

Search



Home > Journal of Asset Management > Article

Managing the financial consequences of weather variability

| Original Article | Published: 19 June 2018

Volume 19, pages 301–315, (2018) Cite this article



Journal of Asset Management

Aims and scope →

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

- > Store and/or access information on a device
- Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Access this article

Log in via an institution \rightarrow

Subscribe and save

Springer+ from €37.37 /Month

- Starting from 10 chapters or articles per month
- Access and download chapters and articles from more than 300k books and 2,500 journals
- Cancel anytime

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Explore related subjects

Discover the latest articles, books and news in related subjects, suggested using machine learning.

<u>Atmospheric Dynamics</u> <u>Financial Econometrics</u> <u>Information Model</u> <u>Market Intelligence</u>

<u>Meteorology</u> <u>Statistics in Business, Management, Economics, Finance, Insurance</u>

References

Agnew, M.D., and J.P. Palutikof. 1999. The impacts of climate on retailing in the UK with particular reference to the anomalously hot summer of 1995.

International Journal of Climatology 19(13): 1493–1507.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

normal the key to deriving alternative climate normals. *Bulletin of American Meteorological Society* 92: 699-704.

Article Google Scholar

Arunraj, N.S., and D. Ahrens. 2016. Estimation of non-catastrophic weather impacts for retail industry. *International Journal of Retail and Distribution Management* 44: 731–753.

Article Google Scholar

Auffhammer, M., S. Hsiang, W. Schlenker, and A. Sobel. 2013. Global climate models: A user guide for economists. *Review of Environmental Economics and Policy* 7(2): 181–198.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Beatty, T.K., J.P. Shimshack, and R.J. Volpe. 2015. Disaster preparedness and disaster response: Evidence from bottled water sales before and after tropical cyclones. Working paper.

Bertrand, J.-L. 2010. La gestion du risque météorologique en entreprise. Ph.D. thesis, Université Paris Ouest Nanterre La Défense.

Bertrand, J.-L., X. Brusset, and M. Fortin. 2015. Assessing and hedging the cost of unseasonal weather: Case of the apparel sector. *European Journal of Operational Research* 244(1): 261–276.

Article Google Scholar

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

management. Risk Management and Insurance Review 8(1): 127-140.

Article Google Scholar

Brooks, H.E., A. Witt, and M.D. Eilts. 1997. Verification of public weather forecasts available via the media. *Bulletin of the American Meteorological Society* 78: 2167–2178. <a href="https://doi.org/10.1175/1520-0477(1997)078<2167:VOPWFA>2.0.CO;2">https://doi.org/10.1175/1520-0477(1997)078<2167:VOPWFA>2.0.CO;2.

Cachon, G. 2004. Supply chain coordination with contracts. In *Handbooks in operations research and management science: Supply chain management, Ch. 6*, vol. 11, ed. T. de Kok and S. Graves, 229–340. New York: Elsevier.

Google Scholar

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Management with Weather Hedges, 127-150. London: Risk Books.

Dutton, J. 2002. Opportunities and priorities in a new era for weather and climate services. *Bulletin of American Meteorological Society* 83(9): 1303–1311.

Article Google Scholar

Eriksson, A., E. Ghysels, and F. Wang. 2009. The normal inverse gaussian distribution and the pricing of derivatives. *The Journal of Derivatives* 16(3): 23–37.

Article Google Scholar

Geman, H. 1999. Insurance and weather derivatives: From exotic options to

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

wth weather modeling. Report, SAP.

Hu, Q.S., Skaggs, K. 2009. Accuracy of 6–10 day precipitation forecasts and its improvement in the past six years. In: 7th NOAA Annual climate prediction Application Science Workshop. Science and Technology Infusion Climate Bulletin. NOAA National Weather Service.

http://www.nws.noaa.gov/ost/climate/STIP/RServices/hug_032509.htm

IPCC. 2014. Climate change 2014: Impacts, adaptation and vulnerability. Report, Intergovernmental Panel on Climate Change. www.ipcc-wg2.gov/AR5.

Jewson, S., and A. Brix. 2005. *Weather derivative valuation: The meteorological, statistical, financial and mathematical foundations*. Cambridge: Cambridge

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Linden, F. 1962. Consumer markets: Merchandising weather. *The Conference Board Business Record* 19(6): 15–16.

Google Scholar

Maunder, W.J. 1968. Effect of significant climatic factors on agricultural production and incomes: A New Zealand example. *Monthly Weather Review* 96(1): 39–46.

Article Google Scholar

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Murray, K.B., F.D. Muro, A. Finn, and P.P. Leszczyc. 2010. The effect of weather on consumer spending. *Journal of Retailing and Consumer Services* 17: 512–520.

Article Google Scholar

Nenni, M.E., L. Giustiniano, and L. Pirolo. 2013. Demand forecasting in the fashion industry: A review. *International Journal of Engineering Business Management* 5(Special issue: innovations in fashion industry): 1–6.

Google Scholar

Parnaudeau, M., and J.-L. Bertrand. 2018. The contribution of weather variability to economic sectors. *Applied Economics*.

https://doi.org/10.1080/00036846.2018.1458200.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Rosselló-Nadal, J. 2014. How to evaluate the effects of climate change on tourism. *Tourism Management* 42: 334–340.

Article Google Scholar

Shor, M. 1963. Exploratory work in measurement of the effect of weather factors on retail sales. In *Proceedings of the American Statistical Association*, 54–58.

Starr-McCluer, M. 2000. The effect of weather on retail sales. Tech. rep.

Steele, A.T. 1951. Weather's effect on sales of a department store. *Journal of*

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

WMO. 2013. WMO statement on the status of the global climate in 2012. Report 1108, World Meteorological Organization.

Zhelyazkov, G. 2011. Agile supply chain: Zara's case study analysis. Tech. rep. http://galinzhelyazkov.com/?cat=3.

Author information

A -- 41- -- -- -- -- A CCILI-41-

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Rights and permissions

Reprints and permissions

About this article

Cite this article

Bertrand, JL., Brusset, X. Managing the financial consequences of weather variability. *J Asset Manag* **19**, 301–315 (2018). https://doi.org/10.1057/s41260-018-0083-x

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies

Track your research

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 93 **partners**, also use optional cookies and similar technologies for advertising, personalisation of content, usage analysis, and social media.

By accepting optional cookies, you consent to allowing us and our partners to store and access personal data on your device, such as browsing behaviour and unique identifiers. Some third parties are outside of the European Economic Area, with varying standards of data protection. See our **privacy policy** for more information on the use of your personal data. Your consent choices apply to springer.com and applicable subdomains.

You can find further information, and change your preferences via 'Manage preferences'. You can also change your preferences or withdraw consent at any time via 'Your privacy choices', found in the footer of every page.

We use cookies and similar technologies for the following purposes:

Store and/or access information on a device

Personalised advertising and content, advertising and content measurement, audience research and services development

Accept all cookies

Reject optional cookies