

Invitation

You are cordially invited to the public defence to obtain the academic degree of

DOCTOR OF ECONOMICS

by Justine Miller

Disentangling the Spaghetti Bowl of Regional Integration

Supervisor:

Prof. Dr. Samuel Standaert

Thursday, 18 June 2026 at 17h

In the Faculty Council Room, second floor, Tweekerkenstraat 2, 9000 Ghent).

Please confirm your attendance via the following link: <https://forms.gle/pVXmE6q2ZNzfoUdP9>

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Abstract

This dissertation studies the global tangle created by the proliferation of Regional trade agreements since World War II, a phenomenon known as the Spaghetti Bowl of Regional Integration. While this metaphor gives an intuition of how intertwined the near 700 active agreements are, it does not reflect the complexity of the underlying phenomenon. This dissertation argues that a more rigorous, empirically-grounded definition is needed to understand how it has formed, what effects it has, and how it may continue to develop. It concludes that while the Spaghetti Bowl metaphor may not be the most accurate analogy to represent the architecture of the overlapping agreements, it should not be ignored. The evidence so far leaves room for cautious optimism on the state of preferential liberalisation, but if the tangle of agreements keeps growing as it has been so far, problems may arise in the future.

Chapter 1 provides the theoretical and contextual foundations of the dissertation. It explores the normative arguments for regional integration, reflects on the tension between multilateralism and regionalism, and introduces a novel dataset on Regional Trade Agreements. It showcases how different techniques, including network analysis, can be used in combination with more traditional economic models to analyse the proliferation and the effects of trade agreements.

Chapter 2 constructs a coalesced historical database on regional integration agreements, reconciling discrepancies across five major data sources. We demonstrate that databases, even accounting for the original goals and scope, differ considerably in their coverage across regions and over time and how they store the metadata of treaties, with strong implications for empirical analyses relying on them. By making a consolidated database publicly available, we aim to reduce the costs for researchers working across multiple sources and to support more systematic validation of findings.

Chapter 3 sets to provide an empirically grounded definition of the Spaghetti Bowl. Using network analysis, we map the phenomenon across two dimensions, namely the overlap in membership overlap and overlap in content. We show that these two dimensions behave differently over time and across regions, with important consequences for how the Spaghetti Bowl is understood and assessed, something that the traditional approach of defining it by counting the number of agreements cannot capture. We argue that the Spaghetti Bowl expanded in the 1970s, became a predominantly regional phenomenon in the 1990s and early 2000s, and has since 2010 grown into a global one, driven by the rise of interregional agreements.

Chapter 4 estimates the impact of the membership dimension of the Spaghetti Bowl on trade flows. While regional trade agreements have been shown to be generally beneficial for trade flows, little is known about whether this effect is affected by their proliferation and interaction when they overlap. Using a state-of-the-art gravity model, the chapter consistently finds that participating in multiple agreements increases trade gains relative to a single agreement, but with diminishing returns: gains rise up to around five agreements, after which they begin to decline. These findings are robust across a range of specifications, including controls for agreement depth, age, and phase-in, as well as tests addressing endogeneity and temporal and regional variation. While the estimates suggest that, in extreme cases, the accumulation of agreements could offset their benefits, such cases should be treated as exceptions.

Chapter 5 examines how bilateral agreements, plurilateral agreements, and customs unions form and interact. Using longitudinal network models that accommodate the endogeneity and interdependence at the heart of Regional Trade Agreement formation, and by modelling each agreement type according to its institutional structure rather than projecting all agreements onto country pairs, the results consistently point to the importance of careful modelling to avoid biased estimates. The evidence also suggests that countries' decision to form agreements varies across agreement types.

Curriculum vitae

Justine Miller (°1997, Saint-Ghislain) obtained a Bachelor's in Economics and Business Economics (2019) and a Master's in Human Geography (Economic Geography, 2020) from Utrecht University, followed by a Master in Advanced Studies in Economics from KU Leuven (2021). She obtained a BOF scholarship with a UNU-CRIS label to conduct research on international trade and regional integration. The first chapter of her dissertation is published as part of the Handbook of Regional Cooperation and Integration, the second is available as a UNU-CRIS working paper, and the third has been published in the Review of International Economics. Alongside her doctoral research, Justine has contributed to the SDG Monitor project, which tracks the implementation of the Sustainable Development Goals at the subnational level in Flanders. This work has resulted in several technical reports, working papers, and policy briefs. She has presented her work at several international conferences, including the European Conference on Social Networks (London), the Sunbelt International Conference on Social Network Analysis (Portland, Edinburgh, Paris), the European Trade Study Group Annual Conference (Guildford, Athens), and the International Conference on Economics of Global Interactions (Bari).