

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 96 **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 →

Subscribe and save

Springer+ Basic

€32.70 /Month

- Get 10 units per month
- Download Article/Chapter or eBook
- 1 Unit = 1 Article or 1 Chapter
- Cancel anytime

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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.

Article Google Scholar

Agnew, M.D., and J.E. Thornes. 1995. The weather sensitivity of the UK food retail and distribution industry. *Meteorological Applications* 2: 137–147.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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.

Article Google Scholar

Bahng, Y., and D. Kincade. 2012. The relationship between temperature and sales. *International Journal of Retail and Distribution Management* 40(6): 410-

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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

Bertrand, J.-L., and Parnaudeau, M. 2015. Ranking the impact of climate variability on UK retail sectors: A path to resilience. Working Paper Available at

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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

Cao, M. 2000. Pricing the weather. Risk, 67–70. http://www.riskpublications.com/risk.

Davis M. 1000 Oution missas in incomplete modests. In Mathematica of

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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 exotic underlyings, Working Paper, Dauphine Recherche en Management. http://ideas.repec.org/p/dau/papers/123456789-3433.html.

Geman, H., and M.-P. Leonardi. 2005. Alternative approaches to weather derivatives pricing. *Managerial Finance* 31(6): 46–72.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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 University Press.

Book Google Scholar

Jewson, S., and Zervos, M. 2005. No-arbitrage pricing of weather derivatives in

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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

Maunder, W.J. 1973. Weekly weather and economic activities on a national scale: An example using united states retail trade data. *Weather* 28(1): 2–19.

Article Google Scholar

Milne, R. 2016. *Late spring chills h&m sales*. London: The Financial Times.

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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 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.

Google Scholar

Parsons, A.G. 2001. The association between daily weather and daily shopping patterns. *Australasian Marketing Journal* 9: 78–84.

Article Google Scholar

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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 Marketing* 15: 436–443.

Article Google Scholar

Subak, S., J.P. Palutikof, M.D. Agnew, S.J. Watson, C.G. Bentham, M.G.R. Cannell, M. Hulme, S. McNally, J.E. Thornes, D. Waughray, and J.C. Woods. 2000. The impact of the anomalous weather of 1995 on the UK economy. *Climatic Change*

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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

Author information

Authors and Affiliations

ESSCA School of Management, Angers, France

Jean-Louis Bertrand

Skema Business School, UCA, Lille, France

Xavier Brusset

Corresponding author

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

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

Revised Published Issue Date

01 June 2018 19 June 2018 September 2018

DOI

https://doi.org/10.1057/s41260-018-0083-x

Keywords

<u>Weather sensitivity</u> <u>Weather risk management</u> <u>Decision making</u> <u>Statistical model</u>

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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

Your privacy, your choice

We use essential cookies to make sure the site can function. We, and our 96 **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