

**The End of the Empire that  
Entrepreneurship Built: How  
Seven Sources of Rot will  
Undo the West**

**Other titles in Foundations and Trends® in Entrepreneurship**

*Entrepreneurs' Search for Sources of Knowledge*

Albert N. Link

ISBN: 978-1-63828-296-9

*The Evolution of Hidden Champions as Niche Entrepreneurs*

Erik E. Lehmann and Julian Schenkenhofer

ISBN: 978-1-63828-258-7

*Entrepreneurship in the Long-Run: Empirical Evidence and  
Historical Mechanisms*

Michael Fritsch and Michael Wyrwich

ISBN: 978-1-63828-108-5

*Minority Entrepreneurship 2.0*

Timothy Bates

ISBN: 978-1-63828-048-4

*From the Metaphor to the Concept of the Entrepreneurial Journey  
in Entrepreneurship Research*

Tönis Mets

ISBN: 978-1-63828-016-3

*Student Entrepreneurship: Reflections and Future Avenues for Research*

Bart Clarysse, Philippe Mustar and Lisa Dedeyne

ISBN: 978-1-63828-012-5

# The End of the Empire that Entrepreneurship Built: How Seven Sources of Rot will Undo the West

---

**Wim Naudé**

RWTH Aachen University  
Naudé@time.rwth-aachen.de

**now**

the essence of knowledge

Boston — Delft

## Foundations and Trends<sup>®</sup> in Entrepreneurship

*Published, sold and distributed by:*

now Publishers Inc.  
PO Box 1024  
Hanover, MA 02339  
United States  
Tel. +1-781-985-4510  
[www.nowpublishers.com](http://www.nowpublishers.com)  
[sales@nowpublishers.com](mailto:sales@nowpublishers.com)

*Outside North America:*

now Publishers Inc.  
PO Box 179  
2600 AD Delft  
The Netherlands  
Tel. +31-6-51115274

The preferred citation for this publication is

W. Naudé. *The End of the Empire that Entrepreneurship Built: How Seven Sources of Rot will Undo the West*. Foundations and Trends<sup>®</sup> in Entrepreneurship, vol. 20, no. 5, pp. 481–573, 2024.

ISBN: 978-1-63828-391-1  
© 2024 W. Naudé

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Photocopying. In the USA: This journal is registered at the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by now Publishers Inc for users registered with the Copyright Clearance Center (CCC). The 'services' for users can be found on the internet at: [www.copyright.com](http://www.copyright.com)

For those organizations that have been granted a photocopy license, a separate system of payment has been arranged. Authorization does not extend to other kinds of copying, such as that for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. In the rest of the world: Permission to photocopy must be obtained from the copyright owner. Please apply to now Publishers Inc., PO Box 1024, Hanover, MA 02339, USA; Tel. +1 781 871 0245; [www.nowpublishers.com](http://www.nowpublishers.com); [sales@nowpublishers.com](mailto:sales@nowpublishers.com)

now Publishers Inc. has an exclusive license to publish this material worldwide. Permission to use this content must be obtained from the copyright license holder. Please apply to now Publishers, PO Box 179, 2600 AD Delft, The Netherlands, [www.nowpublishers.com](http://www.nowpublishers.com); e-mail: [sales@nowpublishers.com](mailto:sales@nowpublishers.com)

**Foundations and Trends<sup>®</sup> in Entrepreneurship**  
Volume 20, Issue 5, 2024  
**Editorial Board**

**Editors-in-Chief**

**Albert N. Link**

University of North Carolina at Greensboro

**David B. Audretsch**

Indiana University

**Editors**

Howard Aldrich

*University of North Carolina*

Sharon Alvarez

*University of Pittsburgh*

Per Davidsson

*Queensland University of Technology*

Michael Frese

*Asian School of Business*

William B. Gartner

*Babson College*

Magnus Henrekson

*IFN Stockholm*

Michael A. Hitt

*Texas A&M University*

Joshua Lerner

*Harvard University*

Jeff McMullen

*Indiana University*

Maria Minniti

*Syracuse University*

Simon Parker

*University of Western Ontario*

Holger Patzelt

*TU Munich*

Saras Sarasvathy

*University of Virginia*

Roy Thurik

*Erasmus University*

## Editorial Scope

Foundations and Trends® in Entrepreneurship publishes survey and tutorial articles in the following topics:

- Nascent and start-up entrepreneurs
- Opportunity recognition
- New venture creation process
- Business formation
- Firm ownership
- Market value and firm growth
- Franchising
- Managerial characteristics and behavior of entrepreneurs
- Strategic alliances and networks
- Government programs and public policy
- Gender and ethnicity
- New business financing:
  - Business angels
  - Bank financing, debt, and trade credit
  - Venture capital and private equity capital
  - Public equity and IPOs
- Family-owned firms
- Management structure, governance and performance
- Corporate entrepreneurship
- High technology:
  - Technology-based new firms
  - High-tech clusters
- Small business and economic growth

### Information for Librarians

Foundations and Trends® in Entrepreneurship, 2024, Volume 20, 4 issues. ISSN paper version 1551-3114. ISSN online version 1551-3122. Also available as a combined paper and online subscription.

## Contents

---

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>The Empire that Entrepreneurship Built</b>	<b>9</b>
2.1	Definitions . . . . .	9
2.2	The Great Take-Off and the Great Divergence . . . . .	11
2.3	The Great Acceleration . . . . .	12
2.4	Entrepreneurship and Economic Development: The Big Picture . . . . .	13
<b>3</b>	<b>Seven Sources of Rot: Does the Fate of the Soviet Union Await the West?</b>	<b>24</b>
3.1	The Military-Industrial Complex: Kinetic Diplomacy and Surveillance . . . . .	26
3.2	The Rejection and Capture of Science . . . . .	29
3.3	Disincentivizing Innovation . . . . .	33
3.4	Technological Conservatism . . . . .	43
3.5	Informational Bubbles and Lack of Sensemaking . . . . .	50
3.6	The Bankers' Takeover . . . . .	55
3.7	The End of the Hydrocarbon Age . . . . .	60
<b>4</b>	<b>Scenario Spoilers</b>	<b>66</b>

<b>5 Summary and Conclusion</b>	<b>70</b>
<b>Acknowledgements</b>	<b>74</b>
<b>References</b>	<b>75</b>



# The End of the Empire that Entrepreneurship Built: How Seven Sources of Rot will Undo the West

Wim Naudé

*RWTH Aachen University, Germany; Naude@time.rwth-aachen.de*

---

## ABSTRACT

The West is the empire that entrepreneurship built. All empires in the past have at some point collapsed. In recent years attention has been turning to concerns that the global economy is facing the polycrisis, and that collapse may be imminent. In this light, this monograph argues that there are at least seven sources of rot that affect entrepreneurship. These sources of rot follow from an analysis of the sources of rot which led to the collapse of the Soviet Union. It is argued that all of these sources of rot are relevant in the West. The West has an increasingly powerful military-industrial complex which thrives on a *Warfare Economy*, science and research are declining, innovation is being disincentivised, the West is becoming a stop-button society that is seeing technological conservatism just when new technological innovations may most be needed, and the flow of information is increasingly hampering the role of entrepreneurs as knowledge spillover conduits as well as the functioning of democracy. While these factors impacted the Soviet Union, the West is now also facing the end of the hydrocarbon age and has to face the consequences of the financialization of the economy. From the analyses of how these sources of rot

---

Wim Naudé (2024), “The End of the Empire that Entrepreneurship Built: How Seven Sources of Rot will Undo the West”, Foundations and Trends® in Entrepreneurship: Vol. 20, No. 5, pp 481–573. DOI: 10.1561/0300000126.

©2024 W. Naudé

undermine entrepreneurial growth, follows two implications. One is that, given that the underlying sources of rot are similar in outline in an empire that has been built by entrepreneurship, and in an empire that has not been, then entrepreneurship is not a solution to avert collapse. A second is that if collapse is not extinction, it may be a reset to a system that has become too costly and too exploitative to maintain. Collapse may be welcomed, and may even be a feature, and not a “bug” of the evolution of society. These implications suggest that the West should be getting busy with succession planning.

---

**Keywords:** Entrepreneurship; collapse; innovation; trade; business dynamics; development.

# 1

---

## Introduction

---

The West is the empire that entrepreneurship built. From around 1820, global world production (GWP) grew exponentially. Today, the average citizen on the planet has an income that is around 5600% higher than it was roughly 11,000 years ago, and uses around ten times as much energy as the average citizen back then (Syvitski *et al.*, 2020). This remarkable transformation of human society from largely neolithic type farmers and feudal serfs into the modern West featuring global businesses has been termed the *Great Take-Off*. It occurred due to a confluence of circumstances that triggered a veritable explosion in entrepreneurship, as documented by, amongst others, Landes *et al.* (2010) and Mokyr (2016). The Great Take-Off has generated a large literature explaining why and how it happened, and asking whether it can be sustained, and if not, when this empire will collapse. As Gordon (2012, p. 1) remarked, “there was virtually no economic growth before 1750, suggesting that the rapid progress made over the past 250 years could well be a unique episode in human history rather than a guarantee of endless future advance at the same rate.”

In 1973, the Club of Rome’s Limits to Growth (LtG) study’s business-as-usual scenario warned of collapse setting in around the 2030s, give or

take (Meadows *et al.*, 1972). A recent update of the LtG model found that the world is closely tracking the business-as-usual scenario (Turner, 2014). Various scholars have in recent years built on the pioneering work of Olson (1982) and Tainter (1988) on civilizational collapse or degrading, including Bardi (2020), Bostrom (2013), Diamond (2005), Gowdy (2020), Kotkin (2020), Odum and Odum (2001), Ord (2020), Turchin (2023), Naudé (2023b) and to an extent Varoufakis (2023). According to Varoufakis (2023), capitalism at least, if not the world, has been “killed.”

This theme of imminent collapse has crystalized in the contemporary notion, advanced by the World Economic Forum and others, that the world is in *the* Polycrisis, which refers to “the causal entanglement of crises in multiple global systems in ways that significantly degrade humanity’s prospects” (Lawrence *et al.*, 2024, p. 4). As if confirming something is amiss, narratives of collapse, and worse, extinction, have also been proliferating in the broader public consciousness. “What isn’t ending nowadays? What isn’t on the verge of extinction?” Livingstone (2024) exclaimed.

It is good to get the terminology right at the outset. *Collapse* of the West does not have to imply extinction of humanity. Tainter (1988) defined collapse as “a phase transition that leads to a state of reduced complexity, typically being rapid and abrupt.” It does not require an existential risk (*x-risk*), nor does it imply one.<sup>1</sup> Reduced complexity may, however, make humanity more vulnerable to existential risks (Aschenbrenner, 2020). Distinguishing collapse from extinction leaves the possibility open for a successive empire to arise, just as the modern West eventually arose out of the ashes of the collapsed Roman Empire (Greer, 2005).

In this light, this monograph argues that concerns about collapse need to be taken seriously and that there are at least seven sources of rot that affect how entrepreneurship, the builder of the West, continues to play a role in shaping society, and not always in a positive way. By

---

<sup>1</sup>Bostrom (2002) defines existential risk and provides a typology. An existential risk is one “where an adverse outcome would either annihilate Earth-originating intelligent life or permanently and drastically curtail its potential” (Bostrom, 2002, p. 2).

considering these sources of rot from the point of entrepreneurship, it extends the current literature on collapse. It also complements the literature on imminent threats and crises, such as Roubini (2023), which focuses on the imminent occurrence of disasters (“megathreats”) which could trigger collapse. In contrast to imminent threats, this monograph discusses seven slow-burning issues that weaken an empire more subtly over a span of time, which is precisely why they are eventually more destructive.

An entrepreneurship lens on collapse has been somewhat neglected, but not wholly so. The work of Karl Marx, and more recently Mancur Olson and Thomas Piketty, have already, even if somewhat indirectly, implied that entrepreneurship may be a special feature during only a transient stage in history. Marx (1867) for instance argued that capitalism would evolve into communism, thus concluding the age of private entrepreneurship and property as it has been known. Olson (1982) put forward a theoretical model wherein a long period of social stability sees the rise of special interest groups (such as labor unions) and social rigidities (such as regulatory creep) that eventually stifles innovative policies and entrepreneurship. Piketty (2014) provided a model that implies that productive entrepreneurship would be feasible only when the rate of economic growth ( $g$ ) exceeds the rate of return on assets ( $r$ ) – when it does not, when  $r > g$  – which he argues has been the case for most of history<sup>2</sup> – then the wealthy would live from the returns to savings, inequality would rise, new start-ups would face growing financing constraints, and entrepreneurship driven-growth would decline. In Marx and Piketty’s analyses, the private pursuit of profits in a capitalist system undermines itself, leading to a dystopian outcome, in which high levels of inequality sets up untenable power relations in society. Similarly, in Olson’s (1982) analysis, the pursuit of special interests give rise to “distributional coalitions” which, although it improves the position of the members of the coalitions, reduces overall prosperity, leading to “institutional sclerosis.”

---

<sup>2</sup>Krugman (2014) summarises Piketty’s (2014) core arguments, explaining that “historically,  $r$  has almost always exceeded  $g$  [...] the kind of society we consider normal, in which high incomes reflect personal achievement rather than inherited wealth, is in fact an aberration driven by this exceptional period.”

The seven sources of rot that affect entrepreneurship and vice versa that are discussed in this monograph, while not presented as a formal theory of social change as Marx, Olson and Piketty did, are however consistent with their overall narratives, and provide if you will, a set of case studies of how the empire of the West undermines itself.

The modern West is an empire built by entrepreneurship, of which its institutional and governance context has in turn facilitated, incentivized, and allocated entrepreneurship. This empire has achieved great economic and military power and remarkable scientific progress, but it has also placed an unsustainable burden on the planet's ecology and exacted a heavy imperialistic price from non-Western cultures (see e.g., Patnaik and Patnaik, 2021). Its forging in the 20th century unleashed the most terrible destruction on its own citizens through the two most brutal wars in history. Entrepreneurship is not an unambiguously and automatically virtuous activity. It can be inconsistent with human wellbeing (Naudé *et al.*, 2014). It has built an empire that is increasingly being questioned even from the inside. The fact that it is rotting may therefore not be unambiguously bad news for the world.

To identify and analyze the sources of this rot, this monograph takes a somewhat different approach than has been taken so far in the literature, by drawing parallels between the rot affecting the West, and the rot that caused the collapse of the Soviet Union.

From this follows two fascinating and important implications. One is that, if the underlying sources of rot are similar in outline (if not detail) in an empire that has been built by entrepreneurship, and in an empire that has not been, then one should not expect entrepreneurship to reverse the decline of the West. A second implication is that, if collapse is not extinction, then collapse may be a reset to a system that, as per Tainter's (1988) analysis, has become too costly to maintain, and per Marx's (1867), too exploitative to maintain. Collapse may be welcomed and even a feature, and not a "bug", of the evolution of society (Bardi, 2020).

Taken together this suggests that the West should be getting busy with succession planning. The who and how of such empire succession planning falls outside the scope of the present monograph. It can be

noted though, that virtually no-one is concerned<sup>3</sup> about such succession planning, most certainly not Western Elites, certainly partly because systemic rot is a subtle, relative slow process, unlike eminent threats, as mentioned already. “As empires collapse, elites are usually the last to know” (Fix, 2020a).

In drawing the parallels with the Soviet Union, I will follow Chan’s (2015) categorisation of five sources of rot that ended the Soviet Union. To these I will add two further sources that are prominent in the West. According to Chan (2015) the Soviet Union collapsed as a result of

- (a) Increasing militarization.
- (b) The ideological undermining of science.
- (c) The disincentivizing of innovation.
- (d) “Technological conservatism”; and
- (e) A centralizing hierarchy that obstructed the horizontal flow of information.

All of these pathologies are currently present – and becoming more pronounced over time – in the West. I will also argue that there are two further pathologies – sources of rot – that affect the West that did not play a major role in the Soviet Union’s collapse, namely

- (f) The end of the hydrocarbon age – the energy transition out of cheap fossil fuels; and
- (g) The financialization of the economy – the bankers’ takeover.

These seven sources of rot are argued to be the main harbingers of the collapse of the West. Understanding these better may help inform the debate that is needed on succession planning so as to minimize the damages that can be caused by collapse, and moreover to manage post-collapse recovery.

The rest of the monograph is structured as follows. Section 2 explains why entrepreneurship has been the builder of the West’s empire that

---

<sup>3</sup>There are a few exceptions, notably Nate Hagens, who campaigns for a “Great Simplification” (see: <https://www.thegreatsimplification.com>).

arose roughly around the 1800s. Section 3 asks, does the fate of the Soviet Union await the West? It discusses seven sources of rot. Section 4 draws together the conclusions from the discussion of these sources of rot to explain how they represent scenario spoilers for the optimistic scenarios of an entrepreneurial economy. Section 5 concludes.



## References

---

- Acemoglu, D. and J. Robinson (2011). *Why Nations Fail. The Origins of Power, Prosperity, and Poverty*. New York: Penguin.
- Acs, Z. J., P. Braunjerhjelm, D. Audretsch, and B. Carlsson (2009). “The knowledge spillover theory of entrepreneurship”. *Small Business Economics*. 32(1): 15–30.
- Akcigit, U. and S. Ates (2019a). “Ten facts on declining business dynamism and lessons from endogenous growth theory”. *CEPR Discussion Paper no. 13668*, London, Centre for Economic Policy Research.
- Akcigit, U. and S. Ates (2019b). “What happened to U.S. business dynamics?” *CEPR Discussion Paper no. 13669*, London, Centre for Economic Policy Research.
- Akkerman, M., N. Ní Bhriain, and J. Valeske (2022). *Smoke Screen: How States are Using the War in Ukraine to Drive a New Arms Race*. Amsterdam: TNI and Stop Wapenhandel.
- Andrews, D., C. Criscuolo, and P. Gal (2016). “The best versus the rest: The global productivity slowdown, divergence across firms and the role of public policy”. *OECD Productivity Working Papers No. 5*, Paris: OECD.
- Archer, E. (2020). “The intellectual and moral decline in academic research”. *James G. Martin Center for Academic Renewal*.

- Arrow, K. (1962). "Economic welfare and the allocation of resources for invention". In: *The Rate and Direction of Inventive Activity: Economic and Social Factors*, Universities-National Bureau Committee for Economic Research, Committee on Economic Growth of the Social Science Research Council. Princeton: Princeton University Press.
- Aschenbrenner, L. (2020). "Existential risk and growth". *GPI Working Paper No. 6-2020*, Global Priorities Institute, University of Oxford.
- Atkinson, A., T. Piketty, and E. Saez (2011). "Top incomes in the long run of history". *Journal of Economic Literature*. 49(1): 3–7.
- Audretsch, D. and A. Thurik (2000). "Capitalism and democracy in the 21st century: From the managed to the entrepreneurial economy". *Journal of Evolutionary Economics*. 10(1–2): 17–34.
- Audretsch, D. and A. Thurik (2004). "A model of the entrepreneurial economy". *International Journal of Entrepreneurship Education*. 2(2): 143–166.
- Autor, D., D. Dorn, L. Katz, C. Patterson, and J. van Reenen (2017). "The fall of the labor share and the rise of superstar firms". *NBER Working Paper no. 23396*, National Bureau for Economic Research.
- Ayyagari, M., T. Beck, and A. Demirguc-Kunt (2007). "Small and medium enterprises across the globe". *Small Business Economics*. 29: 415–434.
- Ayyagari, M., A. Demirguc-Kunt, and V. Maksimovic (2011). "Small vs. young firms across the world: Contribution to employment, job creation and growth". In: *Policy Research Working Paper 5631*, Washington DC, The World Bank.
- Ayyagari, M., A. Demirguc-Kunt, and V. Maksimovic (2014). "Who creates jobs in developing countries?" *Small Business Economics Journal*. 43: 75–99.
- Azoulay, P., E. Fuchs, A. Goldstein, and M. Kearney (2018). "Funding breakthrough research: Promises and challenges of the ARPA model". *Innovation Policy and the Economy*. 19: 69–96.
- Baily, M. (2003). "The source of economic growth in OECD countries: A review article". *International Productivity Monitor*. 7: 66–70.

- Baldwin, R. and J. Harrigan (2011). “Zeros, quality, and space: Trade theory and trade evidence”. *American Economic Journal: Microeconomics*. 3: 60–88.
- Bardi, U. (2020). *Before the Collapse: A Guide to the Other Side of Growth*. Cham, CH: Springer Nature Switzerland.
- Barth, J. R. (2008). “US subprime mortgage meltdown”. In: *Paper presented at the 14th Dubrovnik Economic Conference, 25 June*. URL: <http://www.hnb.hr/dub-konf/14-konferencija/barth.ppt>.
- Bastos, P. and J. Silva (2010). “The quality of a firm’s exports: Where you export to matters”. *Journal of International Economics*. 82(2): 99–111.
- Baumol, W. (1990). “Entrepreneurship: Productive, unproductive, and destructive”. *Journal of Political Economy*. 98(5): 893–921.
- Baumol, W. J. and R. J. Strom (2007). “Entrepreneurship and economic growth”. *Strategic Entrepreneurship Journal*. 1: 233–237.
- Baumol, W. J. (2008). “Entrepreneurs, inventors and the growth of the economy, part of the supplemental materials for innovation and U.S. competitiveness”. In: *The Conference Board Report #R-1441-09-RR*.
- Becker, B. (2015). “Public R&D policies and private R&D investment: A survey of the empirical evidence”. *Journal of Economic Surveys*. 29: 917–942.
- Beddoes, Z. M. (2023). “2024 will be stressful for those who care about liberal democracy”. *The Economist*.
- Bennett, F., D. Lederman, S. Pienknagura, and D. Rojas (2019). “The volatility of world trade in the 21st century: Whose fault is it anyway?” *The World Economy*. 42(9): 2508–2545.
- Bessen, J., E. Denk, J. Kim, and C. Righi (2020). *Declining Industrial Disruption*. Boston University Law School Working Paper.
- Bhaskar, M. (2021). *Human Frontiers: The Future of Big Ideas in an Age of Small Thinking*. London: The Bridge Street Press.
- Bijnens, G. and J. Konings (2020). “Declining business dynamism in Belgium”. *Small Business Economics*. 54: 1201–1239.
- Bloom, N., J. van Reenen, and H. Williams (2019). “A toolkit of policies to promote innovation”. *Journal of Economic Perspectives*. 33(3): 163–184.

- Bloom, N., C. I. Jones, J. Van Reenen, and M. Webb (2020). “Are ideas getting harder to find?” *American Economic Review*. 110(4): 1104–1144.
- Boettcher, K. (2021). *Seeing Red Over the Climate Crisis: Ecosocialism as Emergency Brake*. Thesis Presented to the Faculty of California State University, Stanislaus.
- Bonaiuti, C., P. Maranzano, M. Pianta, and M. Stamegna (2023). *Arming Europe: Military Expenditures and Their Economic Impact in Germany*. Italy and Spain: Greenpeace.
- Bonatti, L. (2023). “The epistemic vices of democracies in the age of populism”. *CESifo Working Paper 10569*.
- Bostrom, N. (2002). “Existential risks: Analyzing human extinction scenarios and related hazards”. *Journal of Evolution and Technology*. 9(1).
- Bostrom, N. (2003). “Astronomical waste: The opportunity cost of delayed technological development”. *Utilitas*. 15(3): 308–314.
- Bostrom, N. (2013). “Existential risk prevention as global priority”. *Global Policy*. 4: 15–31.
- Bryant, K. (2018). “How we create and destroy growth: The 2018 Nobel Laureates”. *VOX EU/CEPR*.
- Bufacchi, V. (2021). “Truth, lies and tweets: A consensus theory of post-truth”. *Philosophy & Social Criticism*. 47(3): 347–361.
- Cairo, I., H. Hyatt, and N. Zhao (2015). “The U.S. job ladder in the new millennium”. In: *Meeting Papers 893*. Stonybrook, NY: Society for Economic Dynamics.
- Campbell, C. and J. Laherrere (1998). “The end of cheap oil”. *Scientific American*. 278(3): 80–86.
- Cassidy, C. (2024). “We landed on the moon again”. In: *The Morning Brew*.
- Caverley, Z. R. (2023). “Who should fund science?” *Quillette*.
- Chan, C. L. (2015). “Fallen behind: Science, technology and soviet statism”. *Intersect The Stanford Journal of Science, Technology and Society*. 8(3).
- Chiang, T. (2017). “Silicon valley is turning into its own worst fear”. *BuzzFeed News*.

- Cho, D. (2009). *Banks Too Big to Fail Have Grown Even Bigger*. The Washington Post.
- Coase, R. (1937). “The nature of the firm”. *Economica*. 4(16): 386–405.
- Covarrubias, M., G. Gutiérrez, and T. Philippon (2019). From good to bad concentration?
- Cowen, T. (2010). *The Great Stagnation*. New York: Penguin (Dutton).
- Crouzet, N. and J. Eberly (2018). “Understanding weak capital investment: The role of market concentration and intangibles”. In: *Technical Report*, Jackson Hole Economic Policy Symposium. Federal Reserve Bank of Kansas City, August 23–25.
- Czarnitzki, D. and S. Thorwarth (2012). “Productivity effects of basic research in low-tech and high-tech industries”. *Research Policy*. 41(9): 1555–1564.
- Davis, S. (2015). “Regulatory complexity and policy uncertainty: Headwinds of our own making”. *Economics Working Paper 15118*, Hoover Institution, Stanford, Stanford University.
- Decker, R., J. Haltiwanger, R. Jarmin, and J. Miranda (2014). “The role of entrepreneurship in U.S. job creation and dynamics”. *Journal of Economic Perspectives*. 28(3): 3–24.
- Decker, R., J. Haltiwanger, R. Jarmin, and J. Miranda (2017). “Declining dynamism, allocative efficiency, and the productivity slowdown”. *American Economic Review, Papers and Proceedings*. 107(5): 322–326.
- Demaria, F., F. Schneider, F. Sekulova, and J. Martinez-Alier (2016). “What is degrowth? From an activist slogan to a social movement. The environment in anthropology: A reader in ecology”. In: *Culture, and Sustainable Living*. Ed. by N. Haenn, A. Harnish, and R. Wilk. New York, USA: New York University Press. 390–400.
- Diamond, J. (1997). *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W.W. Norton.
- Diamond, J. (2005). *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking Press.
- Dickson, P. (2007). *Sputnik: The Shock of the Century*. Walker Books.
- Duncan, T. (2022). “The continuing costs of the permanent war economy”. URL: <https://ssrn.com/abstract=4314099>.

- Eckhardt, W. (1990). "Civilizations, empires, and wars". *Journal of Peace Research*. 27(1): 9–24.
- Eden, M. and K. Kuruc (2023). *The Long-Run Relationship between Per Capita Incomes and Population Size*. Oxford: Mimeo, Global Priorities Institute.
- Editorial (2019). "Cancer, climate, plastics: Why 'earthshots' are harder than moonshots". *Nature*.
- EEA (2020). "Growth without economic growth". In: *Briefing no. 28/2020*. European Environmental Agency.
- Ely, B. (2009). "Bad rules produce bad outcomes: Underlying public-policy causes of the U.S. financial crisis". *Cato Journal*. 29(1): 93–114.
- Erixon, F. and B. Weigl (2016). *The Innovation Illusion*. New Haven: Yale University Press.
- Fichtner, J., E. Heemskerk, and G. Garcia-Bernardo (2017). "These three firms own corporate America". *The Conversation*.
- Fix, B. (2020a). "Why America won't be 'great' again". *Economics From the Top Down*.
- Fix, B. (2020b). "Peak oil never went away". *Economics From the Top Down*.
- Floyd, J., S. Alexander, M. Lenzen, P. Moriarty, G. Palmer, S. Chandra-Shekeran, B. Foran, and L. Keysser (2020). "Energy descent as a post-carbon transition scenario: How 'knowledge humility' reshapes energy futures for post-normal times". *Futures*. 122: 102565.
- Foster, J. B. and R. McChesney (2014). "Surveillance capitalism: Monopoly-finance capital, the military-industrial complex, and the digital age". *Monthly Review*. 66(3): 1–31.
- Frankel, J. A. and D. Romer (1999). "Does trade cause growth?" *American Economic Review*. 89(3): 379–399.
- Freyman, N. (2024). "Ukraine aid lifts the US economy, backers say". *The Morning Brew*.
- Friedemann, A. J. (2021). *Life After Fossil Fuels: A Reality Check on Alternative Energy*. Springer, Cham.
- Fukayama, F. (1992). *The End of History and the Last Man*. New York: Polity Press.

- Funk, J. and G. Smith (2022). “The hyper-specialization of university researchers”. *Mind Matters*.
- Geroski, P. (1990). “Innovation, technological opportunity, and market structure”. *Oxford Economic Papers*. 42: 586–602.
- Gewin, V. (2023). “How five researchers fared after their ‘great resignation’ from academia”. *Nature*.
- Ghosh, J. (2021). “Lessons from the moonshot for fixing global problems”. *Nature*.
- Goldschlag, N. and A. Tabarrok (2018). “Is regulation to blame for the decline in American entrepreneurship?” *Economic Policy*. 33(93): 5–44.
- Gordon, R. (2012). “Is U.S. economic growth over? Faltering innovation confronts the six headwinds”. *NBER Working Paper No. 18315*, National Bureau for Economic Research.
- Gordon, R. (2016). *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War*. Princeton: Princeton University Press.
- Görg, H. and E. Strobl (2007). “The effect of R&D subsidies on private R&D”. *Economica*. 74(294): 215–234.
- Gowdy, J. (2020). “Our hunter-gatherer future: Climate change, agriculture and uncivilization”. *Futures*. 115: 102488.
- G&R (2023). *The Permian Basin Is Depleting Faster Than We Thought*. Goehring & Rozencwajg.
- Greer, J. M. (2005). “How civilizations fall: A theory of catabolic collapse”. URL: [https://www.ecoshock.org/transcripts/greer%5C\\_on%5C\\_collapse.pdf](https://www.ecoshock.org/transcripts/greer%5C_on%5C_collapse.pdf).
- Gries, T. and W. Naudé (2011). “Entrepreneurship, structural change and a global economic crisis”. *Entrepreneurship Research Journal*. 1(3): article 4.
- Grossman, G. M. and E. Helpman (2015). “Globalization and growth”. *American Economic Review, Papers and Proceedings*. 105(5): 100–104.
- Grullon, G., Y. Larkin, and R. Michaely (2019). “Are U.S. industries becoming more concentrated?” *Review of Finance*. 23(4): 697–743.
- Grunberg, A. (2023). *Der Fall Lohengrin, NRC*.

- Gutiérrez, G. and T. Philippon (2020). “Some facts about dominant firms”. *NBER Working Paper No. 27985*, National Bureau of Economic Research.
- Habashi, F. (2000). “The first oil well in the world”. *Bulletin for History of Chemistry*. 25(1): 64–66.
- Hagemejer, J. and J. Mućk (2019). “Export-led growth and its determinants: Evidence from central and eastern European countries”. *The World Economy*. 42(7): 1994–2025.
- Hagens, N. (2018). “Where are we going?” *Resilience*.
- Hagens, N. (2020). “Economics for the future—Beyond the superorganism”. *Ecological Economics*. 169: 106520.
- Hall, C. (2017). “Will EROI be the primary determinant of our economic future? The view of the natural scientist versus the economist”. *Joule*. 1: 635–638.
- Hallock, J. L., W. Wu, C. A. S. Hall, and M. Jefferson (2014). “Forecasting the limits to the availability and diversity of global conventional oil supply: Validation”. *Energy*. 64: 130–153.
- Haltiwanger, J. (2022). “Entrepreneurship in the twenty-first century”. *Small Business Economics*. 58: 27–40.
- Hamilton, B. A. (2000). “Does entrepreneurship pay? An empirical analysis of the returns to self-employment”. *Journal of Political Economy*. 108(3): 604–631.
- Hanson, R. (2024). “Our tenured civ”. *Overcoming Bias Blog*.
- Harford, T. (2006). *The Undercover Economist*. Oxford: Oxford University Press.
- Harvey, F. (2022). “Record profits for grain firms amid food crisis prompt calls for windfall tax”. *The Guardian*.
- Hathaway, J. and R. Litan (2014). *Declining Business Dynamism in the United States: A Look at States and Metros*. Washington, DC: Economic Studies at Brookings.
- Hausmann, R. and D. Rodrik (2003). “Economic development as self-discovery”. *Journal of Development Economics*. 72(2): 603–633.
- Hausmann, R., J. Hwang, and D. Rodrik (2007). “What you export matters”. *Journal of Economic Growth*. 12(1): 1–25.



- Head, M. J., W. Steffen, D. Fagerlind, C. N. Waters, C. Poirier, *et al.* (2021). “The great acceleration is real and provides a quantitative basis for the proposed Anthropocene”. *Journal of International Geoscience*. DOI: [10.18814/epiiugs/2021/021031](https://doi.org/10.18814/epiiugs/2021/021031).
- Hess, A. (2022). “Apocalypse nowadays: The new wave of films about the end of the world”. *The Guardian*.
- Hiatt, R. A. and N. Beyeler (2020). “Cancer and climate change”. *The Lancet Oncology*. 21: e519–27.
- Hickel, J. (2021). “What does degrowth mean? A few points of clarification”. *Globalizations*. 18(7): 1105–1111.
- Hidalgo, C. A., B. Klinger, A.-L. Barabasi, and R. Hausmann (2007). “The product space conditions the development of nations”. *Science*. 317(5837): 482–487.
- Hopenhayn, H., J. Neira, and R. Singhania (2018). “From population growth to firm demographics: Implications from concentration, entrepreneurship and the labor share”. *NBER Working Paper No. 25382*.
- Hotez, P. J. (2020). “Combating antiscience: Are we preparing for the 2020s”. *PLoS Biology*. 18(3): e3000683.
- Hotez, P. J. (2021). *The Antiscience Movement is Escalating, Going Global and Killing Thousands*. Scientific American.
- Hubbert, M. (1956). “Nuclear energy and the fossil fuels”. In: *Presented before the Spring Meeting of the Southern District*. San Antonio, Texas, March: American Petroleum Institute, Plaza Hotel. 7–9.
- Hummels, D. L. and P. J. Klenow (2005). “The variety and quality of a nation’s exports”. *American Economic Review*. 95(3): 704–723.
- Hutton, W. (2023). “Britain is stuck in a doom loop: The system is rigged against growth. That needs to change”. *The Guardian*.
- Ioannidis, J. P. A. (2005). “Why most published research findings are false”. *PLoS Med*. 2(8): e124.
- Johnson, S. (2009). “The quiet coup”. *The Atlantic*.
- Johnson, S. and J. Kwak (2011). *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*. New York: Random House.
- Jones, C. (2019). “Paul Romer: Ideas, nonrivalry, and endogenous growth”. *Scandinavian Journal of Economics*. 121: 859–883.

- Jones, C. (2022). “The end of economic growth? Unintended consequences of a declining population”. *American Economic Review*. 112(11): 3489–3527.
- Jorgenson, A. K., B. Clark, R. P. Thombs, J. Kentor, J. E. Givens, X. Huang, H. El Tinay, D. Auerbach, and M. C. Mahutga (2023). “Guns versus climate: How militarization amplifies the effect of economic growth on carbon emissions”. *American Sociological Review*. 88(3): 418–453.
- Kallis, G. and H. March (2015). “Imaginaries of hope: The Utopianism of Degrowth”. *Annals of the Association of American Geographers*. 105(2): 360–336.
- Kamepalli, S., R. Rajan, and L. Zingales (2020). “Kill zone”. In: *Working Paper 2020-19*. Becker Friedman Institute for Economics, University of Chicago.
- Kapoor, R. and J. P. Murmann (2023). “The organizational and technological origins of the U.S. shale gas revolution, 1947 to 2012, industrial and corporate change, dtad021”.
- Keiser, M. (2008). “Who could have predicted revolution in Iceland?” *HuffPost Business*.
- Kemp, L., C. Xu, J. Depledge, K. Ebi, G. Gibbins, T. Kohler, J. Rockström, M. Scheffer, H. Schellnhuber, W. Steffen, and T. Lenton (2022). “Climate endgame: Exploring catastrophic climate change scenarios”. *Proceedings of the National Academy of Sciences*. 119(34): e2108146119.
- Kirzner, I. M. (1979). *Perception, Opportunity, and Profit*. Chicago: University of Chicago Press.
- Klimm, F. (2022). “Quantifying the ‘End of History’ through a Bayesian Markov-Chain approach”. *Royal Society Open Science*. 9(11): 221131.
- Klüppel, L. and A. Knott (2023). “Are ideas being fished out?” *Research Policy*. 52(2): 104665.
- Kornai, J. (2013). *Dynamism, Rivalry, and the Surplus Economy: Two Essays on the Nature of Capitalism*. Oxford University Press.
- Kotkin, J. (2020). *The Coming of Neo Feudalism: A Warning to the Global Middle Class*. New York: Encounter Books.
- Kotkin, S. (2008). *Armageddon Averted: The Soviet Collapse, 1970–2000*. Oxford: Oxford University Press.

- Kozeniauskas, N. (2018). “What’s driving the decline in entrepreneurship?” Unpublished paper. New York University, New York, NY.
- Kraus, S., R. V. Mahto, and S. Walsh (2023). “The importance of literature reviews in small business and entrepreneurship research”. *Journal of Small Business Management*. 61(3): 1095–1106.
- Kremer, M. (1993). “Population growth and technological change: One million B.C. to 1990”. *The Quarterly Journal of Economics*. 108(3): 681–716.
- Krugman, P. (2014). “Notes on Piketty (Wonkish)”. *The New York Times*.
- Kuratko, D. F. and D. Audretsch (2022). “The future of entrepreneurship: The few or the many?” *Small Business Economics*. 59: 269–278.
- Lal, V. (2009). “Gandhi’s west, the west’s Gandhi”. *New Literary History*. 40(2): 281–313.
- Landes, D. S., J. Mokyr, and W. J. Baumol (2010). *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*. Princeton: Princeton University Press.
- Lang, G. (2009). “Measuring the returns of R&D: An empirical study of the German manufacturing sector over 45 years”. *Research Policy*. 38(9): 1438–1445.
- Lawrence, M., T. Homer-Dixon, S. Janzwood, J. Rockström, O. Renn, and J. F. Donges (2024). “Global polycrisis: The causal mechanisms of crisis entanglement”. *Global Sustainability*: 1–36.
- Lee, S. M. (2021). “A data sleuth challenged a powerful COVID scientist. Then he came after her”. *Buzzfeed News*.
- Lenderink, B., I. Johannes, and H. Voordijk (2019). “Innovation and public procurement: From fragmentation to synthesis on concepts, rationales and approaches”. *Innovation: The European Journal of Social Science Research*.
- Lenton, T. M., H. Held, E. Kriegler, and H. Schellnhuber (2008). “Tipping elements in the earth’s climate system”. *PNAS*. 105(6): 1786–1793.
- Lenton, T. M., C. Xu, J. F. Abrams, *et al.* (2023). “Quantifying the human cost of global warming”. *Nature Sustainability*.

- Lenton, T., J. Rockström, O. Gaffney, S. Rahmstorf, K. Richardson, W. Steffen, and H. Schellnhuber (2019). “Climate tipping points—Too risky to bet against”. *Nature*.
- Lin, J. Y. (2008). “The impact of the financial crisis on developing countries”. In: *Paper Presented in Korea Development Institute*. Seoul.
- Livingstone, J. (2024). “What was capitalism?” *Project Syndicate*.
- Lucas, R. (1990). “Why doesn’t capital flow from rich to poor countries?” *American Economic Review*. 80(2): 92–96.
- Lynas, M. (2024). “Viewpoint: Nobel laureates and 1,000 other scientists plead with European parliamentarians to ‘reject the darkness of anti-science fearmongering’ over gene editing”. *Genetic Literacy Project*.
- Mainela, T., V. Puhakka, and S. Sipola (2018). “International entrepreneurship beyond individuals and firms: On the systemic nature of international opportunities”. *Journal of Business Venturing*. 33(4): 534–550.
- Marx, K. (1867). “Das Kapital. Kritik der politischen Oekonomie. Verlag von Otto Meisner”.
- Mason, R. (2008). “Iceland falls out of love with its billionaires”. *The Telegraph*.
- Mazzucato, M. (2011). *The Entrepreneurial State*. London: Penguin.
- Mazzucato, M. (2021). *Mission Economy: A Moonshot Guide to Changing Capitalism*. London: Allen Lane.
- McCloskey, D. N. (2016). *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World*. Chicago: University of Chicago Press.
- McGowan, M., D. Andrews, and V. Millot (2017). “The walking dead? Zombie firms and productivity performance in OECD countries”. *Working Paper No. 1372*, Paris, OECD.
- McKie, R. (2024). “The situation has become appalling’: Fake scientific papers push research credibility to crisis point”. In: *The Guardian*.
- Meadows, D., D. Meadows, J. Randers, and W. Behrens III (1972). *The Limits to Growth; A Report for the Club of Rome’s Project on the Predicament of Mankind*. New York: Universe Books.

- Minniti, M., W. Naudé, and E. Stam (2023). “Is productive entrepreneurship getting scarcer? A reflection on the contemporary relevance of Baumol’s typology”. *IZA DP No. 16408*, Bonn, IZA Institute for Labor Economics.
- Mohr, S., J. Wang, G. Ellem, J. Ward, and D. Giurco (2015). “Projection of world fossil fuels by country”. *Fuel*. 1: 120–135.
- Mok, A. (2023). “Trump supporters and Christians are the most worried that AI is an existential threat to humanity, poll says”. *Business Insider*.
- Mokyr, J. (2003). “Why was the industrial revolution a European phenomenon?” *Supreme Court Economic Review*. 10: 27–63.
- Mokyr, J. (2007). “The power of ideas”. *World Economics*. 8(3): 53–110.
- Mokyr, J. (2014). “Growth and technology: The wild ride ahead”. *Milken Institute Review*.
- Mokyr, J. (2016). *A Culture of Growth: The Origins of the Modern Economy*. Princeton: Princeton University Press.
- Morris, I. (2010). *Why the West Rules—For Now: The Patterns of History and What they Reveal About the Future*. London: Profile Books.
- Morris, I. (2015). *Foragers, Farmers, and Fossil Fuels: How Human Values Evolve*. Princeton: Princeton University Press.
- Moskovitz, T. J. and A. Vissing-Jørgensen (2002). “The returns to entrepreneurial investment: A private equity premium puzzle?” *American Economic Review*. 92: 745–778.
- Murphy, K., A. Schleifer, and R. Vishny (1991). “The allocation of talent: Implications for growth”. *Quarterly Journal of Economics*. 106(2): 503–530.
- Murphy, T., D. Murphy, T. Love, M. LeHew, and B. McCall (2021). “Modernity is incompatible with planetary limits: Developing a PLAN for the future”. *Energy Research & Social Science*. 81: 102239.
- Murray, J. and D. King (2012). “Oil’s tipping point has passed”. *Nature*. 481: 433–435.
- Naudé, W. ed. (2010a). *Entrepreneurship and Economic Development*. Basingstoke: Palgrave Macmillan.

- Naudé, W. (2010b). “The global economic crisis and developing countries: Impacts, responses and options for sustainable recovery”. *Poverty and Public Policy*. 2(2): article 8.
- Naudé, W. (2011). “Global finance after the crisis: Reform imperatives and vested interests”. *Global Economy Journal*. 11(2): article 6.
- Naudé, W., E. Amorós, and O. Cristi (2014). “Surfeiting, the appetite may sicken’: Entrepreneurship and happiness”. *Small Business Economics Journal*. 42(1): 523–540.
- Naudé, W. (2016). “Is European entrepreneurship in crisis?” In: *IZA DP No. 9817*. Bonn: IZA Institute for Labor Economics.
- Naudé, W. and M. J. Cameron (2021). “Export-led growth after COVID-19: The case of Portugal”. *Notas Económicas*. 52(1): 7–53.
- Naudé, W. and P. Nagler (2022). “The ossified economy: The case of Germany, 1870-2020”. In: *IZA DP No. 15607*. Bonn: IZA Institute of Labor Economics.
- Naudé, W. (2022a). “From the entrepreneurial to the ossified economy”. *Cambridge Journal of Economics*. 46(1): 105–131.
- Naudé, W. (2022b). “Longtermism and AI: How our billionaire overlords want to live forever”. *Medium*.
- Naudé, W. (2023a). “Destructive digital entrepreneurship”. In: *IZA DP No. 16483*. Bonn: IZA Institute of Labor Economics.
- Naudé, W. (2023b). *Economic Growth and Societal Collapse: Beyond Degrowth and Green Growth Fairy Tales*. Basingstoke: Palgrave Macmillan.
- Naudé, W. (2023c). “The stop button society: Longing for the end of capitalism?” *Medium*.
- Naudé, W. (2023d). “Degrowth: Slowing down rich economies to deal with climate change is a flawed idea”. *The Conversation*.
- Naudé, W. (2023e). “No, degrowth won’t save us”. *BMJ (British Medical Journal)*. 382: 2245.
- Naudé, W. (2023f). “Degrowth’s radical political project to de-develop the world”. *Medium*.
- Naudé, W. (2024). “Is the scholarly field of entrepreneurship at its end?” In: *IZA Discussion Paper*. Bonn: IZA Institute of Labor Economics.
- Nowogrodzki, A. (2022). “Most US professors are trained at same few elite universities”. *Nature*.

- Odum, H. and E. Odum (2001). *A Prosperous Way Down: Principles and Policies*. Boulder, CO: University Press of Colorado.
- Olson, M. (1982). *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven: Yale University Press.
- Ord, T. (2020). *The Precipice: Existential Risk and the Future of Humanity*. New York: Hachette Books.
- O'Rourke, K. H. and J. G. Williamson (2000). "When did globalization begin?" *NBER Working Paper No. 7632*, Cambridge MA, National Bureau of Economic Research.
- Patnaik, U. and P. Patnaik (2021). *Capital and Imperialism: Theory, History, and the Present*. New York: Monthly Review Press.
- Perez-Orive, A. and Y. Timmer (2023). *Distressed Firms and the Large Effects of Monetary Policy Tightenings*. FEDS Notes.
- Philipp-Muller, A., S. W. S. Lee, and R. E. Petty (2022). "Why are people antiscience, and what can we do about it?" *PNAS*. 119(30): e2120755119.
- Piketty, T. (2014). *Capital in the Twenty-First Century*. Cambridge: Harvard University Press.
- Pinker, S. (2018). *Enlightenment Now: The Case for Reason, Science, Humanism and Progress*. New York: Viking.
- Pluckrose, H. (2017). "How French intellectuals ruined the west: Post-modernism and its impact explained". *Languaa*.
- Pomeranz, K. (2021). *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. Princeton: Princeton University Press.
- Rammer, C. and T. Schubert (2018). "Concentration on the few: Mechanisms behind a falling share of innovative firms in Germany". *Research Policy*. 47(2): 379–389.
- Ridley, M. (2011). *The Rational Optimist*. London: 4th Estate.
- Ridley, M. (2020). *How Innovation Works*. London: 4th Estate.
- Robinson, J. A. (2009). "'Industrial policy and development: A political economy perspective', Seoul". In: *Paper Presented in 2009 World Bank ABCDE Conference*, 22–24 June.
- Rockström, J., W. Steffen, K. Noone, A. Persson, F. Chapin, E. Lambin, T. Lenton, *et al.* (2009). "Planetary boundaries: Exploring the safe operating space for humanity". *Ecology and Society*. 14(2).

- Rockström, J., J. Gupta, D. Qin, *et al.* (2023). “Safe and just Earth system boundaries”. *Nature*. 619: 102–111.
- Romer, P. M. (1986). “Increasing returns and long-run growth”. *Journal of Political Economy*. 94(5): 1002–1037.
- Romer, P. M. (1990). “Endogenous technological change”. *Journal of Political Economy*. 98(5): S71–S102.
- Romer, P. (1993). “Idea gaps and object gaps in economic development”. *Journal of Monetary Economics*. 32(3): 543–573.
- Romer, P. (2016). “The deep structure of economic growth, Paul Romer blog”. URL: <https://paulromer.net/economic-growth/>.
- Rosenberg, N. (1990). “Why do firms do basic research (With their own money)?” *Research Policy*. 19: 165–174.
- Roubini, N. (2023). *Megathreats: Our Ten Biggest Threats, and How to Survive Them*. London: John Murray Press.
- Ruiz, A., B. Vranken, F. Vignarca, J. Calvo, L. Sédou, and W. de Vries (2021). *A Militarised Union: Understanding and Confronting the Militarisation*. Brussels: Rosa-Luxemburg-Stiftung.
- Rushkoff, D. (2022). *Survival of the Richest: Escape Fantasies of the Tech Billionaires*. New York: W.W. Norton.
- Sample, I. (2024). “Why landing on the moon is proving more difficult today than 50 years ago”. *The Guardian*.
- Schmelzer, M. and T. Nowshin (2023). “Ecological reparations and degrowth: Towards a convergence of alternatives around world-making after growth”. In: *Development*.
- Schumpeter, J. A. (1943). *Capitalism, Socialism, and Democracy*. 6th ed. London/New York: George Allen & Unwin.
- Schwartz, P. and P. Leiden (1997). “The long boom: A history of the future, 1980–2020”. *WIRED Magazine*.
- Sédou, L. (2023). “War in Ukraine, cover for EU’s all-out militarisation”. *Stop Wapenhandel Blog*.
- Shane, S. (2009). “Why encouraging more people to become entrepreneurs is bad public policy”. *Small Business Economics Journal*. 33: 141–149.
- Shulman, C. and N. Bostrom (2021). “Sharing the world with digital minds”. In: *Rethinking Moral Status*. Ed. by S. Clarke, H. Zohny, and J. Savulescu. Oxford: Oxford Academic.



- SIC (2010). *Report of the special investigation commission*.
- Smil, V. (2022). *How the World Really Works*. London: Penguin Books.
- Sokal, A. and J. Bricmont (1998). *Fashionable Nonsense: Postmodern Intellectuals' Abuse of Science*. New York: Picador.
- Solow, R. (1956). "A contribution to the theory of economic growth". *Quarterly Journal of Economics*. 70: 65–94.
- Srnicek, N. (2016). *Platform Capitalism*. John Wiley & Sons.
- Stam, E. and B. Spigel (2018). "Entrepreneurial ecosystems". In: *The SAGE Handbook of Small Business and Entrepreneurship*. Ed. by R. Blackburn, D. D. Clercq, and J. Heinonen. London: SAGE. 407–422.
- Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney, and C. Ludwig (2015b). "The trajectory of the anthropocene: The great acceleration". *The Anthropocene Review*. 2(1): 81–98.
- Stiglitz, J. E. (2009). "The anatomy of a murder: Who killed America's economy?" *Critical Review*. 21(2–3): 329–339.
- Stokstad, E. (2024). "European Parliament votes to ease regulation of gene-edited crops". *Science*.
- Stone, R. W. (1995). *Satellites and Commissars: Strategy and Conflict in the Politics of Soviet-Bloc Trade*. Princeton: Princeton University Press.
- Supran, G. and N. Oreskes (2021). "Rhetoric and frame analysis of ExxonMobil's climate change communications". *One Earth*. 4(5): 696–719.
- Sveikauskas, L. (2007). "R&D and productivity growth: A review of the literature". *Bureau of Labor Statistics Working Paper 408*, Washington, D.C., Bureau of Labor Statistics.
- Syvitski, J., C. Waters, J. Day, *et al.* (2020). "Extraordinary human energy consumption and resultant geological impacts beginning around 1950 CE initiated the proposed anthropocene epoch". *Communications Earth and Environment*. 1: 32.
- Szirmai, A., W. Naudé, and M. Goedhuys (2011). *Entrepreneurship, Innovation, and Economic Development*. Oxford: Oxford University Press.
- Taibbi, M. (2009). "How wall street is using the bailout to stage a revolution". In: *Rolling Stone*.

- Tainter, J. (1988). *The Collapse of Complex Societies*. Cambridge: Cambridge University Press.
- Tenreyro, S. (2018). “The fall in productivity growth: Causes and implications”. *Bank of England*.
- The Honest Sorcerer (2023). “The final countdown: Peak oil is coming fast, and it won’t be nice”. URL: <https://thehonestsorcerer.substack.com>.
- Thierer, A. (2016). *Permissionless Innovation and Public Policy: A 10-Point Blueprint*. Mercatus Centre: George Mason University.
- Thurik, A., E. Stam, and D. Audretsch (2013). “The rise of the entrepreneurial economy and the future of dynamic capitalism”. *Technovation*. 33(8–9): 302–310.
- Tirole, J. (2021). “Digital dystopia”. *American Economic Review*. 111(6): 2007–2048.
- Toft, M. D. (2018). “The dangerous rise of kinetic diplomacy”. *War on the Rocks*.
- Torres, E. P. (2021a). “Against longtermism”. *AEON*.
- Torres, E. P. (2021b). “The dangerous ideas of longtermism and existential risk”. *Current Affairs*.
- Tory, M. (2023). “Britain plc in liquidation, 2006-? ONDRA”. URL: [https://www.ondra.com/assets/pdfs/Britainplc%5C\\_131023.pdf](https://www.ondra.com/assets/pdfs/Britainplc%5C_131023.pdf).
- Turchin, A. and D. Denkenberger (2020). “Classification of global catastrophic risks connected with artificial intelligence”. *AI & Society*. 35: 147–163.
- Turchin, P. (2023). *End Times: Elites, Counter-Elites, and the Path of Political Disintegration*. London: Penguin.
- Türk, V. (2023). “Protect the ‘right to science’ for people and the planet”. *Nature*.
- Turner, G. (2014). *Is Global Collapse Imminent? An Updated Comparison of The Limits to Growth with Historical Data*. Melbourne Sustainable Society Institute, Research Paper No. 4.
- Turse, N. (2008). *The Complex: How the Military Invades our Everyday Lives*. New York: Henry Holt and Company.
- Van Noorden, R. (2023). “How big is science’s fake-paper problem?” *Nature*.

- Varoufakis, Y. (2023). *Technofeudalism: What Killed Capitalism*. London: Penguin.
- Wagner, J. (2007). “Exports and productivity: A survey of the evidence from firm-level data”. *The World Economy*. 30(1): 60–82.
- Weiss, M. and C. Cattaneo (2017). “Degrowth—Taking Stock and Reviewing an Emerging Academic Paradigm”. *Ecological Economics*. 137: 220–230.
- Weitzman, M. (1998). “Recombinant growth”. *Quarterly Journal of Economics*. 113: 331–360.
- Williamson, A. (2007). “The hobbled hegemon”. *The Economist*.
- Young, A. A. (1928). “Increasing returns and economic progress”. *The Economic Journal*. 38(12): 527–542.
- Yudkowsky, E. (2023). “Pausing AI developments isn’t enough. We need to shut it all down”. *Time Magazine*.
- Zabala-Iturriagoitia, J., J. Aparicio, L. Ortiz, E. Carayannis, and E. Grigoroudis (2021). “The productivity of national innovation systems in Europe: Catching up or falling behind?” *Technovation*. 102.
- Zeihan, P. (2022). *The End of the World Is Just the Beginning: Mapping the Collapse of Globalization*. Harper Business.
- Zuboff, S. (2015). “Big other: Surveillance capitalism and the prospects of an information civilization”. *Journal of Information Technology*. 30: 75–89.