

Natural disasters and accounting: Which contributions form the past?

Recent COVID-19 pandemic has unveiled the extraordinary impact that natural disasters can have on people and organizations, changing everyday life and working activities. This event alerted us to the potentiality pandemic and more in general natural disasters topic for contemporary accounting studies, but also for historical investigations.

Natural disasters of different kind are not new for human beings and are documented multiple times throughout history, challenging the survival of human beings (Schenk, 2007). They refer to exogenous risks, which are about “shocks that arrive from outside the system” (Danielsson and Shin, 2002). Within this broad area, further classifications are possible. An example of classification is based on the origin of disasters distinguishing among natural disasters caused by geological events (e.g. earthquakes, tsunamis, volcanic eruptions, landslides and mudslide), by biological events (e.g. epidemics and pandemics) and by meteorological-hydrological events (e.g. floods, hurricanes, storms, droughts and wild fires) (Eshghi and Larson, 2008).

A major attention in recent years towards the global warming and climate change (IPCC, 2018), whose effects have impacted on the frequency and severity of these natural occurrences (United Nations Office for Disaster Risk Reduction, 2019), has stimulated some accounting investigations on natural disaster such as hurricanes (Baker, 2014; Perkiss and Moerman, 2020), floods (Lai et al., 2014; Sciulli, 2018), bushfires (Taylor et al., 2014) and earthquakes (Jayasinghe et al., 2020; Sargiacomo, 2015; Sargiacomo et al., 2014; Sargiacomo and Walker, 2020).

Natural disasters are interesting phenomena from a sociological point of view. They often reveal the makeup of the social arena as community reacts under extreme pressure and stress (Burnham, 1988).

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When and how did people start a systematic reaction, supporting others in the community? What institutions and relations were relevant to them in this process? The way accounting and accountability practices operate in answering to these questions is not peripheral and accounting history research can assume an increased meaning when experiences from the past are added to contemporary investigations' findings.

As recently underlined in a literature review on the topic (Sargiacomo et al., 2021), “historical investigations on natural disasters are still underdeveloped. They have used recurrent *loci* of investigations, mainly focused on twentieth century cases, and mostly addressed post-earthquake outcomes; drought and pandemics are the exceptions to slow-moving disasters” (p. 198). In particular, in the accounting history field, the still scarce and scattered literature on natural disasters is characterised by a high concentration of investigations on earthquakes with a time focus on twentieth century (i.e. Hunter and Ogasawara, 2019; Imaizumi et al., 2016; Miley and Read, 2013; Odell and Weidenmier, 2004; Okazaki et al., 2019; Pereira, 2009; Shimizu and Fujimura, 2010; Siodla, 2017; Vosslamber, 2015). There are only few exceptions in terms of natural disaster focus and/or timeframe. These exceptions refer to the exploration of the plague at the beginning of the Renaissance (Manetti et al., 2017), the study of drought in the US context during 1930s (Walker, 2014) and the investigation of the 1755 Lisbon earthquake (Pereira, 2009). This is a clear evidence that there is the need of investigating natural disasters beyond earthquakes and exploring more ancient archival sources.

Many different natural disasters can be explored in different time and space dimensions. Some examples of natural disasters that may eventually be investigated by accounting historians are the Oceania's bush fires of nineteenth and twentieth centuries; Netherlands (1530), Mississippi (1927) and Florence (1966) floods; epidemics/pandemics throughout the world in different centuries (e.g. plague; cholera; Spanish flu); Indonesia (1815 and 1883) and Azores (1957/8) volcanic eruptions. Other earthquakes can also be explored, both with reference to pre-twenty century period, such as Istanbul (1766), Hayward (1868) or Filiatra (1886), and considering cases not yet explored in the twenty century, such as Messina (1908), Great Chilean (1960) and Great Peruvian (1970).

The accounting history exploration of past natural disasters permits to unveil the story of suffering and vulnerable people and offers the opportunity to enlarge the knowledge of the way these threats have

been faced, contained and eventually overcome. The features of natural disasters offer the possibility to explore not only their impact on nature and society, but also the role assumed, the tools used and the processes adopted by the local and central governance in facing the phenomenon (Gomes and Sargiacomo, 2013, p. 441).

The capability to analyse accounting and accountability sources to explore natural disasters give us a powerful tool of investigation, capable to offer new insights on these phenomena. These sources are strictly entwined with the features of the social context producing them and include public and private documents. Public authorities' ordinances, municipality and central government accounts, accounting registers, tax and rent books, but also private diaries, burial records, bills of mortality, hospital records and, at a more general level, chronicles and newspapers are some examples of primary sources to be studied.

The investigation on natural disasters gives the possibility to propose comparative explorations (Carnegie and Napier, 1996; 2002) and offers (trans)cultural understanding of historical disasters' experiences. The historical investigation, comparing the accounting and accountability drivers guiding societal responses to external shocks, enriches our understanding of contemporary answers. It permits to move beyond the specific narrative, offering possible trajectories of interpretation.

The above premise on the potential contribution deriving from accounting history investigation represent an invitation for robust and rigorous research on natural disasters, still overlooked in this domain.

References

- Baker R. (2014). Breakdown of accountability in the face of natural disasters: The case of Hurricane Katrina. *Critical Perspectives on Accounting* 25(7): 620-632.
- Burnham J.C. (1988). A neglected field: the history of natural disasters. *Perspectives on History*, April.
- Carnegie G.D. and Napier C.J. (1996) Critical and interpretive histories: Insights into accounting's present and future through its past. *Accounting, Auditing & Accountability Journal*, 9(3): 7-39.
- Carnegie G.D. and Napier C.J. (2002), Exploring comparative international accounting history. *Accounting, Auditing & Accountability Journal*, 15(5): 689-718.
- Danielsson J and Shin H.S. (2002). Endogenous risk. In *Modern Risk Management – A History*. Risk Books.

- Eshghi K. and Larson R.C. (2008). Disasters: lessons from the past 105 years. *Disaster Prevention and Management*, 17(1).
1. Gomes D. and Sargiacomo M. (2013). Accounting and accountability in local government: An introduction. *Accounting History*, 18(4): 439-446.
- Hunter J. and Ogasawara K. (2019). Price shocks in regional markets: Japan's Great Kantō Earthquake of 1923. *Economic History Review*, 72(4): 1335-1362.
- International Panel on Climate Change (2018). Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.
- Imaizumi A., Ito K. and Okazaki T. (2016). Impact of natural disasters on industrial agglomeration: The case of the Great Kantō Earthquake in 1923. *Explorations in Economic History*, 60: 52-68.
- Jayasinghe K., Kenney C., Prasanna R. and Velasquez J. (2020). Enacting 'accountability in collaborative governance': Lessons in emergency management and earthquake recovery from the 2010-2011 Canterbury Earthquakes. *Journal of Public Budgeting, Accounting & Financial Management*, 32(3): 439-459.
- Lai A., Leoni G. and Stacchezzini R. (2014). The socializing effects of accounting in flood recovery. *Critical Perspectives on Accounting*, 25(7): 579-603.
- Manetti G., Bellucci M. and Bagnoli L. (2017). The management of the plague in Florence at the beginning of the Renaissance: The role of the partnership between the Republic and the Confraternita of Misericordia. *Accounting History*, 22(4): 510-529.
- Miley F. and Read A. (2013). After the quake: The complex dance of local government, national government and accounting. *Accounting History*, 18(4): 447-471.
- Odell K.A. and Weidenmier M.D. (2004). Real shock, monetary aftershock: The 1906 San Francisco earthquake and the panic of 1907. *Journal of Economic History*, 64(4): 1002-1027.
- Okazaki T., Okubo T. and Strobl E. (2019). Creative destruction of industries: Yokohama City in the Great Kantō Earthquake, 1923. *Journal of Economic History*, 79(1): 1-31.
- Pereira A.S. (2009). The opportunity of a disaster: The economic impact of the 1755 Lisbon earthquake. *Journal of Economic History*, 69(2): 466-499.
- Perkiss and Moerman (2020). Hurricane Katrina: Exploring justice and fairness as a sociology of common good(s). *Critical Perspectives on Accounting*, 67-68: 102022.
- Sargiacomo M. (2015). Earthquakes, exceptional government and extraordinary accounting. *Accounting, Organizations and Society*, 42: 67-89.

- Sargiacomo M., Ianni L. and Everett J. (2014). Accounting for suffering: Calculative practices in the field of disaster relief. *Critical Perspectives on Accounting*, 25(7): 652-669.
- Sargiacomo M. and Walker S. (2020). Disaster governance and hybrid organizations: Accounting, performance challenges and evacuee housing. *Accounting, Auditing & Accountability Journal*. Epub ahead of print 19 January.
- Sargiacomo M., Servalli S., Potito S., D'Andreamatteo A. and Gitto A. (2021), Accounting for natural disasters from a historical perspective: A literature review and research agenda. *Accounting History*, 26(2):179-204.
- Schenk G.J. (2007). Historical Disaster Research. State of Research, Concepts, Methods and Case Studies. *Historical Social Research /Historische Sozialforschung*, 32(3).
- Sciulli N. (2018). Weathering the storm: Accountability implications for flood relief and recovery from a local government perspective. *Financial Accountability & Management*, 34(1): 30-44.
- Shimizu Y. and Fujimura S. (2010). Accounting in disaster and accounting for disaster: The crisis of the Great Kanto Earthquake, Japan, 1923. *Accounting, Business & Financial History*, 20(3): 303-316.
- Siodla J. (2017). Clean slate: Land-use changes in San Francisco after the 1906 disaster. *Explorations in Economic History*, 65(C): 1-16.
- Taylor D., Tharapos M., Khan T. and Sidaway S. (2014), Downward accountability for Victoria's 'Black Saturday' bushfire recovery: Evidence from reports of government and NGOs. *Critical Perspectives on Accounting*, 25(7): 633-651.
- United Nations Office for Disaster Risk Reduction (2019). *Global Assessment Report on Disaster Risk Reduction*. Washington, DC: United Nations.
- Vosslamber R. (2015). After the earth moved: Accounting and accountability for earthquake relief and recovery in early twentieth-century New Zealand. *Accounting History*, 20(4): 518-535.
- Walker S. (2014). Drought, resettlement and accounting. *Critical Perspectives on Accounting*, 25(7): 604-619.

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