

## **PhD SCHOLARSHIPS AT THE UNIVERSITY OF STELLENBOSCH**

July 2021

The Africa Centre for Dispute Settlement (ACDS) at the University of Stellenbosch Business School (USB), together with the University of Stellenbosch School of Data Sciences, is excited to announce full scholarships for candidates pursuing a PhD relevant to our work applying the tools of data science to conflict analysis.

### **WORK AT THE INTERSECTION OF CONFLICT ANALYSIS AND DATA SCIENCES**

The Africa Centre for Dispute Settlement (ACDS) at the University of Stellenbosch Business School (USB) is a hub for research and reflection on conflict and its transformation. An integral part of one of Africa's leading institutions for business as well as development finance research, teaching, and practice, ACDS partners with business, government, labour and communities to reduce the costs of conflict and increase opportunities for collaboration. It aims to achieve transformation in the next generation of dispute resolution practitioners and scholars.

The University of Stellenbosch School for Data Science and Computational Thinking was launched in July, 2019 with a vision to be a world-class institution in and for Africa. The School is rapidly growing, with diverse set of academics focusing on both the science of data science as well as the application of data science in a diverse set of fields.

The Business & Conflict Research Initiative is an international consortium including the University of Stellenbosch, the University of Pennsylvania, the University of Copenhagen, and the Peace Research Institute Oslo (PRIO), and also draws on Data Science expertise from the University of Michigan. The initiative advances understanding of the dynamics of the private sector, conflict risk and its mitigation, and peaceful development, with a goal of informing policy, practice and scholarship in these areas.

### **DEVELOPMENT OF THE BUSINESS & CONFLICT BAROMETER**

Scholarship recipients will join the international team working to consolidate and advance development of the Business & Conflict Barometer, a tool for organising and analysing data on the private sector and conflict that has been under development since 2019. Elements of the Barometer (at different stages of development) include the following:

- The geospatial and temporal organisation and integration of hundreds of datasets, allowing a wide range of data to be used contemporaneously to gain insight on a particular place, and to learn from comparisons between places;
- Automated analysis of a wide range of textual data sources that identifies the places, actors, themes, and timeframes discussed in documents, allowing the cataloguing and analysis of documents alongside quantitative data;
- The development of measures of whether the conflict temperature (defined as whether narratives of conflict are tending towards escalation or de-escalation) rising or falling over a defined period for a defined location, as well as identification of the actors and issues implicated;

- Development and integration of community-based data systems for data collection and analysis that can be integrated with global systems;
- User interfaces which lower the barriers to use of the Barometer by a wider range of stakeholders.

## SCHOLARLY DIRECTIONS

While we expect that the Barometer will prove a useful tool for actors on the ground (e.g., companies, communities, civil society groups, and local governments), as well as for actors responsible for shaping private sector development (e.g., financial intermediaries and insurers, national governments, and international institutions), we also expect the Barometer to facilitate scholarly inquiry into the political economy of business and conflict. It should contribute to fields such as international management, business and human rights, business and peace, conflict studies, peacebuilding, and development finance where large-N statistical and econometric analyses with respect to issues of conflict risk and its mitigation are today difficult to apply. The organising questions of the Business & Conflict Research Initiative with respect to the development of the Barometer are as follows:

### 1. Better understand the role of the private sector in conflict

*Where do we find the private sector in conflict?* By coding and analysing textual data, and combining it with other data layers, associations between the private sector and conflict can be explored. For example, it becomes possible to test propositions that certain private sector activities—notably, mining, plantation agriculture, and large-scale infrastructure projects—have a greater association with conflict. Certain issues can also be tested—notably, gender, human rights, cultural heritage, land, water, security, and livelihoods—or certain actors—notably, SMEs, women-focused businesses, foreign investors, those with international financial institution support, and large companies within a given sector or market—feature more or less prominently in conflict. The data structure enables comparative analyses—e.g., whether conflict sentiment towards business or government is more associated with heightened conflict—and multivariate analyses. It can raise awareness of the need for conflict-sensitive investment, and highlighting where it is not occurring.

### 2. Continuously improve modelling of risk factors for conflict-prone private sector investment

*What makes for risky private sector development in peacebuilding environments?* The data structure allows for large-N analyses to test whether conflict sentiment with respect to the investments, issues, and actors discussed in no. 8 above is sensitive, for example, to widely-used measures of rule of law, development outcomes, income levels, public confidence in government, and other measures of institutional robustness. Similarly, sensitivity to pre-existing conflict faultline issues, to weak or conflictual bonds between identity or interest groups, or to other factors identified in the theoretical literature and case studies can be tested. These propositions arise within domains—including private sector development, business environment reform, business and peace, business and human rights, and others—that have so far resisted robust statistical and econometric analyses, producing significant empirical benefit.

### 3. Improve the evidence base for mediated private sector development

*Do collaborative actions or initiatives distinguish less conflict-prone private sector development from that which is more so?* Management scholarship posits that conflict risks in the context of a company's operations—even in a conflict-affected area—are largely *not* endogenous, but rather determined by the company's own actions and initiatives. Explanatory variables largely under the control of a private sector

may include, for example, the degree to which companies include marginalised groups (including women) in project planning and risk assessment; the degree of its community imbeddedness; the degree to which companies relinquish claims to decision-making rights in favour of more consensus-based decision making approaches; the inter-group structure of a firm's stakeholder network; and support for forums intended to improve inter-group relations. Comparative analyses can uncover which company strategies, and which policy initiatives intended to inform company behaviour, have greatest explanatory power for conflict risk mitigation related to private sector development.

Further information on the work of the Business & Conflict Research Initiative is available to interested candidates from [Professor Brian Ganson](#), Head of the Africa Centre for Dispute Settlement at the University of Stellenbosch Business School.

## **PHD AND SCHOLARSHIP APPLICATIONS**

We are seeking PhD candidates whose anticipated doctoral work will advance some important element of the Business and Conflict Barometer itself, or its scholarly application. We are actively recruiting candidates who have an Information Sciences / Electrical Engineering / Data Sciences / Technology Innovation focus. Others may be considered, particularly insofar as their focus is relevant to our work on SMEs in contexts of urban violence.

Candidates may pursue admission to a PhD programme and a scholarship grant concurrently. The scholarship amount will cover all costs of study at the University of Stellenbosch.

Candidates who anticipate their PhD to be in Business Management and Administration may be admitted on a rolling basis. Please see the procedures at <https://www.usb.ac.za/course/phd-in-business-management-and-administration/>. Your contact is [Dr. Lara Skelly, PhD Programme Head](#).

Candidates who wish their PhD to be in another faculty or department of the University of Stellenbosch must comply with the application procedures and deadlines for that department, available [online](#).

Applications are open until candidates have been admitted to a suitable PhD programme and been awarded the scholarship.

You are encouraged to contact [Professor Brian Ganson](#), Head of the ACDS, with an informal expression of interest before submitting a formal application.