introducing important new carbon measures (New Jersey, California, New York). Oil majors are now also supporting a price on carbon dioxide. Mr Wagner also stressed that subsidies can be designed to support the sort of lower-level transitions discussed by Ms. Jaffe.

In **Mr. Milan Elkerbout's** opinion, the Paris Agreement nationally determined contributions (NDCs) is crucial, since it is inevitable that different countries want to move at different speeds. However, it remains to be seen if the expected periodical increase in ambition regarding the NDC targets will work. Still, he argued, if a few key carbon initiatives were successful (e.g. California, China) that would have a global impact. He added that countries should look beyond carbon price policies to demand-side policies and regulation. Global standards could be effective too, he stated, if accompanied by carbon dioxide embedded content measures, since this would help prevent carbon leakage. The European Union is currently discussing this.

Finally, **Mr. Alexander Apokin** presented his views on the state of the global energy transition. He indicated that there is much hope attached to non-fossil fuel energy technologies, sector reform (e.g. zero emissions in agriculture, buildings and vehicles) and negative emissions technology. However, in his opinion, neither the energy technologies nor the sectors are ready for the transition necessary and could jeopardize universal energy access (SDG 7). For example, the costs of renewable storage is high. In his opinion, current technologies, such as natural gas, will have to bridge the gap until full decarbonization, to maintain affordability, reliability and sustainability.

During the ensuing discussion the panelists stressed some of the political economy aspects of energy transition; supported the introduction of some form of carbon border adjustments; and emphasized the need for global pricing.

Session 10- Coping with Stranded Assets

16:15-17:20	Coping with stranded assets

Mr. Stefan Schleicher introduced the session, stressing that stranded assets could take 3 forms: regulatory stranding (due to a change in regulation); economic stranding (due to a change in relative costs); and physical stranding (due to distance/drought/flooding). He asked the panelist to consider: the relevance of the Paris Agreement; existing evidence and expectations of stranded assets; and current controversies.

Amy Jaffe, Council on Foreign Relations

Ms. Jaffe highlighted the science of unburnable carbon assets, referring to the large stock of fossil fuel reserves that will be rendered unusable because of the severity of the climate problem. Different regions are affected by this to a different extent and there are several features that can help in outlining the problem and challenge of stranded assets. In financial terms, for example, there is the question if and how markets anticipate and factor in this issue. Recent experience suggests that there is a heightened sensitivity in financial markets to climate risk, as illustrated, for example, by measurable share price declines in response to the publication of climate risk analyses. There is also the observation that larger and more expensive resources entail a greater stranded-asset risk. A major challenge is achieving an orderly decarbonization. Problems in this context include a green paradox, namely that if CO_2 costs are expected to increase, then this can create an incentive to extract more carbon-based assets faster, creating even more environmental damage. Second, there is also a major geopolitical dimension. Fossil fuels have been the basis for geopolitical power and influence for numerous countries and if CO_2 pricing leads to the stranding of these carbon assets, then countries may see a need to replace their waning geostrategic oil power with a shift to hard power.

Alexander Apokin, Gas Exporting Council

Mr. Apokin underlined that there are a number of fundamental uncertainties. These include whether the global carbon budget is technology-dependent, the challenge of implementing stated plans and the problem of identifying the precise timing and sequence regarding the point of stranding. With respect to the case of Russia, there is no national climate policy and the working expectation is that any external stranding effect on asset prices will be negligible. There is little active concern that domestic assets will become stranded.

Zain Alsharif, MOHRE-AE, United Arab Emirates

Mr. Alsharif provided an overview regarding the United Arab Emirates (UAE). This included, in particular, various initiatives to address climate change and achieve a low-carbon economy, with reference to a number of different policy areas. He stressed that the Government places climate change at a high level on its agenda.

Jane Cunningham, National Institute of Economic and Industry Research, Australia

Ms. Cunningham highlighted a number of issues concerning the situation in Australia. This included, in particular, the role of the coal industry and trends in investment and in energy markets. There is also the challenge of balancing the need for reducing emissions with the need of providing reliable electricity supply. She also stressed that coal-fired power stations require a lifespan of about 50 years to see an adequate return on the initial investment. Renewable electricity projects are now cheaper than coal or gas, and there is a high risk of early closure of existing plants, impacting livelihoods in regions that rely on the coal industry. Political pressure has eased efforts to close coal plants, but the market will prevent an expansion of coal-fired power.

Suzana Monteiro, Banco Nacional de Angola

Ms. Monteiro provided details on the issue of stranded assets with respect to Angola. The country has set a target of cutting CO_2 emissions by 35 per cent in the energy sector, with a result test coming up in the year 2020.

Day 3 – Wednesday, 19 June 2019

Session 11 - Regional Policy Issues

09:00 – 10:40	Regional policy issues

Khaled Hussein, UN Economic Commission for Africa

Mr. Hussein gave a presentation entitled "Policy for Financing Sustainable Development in Africa." In his presentation, he pointed out the expected growth in Africa in 2019, 3.4 per cent, is not sufficient to meet development needs or achieve the SDGs. He emphasized that fiscal policy was the key to driving Africa's growth and development in the long-run. For example, higher government spending on health and education was essential for poverty reduction. Despite that, the current level of government revenues to GDP, which stood at 21.4 per cent, was too low to provide sufficient resources to support national development strategies. He suggested that the mobilization of revenue in African countries needed to be strengthened through six key areas, including tax policy, expanding non-tax revenue, tax administration, policy options for the natural resources sector, and debt policy. He suggested that enhancing revenue raising through these channels can raise government revenue by up to 12-20 per cent of GDP.

Daniel Titelman, UN Economic Commission for Latin America and the Caribbean

Mr. Titelman gave a presentation entitled "Fiscal Panorama of Latin America and the Caribbean". In his presentation, he emphasized that the region was facing fiscal policy challenges in a low-growth environment, and sovereign risk is of great concern. Many countries faced a dilemma as the low-growth situation forced the countries to consolidate fiscal expenditures, including social spending. He argued that the vital role of fiscal policy in the region for the SDGs, despite the fact that recently monetary policy has had more weight in domestic demand management. He proposed five instruments to expand fiscal space and enhance fiscal capacities, including an instrument to reduce tax evasion and illicit financial flows, an instrument to utilize taxes to promote the digital economy and public health, an instrument to change incentives through environmental taxes to move towards decarbonization of the economy and productive reconversion, an instrument to evaluate the use of tax expenditures, and an instrument to strengthen personal income tax and property taxes. He also stressed that the next generation of counter-cyclical policies needed to prioritise both the level and composition of spending.

Sweta Saxena, UN Economic Commission for Asia and the Pacific

Ms. Saxena gave a presentation entitled "Beyond growth: Towards a green future". She briefed the recent economic situation in East and South Asia, pointing to the fact that the region achieved broadly stable growth outlook and low inflation of this year. However, she pointed out that the present pattern of growth has come at the cost of social inclusiveness and environmental degradation. In fact, five out of the top ten countries in the world that are most severely affected by climate change are located in East and South Asia. She emphasized that our ambitions could be raised beyond economic growth, pointing to ESCAP's estimate that the required green investment to achieve SDG 7 (Affordable and clean energy) is an additional $434 billion, or 27 cents per person per day, or 1 per cent of GDP. In her assessment, this transition to a low-carbon economy was largely affordable with strong development partnership. The removal of fossil fuel subsidies and a small carbon tax would be sufficient to achieve about half of the adjustment.

Mohamed Hedi Bchir, UN Economic and Social Commission for Western Asia

Mr. Bchir gave a presentation entitled "Energy subsidy reform in the Arab region". He pointed out that many developing countries, particularly Arab countries, adopted a development model based on a "cheap energy paradigm". Arab countries still represented more than a quarter of global energy subsidies, namely $117 billion out of the world total of $436 billion, despite the fact that those countries, including major oil exporters, were recently engaged in subsidy reforms. Elimination of energy subsidy was a contentious issue in the region's experience in economic reform. Subsidized cheap energy resulted in inefficient use of energy as well as fiscal burden, but raising energy price could create negative economic impact through inflation. The low price of electricity has also been an important factor attracting investors to the region. He showed the results of simulation exercises based on a Computable General Equilibrium model for Saudi Arabia and Tunisia. The simulations demonstrated that a reduction of energy subsidy could generate fiscal space, reducing fiscal deficits and enhancing fiscal sustainability. Moreover, he emphasized that the inflationary impact would be short-term while the reduction of a subsidy would open up alternative policy options, such as lump-sum transfers for the poor.

Session 12 – Measuring Potential Output

11:00 – 12:05	Measuring potential output

David Turner, OECD

Mr. Turner presented the OECD's approach to estimating potential output. He presented a newly developed methodology by the OECD for potential output estimation, noting that substantial revisions have been made to the initial output gaps estimates for G7 countries in 2007. The size of average revision was 2.3 per cent of GDP. He indicated that the largest source of revision was the so-called labour efficiency gap. To smooth the adjustment process, the OECD regresses filtered estimates against adjustment variables for estimating labour efficiency, which vary from country to country and may include capacity utilization, share of investment in GDP, current account balance and commodity prices. This methodology turns out to be more efficient than using a univariate HP-filter alone. OECD estimates of potential growth are much less cyclical compared with those of the IMF or the European Commission, exhibiting lower sensitivity of change in potential output to the change in actual output. He stressed that the advantages of the presented method, where the methodology is common across countries, but different adjustment variables are used for each country, include: avoiding sample end-point problem by not relying on the forecasts; conceptual simplicity; and also reduced revisions compared with the HP-filter based methodology.

Roberto Mariano and Suleyman Ozmucur, University of Pennsylvania

Mr. Mariano and Mr. Ozmucur gave a presentation entitled "Estimating potential output in the Philippines", based on the ongoing consulting project of the authors with the Central Bank of the Philippines, which is aimed at identifying problems in measuring the output gap and improving the methodology. According to the presenters, among the variables that central banks often consider in their assessments are the inflation gap and the output gap and reliable estimates of the economy's potential output and output gap are particularly important for inflation targeting and monetary policy setting. The presenters discussed some of the existing potential output and output gap estimation models, noting that the Central Bank of the Philippines is using several approaches, including statistical filters, production function, and a semi-structural model. The outcomes are then averaged to generate an estimate of potential output. Then they discussed the issues that have been raised on their specifications and results, and the potential extensions to the existing model, in order to capture the impact of the labour market dynamics and the financial cycle developments in the Philippines. Special attention was paid to estimating total factor productivity by using production functions. Their research also considers alternative ways of combining the estimates. The authors stressed a preference for the Macroeconomic Unobserved-Components Models (MUCM) approach, which encompasses all other models and can be used for model selection.

Ray Barrell, Brunel University/LSE Centre for Macroeconomics

Mr. Barrell provided his comments on the OECD methodology and on the caveats of similar estimations in general. He mentioned concepts of the equilibrium level of population, labour force, and unemployment; he also stressed the importance of modelling production technology and capital stock. According to the discussant, using a Cobb-Douglas production function underestimates technical progress; only in case of Hicks-neutral technical progress, is a Cobb-Douglas function justified. However, the available micro-level evidence supports the idea that technology is better represented by a CES production function with an elasticity of substitution of 0.5 and time-varying labour share weights to produce a good estimate of the technical progress. He also noted that the OECD uses an expectations-adjusted Philips Curve with an embedded Kalman filter on unemployment for the calculations of the equilibrium unemployment level. However, there are other important parameters such as the wedge between producer and consumer prices, real exchange rate and the tax wedge; changes in those can be large and permanent creating an end-point problem if they are all omitted from the augmented Philips curve.

He then turned to the end-point problem and the problem of dealing with structural breaks similar to the one occurring in 2007-2008. Those problems are common when HP and other filters are used. In conclusion, Mr. Barrell suggested to increase the role of energy in the production function, stressing that changes in energy use change potential output. Currently, policies to address climate change reduce carbon use; the effects of using renewable energy sources immediately feed into production costs, but affect trend output more slowly.

During the discussion, the participants noted that modelling energy input is complicated for the advanced economies, since for them energy and labour are not perfect substitutes. As one additional difficulty, they mentioned problems of incorporating digital sector of an economy into the GDP calculations.

The discussion in this session stresses that a better understanding of the cyclical positions of economies would help to assess monetary and fiscal policies.

Session 13 – Protectionism, Trade Costs and Global Value Chains

12:05-13:20	Protectionism, trade costs and global value chains

Byron Gangnes, University of Hawaii

Mr. Gangnes presented the paper "Production Switching and Vulnerability to Protectionism". Mr. Gangnes initiated his presentation by discussing the Sino-US trade war. He emphasized the role that production switching to other countries can have in the trade impacts of the trade war. Importantly, the capacity of a company to switch production to other countries depends on the suppliers' position in the global value chain. Then, Mr. Gangnes introduced a model to analyze the mechanisms of how tariffs affect trade. A crucial insight of the model is that the effects of trade hikes –or tariff-equivalent barriers- critically depends on the substitutability of home and foreign goods, or between alternative foreign source countries. In the model, companies have the option to produce at home and abroad. The option for multinational companies to relocate production increases the tariff elasticity of the supplier country's exports. Also, export countries that are specialized in "footloose activities" are more elastic to changes in tariffs. With this theoretical model, Mr. Gangnes then discussed the current situation of China. He commented how the export-led development strategy in China has evolved in recent decades. For instance, the share of contract manufacturing in the total processing trade increased by 11% between 2000 and 2006. A key implication is that this upgrading makes Chinese firms more indispensable in GVCs and their exports less footloose. Thus, gradually China should become less vulnerable to protectionism. However, he also noted some evidence of firms moving to Viet Nam, alongside a rise in exports from Viet Nam to the US.

Sebastian Vergara and Helena Afonso, UN/DESA

Ms. Afonso and Mr. Vergara presented the study "Trade Costs and Exporter Dynamics in Africa". Ms. Afonso initiated the presentation by discussing the motivation for this research. She emphasized that exports are a crucial aspect not only of short-term growth prospects but also of medium-term development trajectories, as export activity is a major source of productivity growth. Also, analyzing export dynamics is currently extremely relevant in Africa due to the African Continental Free Trade Agreement (AfCFTA), which went into force last May. Then, Ms. Afonso presented the key questions that this study attempts to tackle: Are African exporter dynamics different? Are trade costs especially relevant in Africa versus other regions? How do trade costs relate to diversification among African exporters? In moving into the results, Ms. Afonso discussed some new insights regarding the micro export dynamics in Africa. Importantly, she mentioned that African exporters are fewer, smaller and relatively less diversified than exporters form other regions. She also emphasized that African countries display the highest rates of entry and exit of exporting firms, exporting products and export destinations, while at the same time showing the lowest probability of survival of exporting firms and products. This suggest that export activity is volatile, with a lot of experimentation. Furthermore, African exporters seem to have major difficulties in maintaining trade relationships. In the second part of the presentation, Mr. Vergara described the econometric exercises. The main results are that trade costs in Africa are negatively associated to the size of new exporters and surviving new exporters, and to the survival rate of exporters in foreign markets. Mr. Vergara commented that these results were robust and consistent to different sample periods and to using a sample of only developing countries. In understanding the role of trade costs on diversification within Africa, the empirical results show that trade costs are negatively associated to diversification across destinations but not across products. In the final part of the presentation, Mr. Vergara discussed the main results and what can be the effects of the AfCFTA. He mentioned that the AfCFTA should generate large benefits not only in terms of export flows but also in terms of productivity gains associated to the reallocation of resources that lower trade costs generate. Yet, Mr. Vergara also highlighted that the AfCFTA impacts on product diversification, a crucial element of development, will likely remain limited without strengthening productive capacities.

Janvier Nkurunziza, UNCTAD

Mr. Nkurunziza made a presentation on "Commodity Dependence, Distribution of Value and Export Diversification". Mr. Nkurunziza initiated his presentation by discussing about the definition, scope and relevance of commodity-dependence in developing countries. Notably, he emphasized three different aspects of why commodity-dependence matters from a development perspective. First, commodity prices display a downward trend from an historical perspective. Second, there is high producer price volatility, which affects investment decisions. And third, many commodity-dependent developing countries are stuck at the bottom of the value chain. In this regard, Mr. Nkurunziza emphasized that many commodity markets display an unequal distribution of value, with the coffee sector in Ethiopia being an illustrative example. Notably, Mr. Nkurunziza highlighted that there is need for an international dialogue on the fairness in the allocation of value, which might include UNCTAD as a key facilitator. In the last part, Mr. Nkurunziza discussed some aspects of horizontal and vertical diversification. He emphasized how product and export diversification is a key aspect of development, particularly by comparing two contrasting country experiences in recent decades, Costa Rica and Zambia. While product and export diversification have remained largely stagnant in Zambia, in recent decades Costa Rica was able to substantially change their export structure due to a proactive set of productive and industrial policies. Finally, Mr. Nkurunziza discussed how horizontal diversification can be a solution to commodity-dependence and, at the same time, become the best response to the effects of climate change.

Comments

The moderator, Mariangela Parra-Lancourt, closed the session with brief remarks, emphasizing the urgent need for developing countries to insert themselves in global value chains to strengthen their development trajectories.

Notes

Following the final session, a meeting was held between the participants from UN DESA, UNCTAD and the UN Regional Commissions, who will be involved in the preparation of the WESP 2020. The meeting was focused on discussing the content of the upcoming report, taking into account all the presentations at the LINK meeting.

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