#### **Personal Details**

Name/Surname <u>Askar Mukashov</u> (he/him/his)

Citizenship Kyrgyz Republic (Kyrgyzstan / Kirghizia)

Languages English (C2); German (B1); Russian (native); Kyrgyz (native)

## **Professional Experience**

Jan 2025— Research Fellow

present Foresight and Policy Modelling Unit, International Food Policy Research Institute, USA

<u>Economywide risk profiling</u> of developing countries using Computable General Equilibrium (CGE) modeling and machine learning methods

Jun 2022 - Associate Research Fellow

Dec 2024 Foresight and Policy Modelling Unit, International Food Policy Research Institute, USA

 CGE-based modeling of climatic and world price shocks, structural transformation, economic uncertainty and decision-making under uncertainty trade-offs in various developing countries.

Nov 2021 - **Postdoctoral Researcher** 

Jun 2022 Research Center "International Development", Kiel Institute for the World Economy, Germany

• Developed a CGE model of regional development and internal migration, analyzing regional income disparities and interregional migration amid ongoing structural transformation and climate change in Senegal.

May 2017- Junior Researcher

Oct 2021 Research Center "International Development", Kiel Institute for the World Economy, Germany

- Modeled energy subsidy reforms in Egypt using CGE model, analyzing the fiscal deficit, potential savings from subsidy removal, and alternative social protection measures.
- Modeled conflict and post-conflict reconstruction in Yemen using CGE model, identifying key shocks and prioritizing reconstruction efforts.
- Modeled structural transformation and climate change in Senegal using CGE model, focusing on deagrarianization and urbanization.

Nov 2013 - Economist

Jul 2014 Economic Department, Central Bank of the Kyrgyz Republic

- Developed the National Forecasting and Policy Analysis System to support the newly established inflation-targeting regime (based on a Dynamic Stochastic General Equilibrium model).
- Coordinated Monetary Policy Meetings of the Central Bank.

Jul 2012 - Economist

Nov 2013 Department of Financial Risk Management, Central Bank of the Kyrgyz Republic

- Developed strategic investment options for Kyrgyz international reserves using the Black-Litterman and Markowitz models and presented these options to the Board.
- Assessed the investment portfolio's performance against a benchmark, ensuring compliance with investment strategy limits and restrictions, and monitored market and country risks of the Kyrgyz international reserves.

<b>Education</b>	
Aug 2021	Ph.D. in Quantitative Economics (Magna Cum Laude), University of Kiel, Germany.
Nov 2016	M. Sc. In Quantitative Economics (GPA: "good"), University of Kiel, Germany.
Jun 2012	Economist-mathematician qualification (Diploma with honors), Kyrgyz Russian Slavic
	University named after Boris Yeltsin, Bishkek, Kyrgyz Republic

### **Professional Training**

Mar 2013	Foreign Reserves Management, Central Bank of the Federal Republic of Germany
Oct 2012	Advanced Financial Risk Management Methods, Central Bank of Poland

### **Modeling Skills**

- Computable General Equilibrium models
- Dynamic Stochastic General Equilibrium models;
- Financial risk management models;
- General econometrics (cross-section, time series, panel) and mathematical statistics;
- Machine learning and data mining methods.

#### **Software Skills**

- Algebraic modeling: GAMS;
- Econometrics/Statistics: Eviews; MATLAB;
  R; SPSS; STATA;
- Finance: Bloomberg & Eikon
- Other: LaTeX; SVN version control.

#### **Publications**

- **Mukashov**, **A.**; Thurlow, J.; Dorosh, P. A.; and Jones, E. Nepal: Systematic Analysis of Climate and World Market Shocks. Economywide Risk Assessment Country Brief 5, 2024. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/168723
- Mukashov, A.; Diao, X.; Jones, E.; and Thurlow, J. Zambia: Systematic Analysis of Climate and World Market Shocks. Economywide Risk Assessment Country Brief 4, 2024. Washington, DC: International Food Policy Research Institute. <a href="https://hdl.handle.net/10568/168167">https://hdl.handle.net/10568/168167</a>
- Mukashov, A.; Duchoslav, J.; Kankwamba, H.; Jones, E.; and Thurlow, J. Malawi: Systematic Analysis of Climate and World Market Shocks. Economywide Risk Assessment Country Brief 3, 2024. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/168174
- Mukashov, A.; Mbuthia, J.; Omune, L.; Jones, E.; and Thurlow, J. Kenya: Systematic Analysis of Climate and World Market Shocks. Economywide Risk Assessment Country Brief 2, 2024. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/168180
- Mukashov, A.; Warner, J.; Jones, E.; and Thurlow, J. Rwanda: Systematic Analysis of Climate and World Market Shocks. Economywide Risk Assessment Country Brief 1, 2024. Washington, DC: International Food Policy Research Institute. <a href="https://hdl.handle.net/10568/168183">https://hdl.handle.net/10568/168183</a>
- Mukashov, A.; Robinson, S.; Thurlow, J.; Arndt, C.; and Thomas, T. Systematic Risk Profiling A Novel Approach with Applications to Kenya, Rwanda, and Malawi. IFPRI Discussion Paper 02286, October 2024. <a href="https://hdl.handle.net/10568/158180">https://hdl.handle.net/10568/158180</a>
- **Mukashov**, **A.**; Thomas, T.; and Thurlow, J. Revisiting Development Strategy Under Climate Uncertainty: Case Study of Malawi. *Climatic Change 177:91* (2024). https://doi.org/10.1007/s10584-024-03733-2
- Ziesmer, J.; Jin, D.; **Mukashov, A.**; and Henning, C. Integrating fundamental model uncertainty in policy analysis: A Bayesian averaging approach combining CGE-models with metamodeling techniques. *Socio-Economic Planning Sciences* 87(B) (2023). <a href="https://doi.org/10.1016/j.seps.2023.101591">https://doi.org/10.1016/j.seps.2023.101591</a>
- Mukashov, A. Parameter uncertainty in policy planning models: Using portfolio management methods to choose optimal policies under world market volatility. *Economic Analysis and Policy* 77 (2023). <a href="https://doi.org/10.1016/j.eap.2022.11.007">https://doi.org/10.1016/j.eap.2022.11.007</a>

- Detelinova, I.; Thomas, T.; Hammond, W.; Arndt, C.; and **Mukashov**, **A**. From climate risk to resilience: Unpacking the economic impacts of climate change in Malawi. Washington, DC: International Food Policy Research Institute. 2023. https://doi.org/10.2499/p15738coll2.136955
- **Mukashov, A.;** Breisinger, C.; Engelke, W.; and Wiebelt, M. Modeling conflict impact and postconflict reconstruction: The case of Yemen. *Economic Systems* 46 (2022). <a href="https://doi.org/10.1016/j.ecosys.2022.100940">https://doi.org/10.1016/j.ecosys.2022.100940</a>
- Breisinger, C.; **Mukashov**, **A.**; Raouf, M.; and Wiebelt, M. Energy Subsidy Reform for Growth and Equity in Egypt: The Approach Matters. *Energy Policy 129* (2019). <a href="https://doi.org/10.1016/j.enpol.2019.02.059">https://doi.org/10.1016/j.enpol.2019.02.059</a>
- Mukashov, Askar and Thurlow, J. Regional Development and Internal Migration Aspects of Structural Transformation: A Case Study of Senegal. Kiel Working Paper, 2258 (2023). <u>a0608d4a-2c55-4f56-8466-c62377c59e70-KWP 2258.pdf</u>
- **Mukashov, A.;** Henning, C.; Robertson, R.; and Wiebelt, M. The Role of Global Climate Change in Structural Transformation of Sub-Saharan Africa: Case study of Senegal. Kiel Working Paper, 2187 (2021). <a href="https://www.ifw-kiel.de/publications/the-role-of-global-climate-change-in-structural-transformation-of-sub-saharan-africa-21134/">https://www.ifw-kiel.de/publications/the-role-of-global-climate-change-in-structural-transformation-of-sub-saharan-africa-21134/</a>

# Honors, Awards, and Other Experience

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Oct 2019–Sep 2021	Elected representative of doctoral candidates, University of Kiel, Germany
Oct 2016-Apr 2017	Fellowship from the Oluf-Rieke Foundation, University of Kiel, Germany
Oct 2014-Oct 2016	Study scholarship from the German Academic Exchange Service (DAAD)
Dec 2013	Commendation from the Deputy Governor of the Central Bank of the Kyrgyz Republic for the implementation of the National Forecasting and Policy Analysis System
Dec 2012	"The Best Young Specialist" Award of the Central Bank of the Kyrgyz Republic
Feb 2012	Commendation from Traffic Safety Organization Department of the Kyrgyz Russian Slavic University for developing a model of transport accidents in the Kyrgyz Republic
Aug 2007–Jun 2012	Study scholarship from the President of the Kyrgyz Republic for the highest result in the Nationwide Exam of Secondary School Graduates of 2007
Apr 2007	3rd place in Applied Mathematics Olympiad organized by the International University of Kyrgyzstan