



# Full Syllabus



## Course Title

Disaster Economics

## Lecturer

Professor Daniel M. Schydrowsky

## Semester

Spring 2022

## Course requirements

Course attendance, class participation, timely completion of assignments, keep up with reading assignments.

## Final grade components

10% Class participation; 15% Report #1 some due for class of March 9, some due for class of March 16; 15% Report #2 due for class of May 18; 60% Take-home final examination.

## Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1 - Feb 23	<p><u>Introduction</u>: Student and Faculty presentation</p> <p><u>Critical events in a Disaster</u>: what gets destroyed, what gets created, who needs help and who responds, the role of self-help</p> <p><u>Main kinds of disasters and their characteristics</u>: natural (e.g. floods, storms, earthquakes), man-made (e.g. resulting from conflicts), health (e.g. covid-19)</p> <p><u>Financial and economic consequences of disasters</u>: overview</p> <p><u>The Covid-19 "special circumstances"</u>: identification, short run impact, longer term consequences of financial and economic impact</p> <p><u>Readings</u>:</p> <p>Schydrowsky 2020 Sec 2</p> <p>Schydrowsky 2021 The new "initial conditions"</p> <p>ECLAC skim</p> <p>UN Emergency Response Fund</p> <p>OCHA for a sense of the damage</p>
2 - Mar 2	<p><u>Approaches to Disasters</u>: micro, meso, macro, super-macro (intl)</p> <p><u>The actors</u>: civil defense, ngo's, ministries, bank regulators, insurance regulators, international actors</p> <p><u>What role finance?</u> Financial needs under disasters: private direct needs, private indirect needs; public sector needs</p> <p><u>Financing vs Insuring</u>: differences and complementarities</p> <p><u>Readings</u>:</p> <p>Meenan et al. Sec 2, 3.1</p> <p>Schydrowsky 2020 Sec 3</p>



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3 - Mar 9	<p><u>Domestic Financial Authorities and their mandates</u>: central bank, bank regulator, insurance regulator, securities regulator</p> <p><u>Readings</u>: Dikau &amp; Volz 2021 NGFS 2020</p>
4 - Mar 16	<p><u>International Financial Support Institutions</u>: World Bank, IMF, Basel Institutions, Regional Bank; the special case of AFI (Alliance for Financial Inclusion). Mandate, governance and practice; relation to the UN.</p> <p><u>Readings</u>: Global Facility for Disaster Reduction and Recovery World Bank – who we are, IMF – who we are, etc. Financial Stability Board Alliance for Financial Inclusion OCHA (UN) United Nations Emergency Response Fund. <a href="https://cerf.un.org/about-us/who-we-are">https://cerf.un.org/about-us/who-we-are</a></p>
5 - Mar 23	<p><u>Financial Policy Categories</u>: The 4 P's: Provide, Promote, Protect, Prevent; Regulatory Sandboxes</p> <p><u>Readings</u>: AFI 2020 Schydrowsky 2020 Sec 4 Meenan et al. Sec 3 Frisari et al. skim Sandboxes. skim</p>
6 - Mar 30	<p><u>Financial Prevention Planning</u>: Regulations for prevention/avoidance of disasters. Preventing natural disasters vs preventing man-made disasters. Combining financial incentives with extended due diligence.</p> <p><u>Readings</u>: AFI 2020 Meenan et al. Sec 4.1 NGFS 2020 Schydrowsky &amp; Thompson 2014 Schydrowsky 2020 Sec 6a Schydrowsky 2021 ESRM Implementation Policy: the Goal of ESRM; the Advantages of ESRM</p>
7 - Apr 6	<p><u>Financial Contingency Planning</u>: Regulations for when the disaster occurs. Alternatives for absorbing the cost: insurance vs finance. Parametric insurance. Reinsurance to widen the pool. Contingency Finance. Moral hazard. Public finance of subnational jurisdictions.</p> <p><u>Readings</u>: Brettler and Gosnear 2020 FIS Insurance Core Principles – <u>Exec Summary</u> IAIS <u>Insurance Core Principles</u> ICP 13 ICP 26 Martinez-Diaz et al. 2019 Meenan et al. Sec 4.2, 4.3 Schydrowsky 2020 End of Sec 4 on Moral Hazard, Sec 6b.1 Schydrowsky 2021, Disaster Management: Contingency Policy for Business Continuity</p>



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8 - Apr 27	<p><u>Financial Recovery Planning</u>: Regulations for after the disaster has occurred. Coping with existing debt. The critical issue of recovery credit worthiness. Newly appropriate credit terms. Horizontal equity issues.</p> <p><u>Readings</u>: Meenan, Sec. Schydrowsky 2020, Sec 6b2 Schydrowsky 2021, Disaster Management: Contingency Policy for Natural Disaster Recovery; Covid-19 Recovery Policies</p>
9 - May 11	<p><u>Implementation Details</u>: Avoiding the devil in the fine print: clarity in chain of command; clarity in entitlements of benefits and geographical delimitation; triggers for beginning and end of benefits, phasing; overlapping jurisdictions.</p> <p><u>Readings</u>: NGFS 2020 Meenan et al. Sec 5 Schydrowsky 2020 Sec 7 Schydrowsky 2021: ESRM Implementation Policy: Requirements for Banks and Other Financial Institutions; Banking Supervision Requirements.</p>
10- May 18	<p><u>Information Requirements</u>: Historical series for insurance; contemporary data for prevention; transparent property and other records for compensation. The role of social overhead capital in ensuring operability.</p> <p><u>Readings</u>: AFI 2020 NGFS 2020 Schydrowsky 2021: Connectivity and financial inclusion policies; Building institutional overhead capital</p>
11- May 25	<p><u>Horizontal Connections between Policies</u>: Fitting financial disaster planning into the bigger picture of financial regulatory policy. Connections to conflict prevention and abatement and to climate change. The evolving regulation mandate.</p> <p><u>Readings</u>: NGFS 2020 Battiston et al. 2020 Meenan et al. Sec 5 Schydrowsky 2021: Financial Regulatory Policy Appropriate to the Current Circumstances</p>
12- June 1	<p><u>Horizontal Connections between Policies (continued)</u></p>
13- June 8	<p><u>Summary: What have we learned?</u> The critical role of finance in coping with disasters; pervasive role of finance; capacity of financial regulation to leverage changes in behavior; bringing about modifications in behavior through financial regulation. Likely future changes in regulation resulting from climate pressures and social conflict pressures.</p>

**Required course reading**

Alliance for Financial Inclusion, AFI, <https://www.afi-global.org/t>



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Alliance for Financial Inclusion (AFI)(2020). "Inclusive Green Finance, A Survey of the Policy Landscape, Second Edition". Referenced as <https://www.afi-global.org/publications/3330/Inclusive-Green-Finance-A-Survey-of-the-Policy-Landscape-Second-Edition>

Bank for International Settlements, <https://www.fsb.org/about/>

Bank for International Settlements, [https://www.fsb.org/work-of-the-fsb/about-the-compendium-of-standards/wssb/?page\\_moved=1](https://www.fsb.org/work-of-the-fsb/about-the-compendium-of-standards/wssb/?page_moved=1)

Bank for International Settlements, Financial Stability Institute: FSI – Insurance Core Principles Executive Summary  
Battiston, Stefano, Billio, Monica, and Irene Monasterolo (2020). "Pandemics, climate and public finance: how to strengthen socio-economic resilience across policy domains". In: A New World Post COVID-19 Lessons for Business, the Finance Industry and Policy Makers, edited by Monica Billio and Simone Varotto, Edizioni Ca' Foscari

Caribbean Catastrophic Risk Insurance Facility SPC <https://www.ccrif.org/>

Brettler, D. & Timothy Gosnear, (2020) "Parametric Insurance Fills Gaps Where Traditional Insurance Falls Short" Insurance Journal, January

Dikau, S., U.Volz (2021), "Central bank mandates, sustainability objectives and the promotion of green finance", Ecological Economics

ECLAC (2014), Handbook for Disaster Assessment, referenced as <https://www.cepal.org/en/publications/36823-handbook-disaster-assessment>

Frisari Gianleo, Matías Gallardo, Chiemi Nakano, Víctor Cárdenas and Pierre Monnin (2019), Climate Risk and Financial Systems of Latin America: Regulatory, Supervisory and Industry Practices in the Region and Beyond, InterAmerican Development Bank, Climate Change Division, Technical Note No. IDB-TN-01823

Global Facility, <https://www.gfdrr.org/en/global-facility-disaster-reduction-and-recovery>

IAIS Insurance Core Principles, selected core principles

IMF, <https://www.imf.org/en/Home>

Martinez-Diaz, Leonardo, Lauren Sidner, and Jack Mcclamrock (2019), "The Future of Disaster Risk Pooling for Developing Countries: Where Do We Go From Here?," World Resource Institute Working Paper, referenced as <http://www.wri.org/publication/disaster-risk-pooling>

Meenan, Conor, John Ward, Robert Muir-Wood, (2019), Disaster Risk Finance - A Toolkit, GiZ



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Network for Greening the Financial System (2020), [Guide for Supervisors Interating Climate-related and Environmental Risks into Prudential Supervision](#)

Schydrowsky, D.M. (2020), "Prudential Retulations for Greening the Financial System: Coping with Climate Disasters", Latin American Journal of Central Banking

Schydrowsky, D.M. (2021), "Green Financial Regulatory Policy for Latin America in the Aftermath of Covid-19" Boston University Global Policy Development Center

Schydrowsky, D.M. and Robert C. Thompson (2014) "Reducing the Financial Risk of Social Conflict", [Americas Quarterly](#), Spring,

United Nations, Office for the Coordination of Humanitarian Affairs, OCHA (2019), [Natural Disasters In Latin America And The Caribbean, 2000-2019, referenced as](#)  
[https://reliefweb.int/sites/reliefweb.int/files/resources/20191203-ocha-desastres\\_naturales.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/20191203-ocha-desastres_naturales.pdf)

United Nations Emergency Response Fund. <https://cerf.un.org/about-us/who-we-are>

World Bank,

[https://www.worldbank.org/en/about/leadership?cid=ECR\\_GA\\_worldbank\\_EN\\_EXTP\\_search&gclid=Cj0KCQiAw9qOBhC-ARIsAG-rdn7RV\\_TJA3mNm\\_YfYn1C-eqS1HUf8Lq26muVJwz5ZAdZsaJ7QQ\\_ISrMaAk4aEALw\\_wcB](https://www.worldbank.org/en/about/leadership?cid=ECR_GA_worldbank_EN_EXTP_search&gclid=Cj0KCQiAw9qOBhC-ARIsAG-rdn7RV_TJA3mNm_YfYn1C-eqS1HUf8Lq26muVJwz5ZAdZsaJ7QQ_ISrMaAk4aEALw_wcB)

## Optional course reading

Barcena, Alicia, Jose Luis Samaniego, Wilson Peres, Jose Eduardo Alatorre (2020), [The Climate Emergency In Latin America And The Caribbean The Path Ahead – Resignation Or Action?](#), ECLAC

Basel Committee on Banking Supervision (2020) [Climate-related financial risks: a survey on current initiatives](#), April

Batten, S., R. Sowerbutts and M. Tanaka (2016) "Let's talk about the weather: the impact of climate change on central banks", Working Paper No. 603, Bank of England

IAIS Insurance Core Principles

SANDBOXES: Herrera, D. Herrera, Diego and Sonia Vadillo (2018), [Regulatory Sandboxes in Latin America and the Caribbean for the FinTech Ecosystem and the Financial System](#), InterAmerican Development Bank, Institutions for Development Sector, Connectivity, Markets, and Finance Division Discussion Paper N° IDB-DP- 573, March; Wechsler, Michael, Leon Perlman, and Nora Gurung, (2018), "The State of Regulatory Sandboxes in Developing Countries", Digital Financial Services Observatory, Columbia Institute for Teleinformation, Columbia University, referenced as <https://dfsobservatory.com/sites/default/files/DFSO%20-%20The%20State%20of%20Regulatory%20Sandboxes%20in%20Developing%20Countries%20-%20PUBLIC.pdf>

OECD, Policy Guidance on Insurance (2020), <https://www.oecd.org/daf/fin/insurance/Policy-Guidance-on-the-Structure-of-Insurance-Regulation-and-Supervision.pdf>





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