

Webinar on “A Nontechnical Overview of Economic Modelling Tools for Public Policy and Impact: Morphing Knowledge into Practice”

15 December 2020

Online Webex Live Event, Streamed on YouTube channel

<https://youtu.be/nfq75rTOsi4>

SUMMARY OF DISCUSSIONS

Mrs. Nathalie Khaled, ESCWA, welcomed the attendees from the different parts of the world. She gave a special thanks to the representatives from the Arab states and the focal points for the National Developing Planning project managed by ESCWA. She mentioned that although we are facing a difficult period, ESCWA is still putting all the effort to complete this important project. She explained that the webinar will present the economic modelling tools produced by ESCWA and how these tools can be used for economic recovery and growth during times of crises, including the COVID-19 crisis.

Session 1: Introductory Remarks

Mrs. Khaled introduced the first session of the meeting which explored what it means to adopt economic models to navigate through uncertainty and improve public policy and dialogue. She introduced the first speaker, Mr. Moctar El Hacene, Shared Economic Prosperity Cluster Leader, UNESCWA, to elaborate on his topic.

Mr. El Hacene began by thanking the partners who helped organizing this meeting: The Jordanian Ministry of Planning and International Cooperation, The Tunisian Ministry of Finance, UNICEF, and USAID. He stated that COVID-19 has created uncertainty in the global economy and that the tools discussed in this meeting can help alleviate these issues. He added that COVID-19 showed us that the global economy is much more fragile than we thought it was. He believes that the most important question is how to improve policies to accompany the risk and instability that we are facing nowadays.

He continues by saying that these economic modelling tools give us a space for trials. He furthermore states that these models allow us to test how different scenarios and variables can alter an economy's performance. He adds that such economic models allow policymakers to pick the most suitable policies



for the country. Moreover, he states that these economic models allow to us to be flexible when dealing with different scenarios and problems.

He stated that there is no one specific way of dealing with uncertainty. He progresses by saying that any political decision will have its consequences. He explains that the COVID-19 pandemic has increased inequality around the world. He adds that most of the economic losses caused by COVID-19 are incurred by the poor. He states that Arab countries were already suffering from high youth unemployment even before the beginning of the pandemic. Moreover, he states that the youth of the Arab region have a negative outlook for the future.

After that he asks whether high unemployment and debt levels in the Arab region can be solved by using economic modelling tools. Economic modelling must go hand in hand with a new social contract that lives up to the expectations of the youth of the Arab region. He then adds that the biggest responsibility falls on the policymakers and governments to adopt the suitable tools that would help them implement economic policies that would ensure sustainable development and growth.

Next, Mr. El Hacene stated that after the beginning of the pandemic many Arab countries came forward to ESCWA asking for their help in enhancing their modelling tools such as CGE modelling to help overcome the effects of this pandemic. Mr. El Hacene then mentions a couple of benefits gained from adopting solid economic modelling tools. First, economic modelling tools allow policymakers to forecast complex problems that may arise and in turn analyze these problems while coming up with better strategies to control them and deal with them. Second, economic modelling tools allow policymakers to envision the effects of some variables such as climate change, tax cuts or hikes, and industrial policies on the economy. Third, modelling tools give stakeholders a solid base for dialogue and debate. This allows stakeholders to have a unified vision for the economy.

Mr. El Hacene closed his speech by hoping that this webinar will be informative and educational and once again thanked the participants.

Session 2: Country-specific experience from the Arab Region:

Mrs. Khaled thanked Mr. El Hacene for the valuable information provided in his speech and introduced the second session which focused on the experiences of member states with economic models built in partnership with ESCWA, emphasizing on both the challenges in implementation and the national gains made. She then introduced the first speaker of this session Mr. Tawfiq Al Rajhi, Former Minister of Major Reforms and University Professor of Economics in Tunisia and asked him to share Tunisia's experience with economic modelling.

Mr. Al Rajhi began by thanking ESCWA for organizing this webinar and the different representatives from the different ministries for participating. He stated that ESCWA is playing a very important role in helping the Arab states. He believes that Tunisia can share its knowledge on economic modelling with other Arab countries that are still lagging behind on this topic.

After his brief introduction, Mr. Al Rajhi began by explaining how the different ministries in Tunisia benefitted from the cooperation with ESCWA. ESCWA helped Tunisia with the reforming of the energy and pension subsidies. He explained that Tunisia used economic models to predict the negative impacts of removing subsidies on citizens and firms. He stated that Tunisia had started reforming its pension

program since 2016 but back then it didn't have the necessary technical tools to assess the impact of such a change on the economy in the long run. As a result, they had to use a partial model that took into account the effect of change wages without linking it to economic components such as government budget, consumption, investment etc.

Next, Mr. Al Rajhi explains how Tunisia cooperated with ESCWA on this topic and how it managed to improve its modelling tools. They created a model that was comprehensive and that considered all economic consequences associated with reforming the pension program. The model developed in cooperation with ESCWA allowed the assessment of a change in parameters such as retirement age on the components of GDP.

He then explained the three ways in which Tunisia benefitted from the improved economic modelling tools. First, it is very useful for diverting economic policies to the right path of economic development and growth. Second, the modelling tool developed with ESCWA was made available to all departments, ministries, and institutions in Tunisia that would benefit from it. Thirdly, it allowed for the involvement of international organizations such as the IMF, World Bank, USAID, and ILO in the reform process.

Mr. Al Rajhi concluded his part by thanking ESCWA for its experience and expertise on this topic and for all the help provided to Tunisia.

Mrs. Khaled introduced the second speaker of this session Mr. Hadram Al-Fayez, Head of Policies and Studies Department at the Ministry of Planning and International Cooperation and asked him to share Jordan's experience with economic modelling and the benefits of using to implement policies and reforms.

Mr. Al-Fayez began by welcoming all the participants and thanking ESCWA for the invitation to attend this seminar and for the everlasting support.

After his introductory remark, Mr. Al-Fayez stated that he would start by explaining the goals behind economic modelling in Jordan. First goal was to solidify Jordan's ability to implement well thought out plans with greater analysis of public policies by using the CGE model. Second, creating a base to integrate economic modelling into the analysis, designing, and implementation of new policies by government institutions. Finally, to give policymakers a better understanding of the detrimental economic and social effects created by COVID-19. In addition, it allows policymakers to implement policies based on the different outcomes of several possible scenarios and to forecast the negative effects of a change in policy on the economy. Finally, it helps Jordan better cooperate with the IMF on a reform program currently being worked on.

Next, Mr. Al-Fayez briefly talked about the cooperation with ESCWA to build a more user-friendly modelling tool. Several weekly online meetings were held between ESCWA and the Jordanian team to finally come up with a model that was specifically catered to the needs of the Jordanian economy. After the model was completed, it was distributed to the relevant government institutions to be used in implementing policies.

Finally, Mr. Al-Fayez ended his speech by thanking ESCWA once again for their patience and support while in the process of building a suitable economic modelling tool for ESCWA.

Session 3: ESCWA Modelling Toolkit:

Mrs. Khaled thanked Mr. Al-Fayez for sharing Jordan's experience with economic modelling and then opened the third session which provided a non-technical overview of the ESCWA economic modeling toolkit (dimensions, basic function and ESCWA roadmap for developing national and regional technical capacities in economic modeling). She introduced the speaker for the third session Mr. Mohamed Hedi Bchir, Chief of the Modelling and Forecasting Section at ESCWA.

Mr. Bchir began by thanking Mrs. Khaled and the preceding speakers Mr. Al Rajhi and Mr. Al-Fayez for sharing their experiences.

Mr. Bchir introduced the session by listing out the main goals from the economic modelling project carried out by ESCWA. First objective is to strengthen government planning capacities to conduct policy analysis through systematic use of modelling. Second, to institutionalize the use of modelling techniques in all government ministries and departments.

After introducing us to the benefits of ESCWA's project on economic modelling, Mr. Bchir begins explaining how these tools work and how they benefit the different governments involved. Fiscal reform such as VAT, personal tax, and corporate taxation is usually assessed using the CGE model. On the other hand, pension reform is assessed using the OLG model as this model takes into account the demographics of the country. In addition, the OLG model shows the effects of a certain reform twenty years from now which is crucial for pension reform. To assess impacts of trade agreements, tradeSim model should be used as it connects the economies of the worlds. All the models mentioned above follow a user-friendly approach. Next, he discussed the usefulness of the modelling techniques ESCWA produces. Government budgets are usually based on forecasts of several economic indicators. A shock to the economy could alter these predictions or forecasts. The modelling toolkit from ESCWA allows policymakers to factor in an external or internal shock like COVID 19 or a set of reforms that was not factored in initially and eventually see the impact of such changes on economic indicators.

Mr. Bchir proceeds by explaining the several steps that go into building an economic modelling toolkit. The first step involves setting up a social accounting matrix agreed upon by both the government and ESCWA. Next, the CGE model is created as a beta version and sent to the designated government. The government reviews it and sends it back along with the remarks. After that, the interface is created and sent to the government. The government then puts the interface through a stress test where they use the model daily while trying different scenarios using it. This step could take quite some time as both sides are trying to find the perfect model for that specific country. Finally, ESCWA provides two types of training on the economic model. The first training involves teaching the members of the governmental team how to use the interface. The second is a technical training on the programming part of the tool which involves teaching them how to create their own models based on their own parameters.

Finally, Mr. Bchir briefly visually demonstrated how the model can be used to assess the impact of a certain change in VAT for example on indicators such as GDP, budget deficit, inflation etc.

Mr. Bchir ended his speech by thanking all the participants once again.

Session 4: Regional and International Cooperation in the Field of Economic Modelling:

Mrs. Khaled introduced the fourth session which provided an overview of the role and importance of strengthening strategic partnerships with other institutions and United Nations teams and talk about financing options for capacity building projects in the Arab region.

Mrs. Khaled introduced the first speaker of this session Mr. Mohammed Ben Abdullah, Vice President of Tax Policy Team at USAID.

Mr. Ben Abdallah, in his turn, thanked Mrs. Khaled and Mr. Bchir for the invitation to this webinar and the for providing them with the chance to speak about this highly important topic for all Arab countries.

After his introductory remark, Mr. Ben Abdallah began by stating that his intervention consists of three parts: explaining the importance of economic modelling tools when performing economic reforms, provide an example of technical cooperation between the financier USAID and ESCWA to develop the CGE model, discuss the next steps to support this technical cooperation to develop these economic models.

He then shares Tunisia's experience with USAID and ESCWA while developing economic modelling tools to help stimulate growth. He begins by stressing on the fact that Tunisia must continue reforming its economic system. A reform of its economic systems means a major shift in the public policies implemented. Such a major shift in public policies may create imbalances and uncertainty in the economy. In addition, this may affect citizens of different income groups, companies operating in several sectors, and macroeconomic indicators such as inflation, GDP, and industrial output. Moreover, he states that the solution to avoid such uncertainty is by testing the different proposed policies using economic modelling tools which in turn allows policymakers to take well informed decisions based on factual scenarios. The Tunisian Ministry of Finance in coordination with FRST developed several economic modelling tools such as the microsimulation and CGE models. The project aims to support the Tunisian government to improve its management of taxes thus increasing its tax revenue, develop its tax policy, and strengthen strategic communication by improving the services offered to taxpayers. Such development and improvement of tax policy in Tunisia would lead to a better business and investment environment, the creation of new job opportunities, and sustainable economic growth.

Mr. Ben Abdallah proceeded by providing additional examples of cooperation between ESCWA and USAID/FIRST. ESCWA helped the Tunisian government reform its energy subsidy by developing the CGE model to study the effects of energy subsidy reform, changes in economic policies, and external shocks such as an increase in oil prices or COVID-19 pandemic. A meeting was scheduled where Tunisian Ministry of Finance employees, non-technical officials, and policymakers were taught how to use the CGE model. The CGE model was used to study the effect of COVID-19, form the 2021 government budget, and study the effects of energy subsidy reform.

In the final part of his speech, Mr. Ben Abdallah insisted that several steps have to be taken such as continuously building and developing the abilities of the Ministry of Finance to develop the CGE model as per the country's needs, continued cooperation between the different international organizations to be able to share their experiences, and the need to form a unit in the Ministry of Finance whose responsibility would be to provide detailed economic analysis and develop the economic modelling tools further.

Mr. Ben Abdallah closed his part by thanking the participants for their attention.

Mrs. Khaled thanked Mr. Ben Abdallah for participating and for assurance on the importance of cooperation on this topic between local, regional and international organizations. She then proceeded to introduce the final speaker of the webinar Mr. Nayef Al-Khawaldeh, Social Policy Specialist at UNICEF.

In his turn, Mr. Al-Khawaldeh thanked ESCWA for organizing this webinar and hoped that cooperation on such topics can continue to achieve sustainable development.

Mr. Khawaldeh began by stating that his speech is made up of four main sub-topics: project on CGE modelling for Jordan, importance of economic modelling, economic modelling and social protection, and role of international institutions.

After his introductory remark, Mr. Al-Khawaldeh spoke about the CGE modelling project for Jordan. The idea of this project came from the Ministry of Planning whom UNICEF have had several collaborations with previously. The Ministry of Planning launched the first social safety strategy in Jordan on which UNICEF had the chance to work on for two years. Soon after that, the CGE modelling project for Jordan was launched in cooperation with ESCWA who provided their knowledge and experience on this topic. The main goal from this project was to strengthen planning capacities and institutionalizing the use of economic modelling for evidence-based policy design and analysis. In addition, the project aimed to allow policymakers to forecast and assess the effects of a change in policies on the macroeconomy, public finances, and the society.

Mr. Al-Khawaldeh then discussed why economic modelling is of such importance to Jordan. He explains that economic models are a tool for strategic planning used by all governments around the world. On the other hand, when the country is prone to more external shocks due to its geographical location and the nature of its economy e.g. Jordan, the need for economic modelling increases due to such factors. He stresses on the fact that economic modelling tools do not remove uncertainty but only mitigates its effects. Jordan's vulnerability to shocks stems for several factors related to the economy, geographical location, and population. Jordan has a small open economy which largely depends on services and foreign inflows, as a result, any external shocks would easily influence it. In addition, the large informal sector means that shocks such as COVID-19 would cause massive disruptions to that sector thus leading to high unemployment. Jordan is situated in the Middle East which has had its fair share of war and turbulence in past few years. Such wars have a negative spillover effect on the Jordanian economy leading to lower growth, higher unemployment, and reduced remittances. A massive influx in refugees and a significant increase in population also adds downward pressure on the economy.

Next, Mr. Al-Khawaldeh explained how we can use economic modelling for social protection purposes. A solid social protection program must guarantee equitable public spending meaning it should reach rural areas and the people in need. He added that countries should always be prepared for emergencies and improve responsiveness to shocks. Public finances should always have a certain amount of money kept for the cases of emergencies or shocks, that would soften the impact on low income citizens. According to several studies, women and children are the ones most affected by crises. Any public policy implemented should take into account the effects on women and children. To able to achieve a comprehensive social protection program, there must be an increase in the availability of data on factors such as poverty, districts, climate change, and refugees.

Finally, Mr. Al-Khawaldeh briefly talked about the role of international institutions in developing economic modelling tools to assess public policies. The international institutions should provide technical assistance to support institutionalization of economic modelling tools in government entities. Supporting

the availability of data such as gender, climate, and social statistics as mentioned earlier. In addition, these institutions should use their expertise to assist governments in designing, analyzing, and evaluating public policies. Lastly, they must facilitate opportunities for sharing best practices and regional collaboration.

Mrs. Khaled thanked Mr. Al-Khawaldeh and all the other participants for their valuable speeches.

Session 5: Open Discussion:

Mrs. Khaled then moved to the final stage of the webinar with an open discussion where participants will be able to engage and address their questions with the speakers.

Mr. Belgacem Ayed, Head of Committee for Sectoral Development in the Ministry of Economy and Finance, began by intervening with a quick comment rather than a question. He thanked ESCWA for the well-organized seminar and the participants for the much-needed valuable information provided in their speeches. He then went on to say that most Arab countries work to cure shocks or pandemics rather than have an emergency plan to prevent them. From that point, he proceeds by stressing on the need for better strategic planning in the Arab region while using economic modelling tools to mitigate the effects of shocks and emergencies.

Mr. Moatassem Al Kilani, Vice Head of Policies and Studies Department in the Ministry of Planning, posed two questions: To what extent of precision can we reach while using the CGE model? How can we identify the need for another modelling tool which is specifically design for the country to accompany the CGE model?

Mr. Bchir replies by saying that the idea behind economic modelling is closely linked to the questions asked. In other words, CGE model is tool that allows you to link sectoral policies, economic policies, and some social policies. To asses sectoral policies effect on fiscal and macro level then CGE model should be used. If the questions were related to pension reform, then the OLG model would be the best fit. If Jordan were to sign a trade agreement with Korea for example, then the best way to assess the impact of such an agreement would be using the tradeSim model. He concluded by saying that the different models act as a toolbox with each answering a set of economic questions.

Dr. Roucham Benzian asked about the relationship between Algeria and ESCWA and whether there is any cooperation to develop economic modelling tools tailored for Algeria.

Mr. Bchir stated that Algeria is very advanced with its statistics, as a result, developing modelling tools would be an easy task. He stated that if Algeria were to officially request help with modelling tools, ESCWA would swiftly move to provide their full expertise on this topic.

The final question, what is the impact of availability of information and data on developing economic modelling tools, was frequently asked by many in the chat.

Mr. Bchir replied by stating that developing models is directly linked to input-output tables and if they are not available then the development phase would take a long time. On the other hand, if he input-output table is available, then the development would take more than one year. He added by saying that most Arab countries already have an input-output table meaning that the data is available in most countries.

Mrs. Khaled concluded by thanking all the speakers for sharing their experiences and all the participants that attended the webinar.