

CEMO

Centre d'études s
les conflits, les territoires

ARTICLES IN ENGLISH

Chevallier J., Guégan D., Goutte S (CEMOTEV)., 2021, "Is It Possible to Forecast the Price of Bitcoin", Forecasting

September 8, 2021

Auteurs : Julien Chevallier, Dominique Guégan, Stéphane Goutte (CEMOTEV)

Article: Is It Possible to Forecast the Price of Bitcoin?

Forecasting

<https://doi.org/10.3390/forecast3020024>



Taranco A., (CEMOTEV), Geronimi V., (CEMOTEV), 2021, "Revisiting Structural Breaks un the Terms of Trade of Primary Commodities (1900-2020) - Markov Switching Models and Finite Mixture Distributions", Engineering Proceedings

September 1, 2021

Auteurs : Armand Taranco (CEMOTEV), Vincent Geronimi (CEMOTEV)

Article: " Revisiting Structural Breaks in the Terms of Trade of Primary Commodities (1900–2020)—Markov Switching Models and Finite Mixture Distributions "

Revue: Engineering Proceedings

DOI: <https://doi.org/10.3390/engproc2021005034>

Damette O., Mathonnat C., Goutte S., (CEMOTEV), 2021, "Meteorological factors against COVID-19 and the role of human mobility", Plos One, online

June 21, 2021

Auteurs : Olivier Damette, Clément Mathonnat, Stéphane Goutte (CEMOTEV)

Article : Meteorological factors against COVID-19 and the role of human mobility

Revue: Plos One

<https://doi.org/10.1371/journal.pone.0252405>



Goutte S., (CEMOTEV), Péran T., Porcher T., (2021) " Corruption, economy and governance in Central Africa: An analysis of public and regional drivers of corruption ", Finance Research Letters

May 11, 2021

Auteurs : Stéphane Goutte (CEMOTEV), Thomas Péran, Thomas Porcher

Article : "Corruption, economy and governance in Central Africa: An analysis of public and regional drivers of corruption"

Revue: Finance Research Letters

<https://doi.org/10.1016/j.frl.2021.102086>



W.Goodell J., Goutte S., (CEMOTEV), (2021) "Diversifying equity with cryptocurrencies during COVID-19", International Review of Financial Analysis

May 5, 2021

Auteurs: John W.Goodell, Stéphane Goutte (CEMOTEV)

Article: "Diversifying equity with cryptocurrencies during COVID-19"



EI-Khatib Y., Goutte S., (CEMOTEV) Makumbe Zororo S., Vives J., (2021) " Approximate pricing formula to capture leverage effect and stochastic volatility of a financial asset", Finance Research Letters, (available online)
April 17, 2021

Auteurs: Youssef El-Khatib, Stéphane Goutte (CEMOTEV), Zororo S. Makumbe, Josep Vives

Article : " Approximate pricing formula to capture leverage effect and stochastic volatility of a financial asset "

Revue: Finance Research Letters

<https://doi.org/10.1016/j.frl.2021.102072>



Jacolin L., Keneck Massil J., (CEMOTEV) Noah A., (2021) " Informal sector and mobile financial services in emerging and developing countries: Does financial innovation matter?", The World Economy
April 15, 2021

Auteurs : Luc Jacolin, Joseph Keneck Massil (CEMOTEV), Alphonse Noah

Article : "Informal sector and mobile financial services in emerging and developing countries: Does financial innovation matter?"

Revue: The World Economy

<https://doi.org/10.1111/twec.13093>



Belaid F., Ben Amar A., Goutte S., (CEMOTEV), Guesmi K., (2021) "Emerging and advanced economies markets behaviour during the COVID19 crisis era", International Journal of Finance and Economics
January 26, 2021

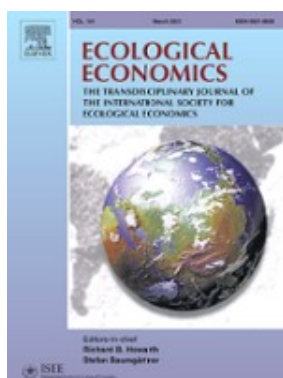
Auteurs : Fateh Belaid, Amine Ben Amar, Stéphane Goutte (CEMOTEV), Khaled Guesmi

Article: "Emerging and advanced economies markets behaviour

during the COVID19 crisis era"

Revue: International Journal of Finance and Economics

DOI: <https://doi.org/10.1002/ijfe.2494>



Zugravu-Soilita N., (CEMOTEV) Kafrouni R., (CEMOTEV), Bouard S., Apithy L. (2020). "Do cultural capital and social capital matter for economic performance? An empirical investigation of tribal agriculture in New Caledonia", Ecological Economics, 106933

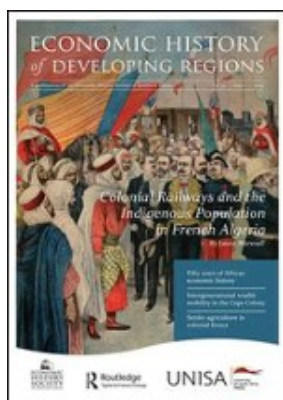
January 12, 2021

Auteurs: Natalia Zugravu-Soilita (CEMOTEV), Rajwane Kafrouni (CEMOTEV), Séverine Bouard, Leïla Apithy

Article: "Do cultural capital and social capital matter for economic performance? An empirical investigation of tribal agriculture in New Caledonia"

Revue: Ecological Economics, 106933

<https://doi.org/10.1016/j.ecolecon.2020.106933>



Keneck Massil J., (CEMOTEV), Harnay S., (2020) " Parliamentary experience and contemporary democracy in Africa: A Northian view", Economic History of Developing Regions, published online

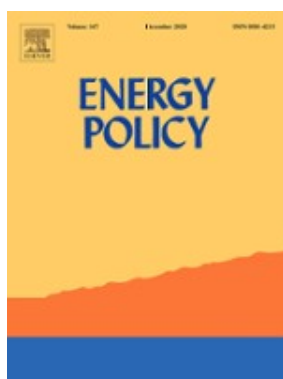
January 11, 2021

Auteurs: Joseph Keneck Massil (CEMOTEV), Sophie Harnay

Article: "Parliamentary experience and contemporary democracy in Africa: A Northian view"

Revue: Economic History of Developing Regions

DOI: [10.1080/20780389.2020.1830758](https://doi.org/10.1080/20780389.2020.1830758)



Chevallier J., Goutte S., (CEMOTEV) Qiang J., Guesmi K., (2020) " Green finance and the restructuring of the oil-gas-coal business model under carbon asset stranding constraints" Energy Policy

December 10, 2020

Auteurs: Chevallier J., Goutte S., (CEMOTEV) Qiang J., Guesmi K

Article: "Green finance and the restructuring of the oil-gas-coal

business model under carbon asset stranding constraints."

Revue : Energy Policy

Amédée-Manesme C-O., Barthélémy F., (2020), "Proper use of the modified Sharpe ratios in performance measurement: rearranging the Cornish Fisher expansion", Annals of Operations Research

November 16, 2020

Auteurs : Amédée-Manesme C-O., Barthélémy F (CEMOTEV).

Article: Proper use of the modified Sharpe ratios in performance measurement: rearranging the Cornish Fisher expansion

Revue: Annals of Operations Research

pages: 1-22

DOI: 10.1007/s10479-020-03858-4

Goutte S., (CEMOTEV), Damette O., Pei Q., (2020), "Climate and nomadic migration in a nonlinear world: evidence of the Historical China", Climatic Change, À paraître

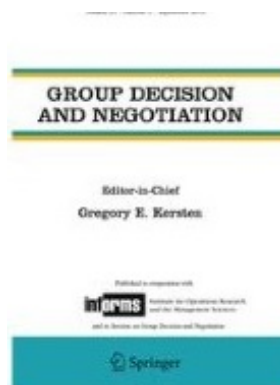
October 20, 2020

Auteurs : Goutte S., (CEMOTEV), Damette O., Pei Q.,

Article : "Climate and nomadic migration in a nonlinear world: evidence of the Historical China"

Revue: Climatic Change

2020



Barthelemy F., (CEMOTEV), Lepelley, D., Martin, M. et al. Dummy Players and the Quota in Weighted Voting Games. Group Decis Negot (2020)

October 12, 2020

Auteurs : Barthelemy, F., (CEMOTEV) Lepelley, D., Martin, M.

Article : Dummy Players and the Quota in Weighted Voting Games

Revue: Group Decis Negot (2020)

DOI: <https://doi.org/10.1007/s10726-020-09705-y>

2020 <

Goutte S. (CEMOTEV), Péran T. & Porcher T. " The role of economic structural factors in determining pandemic mortality



**rates: Evidence from the COVID-19 outbreak in France ",
Research in International Business and Finance, 23 June 2020
June 23, 2020**

Authors : Stéphane Goutte (CEMOTEV), Thomas Péran & Thomas Porcher

Article : "The role of economic structural factors in determining pandemic mortality rates: Evidence from the COVID-19 outbreak in France"

In : Research in International Business and Finance

DOI : <https://doi.org/10.1016/j.ribaf.2020.101281>

Date : 23 June 2020



**Goodell J. & Goutte S. (CEMOTEV), "Co-Movement of COVID-19 and Bitcoin: Evidence from Wavelet Coherence Analysis",
Finance Research Letters, 03 June 2020
June 3, 2020**

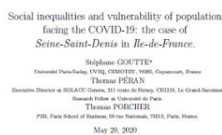
Authors : John W. Goodell & Stéphane Goutte (CEMOTEV)

Article : "Co-movement of COVID-19 and Bitcoin: Evidence from wavelet coherence analysis"

In : Finance Research Letters

DOI : <https://doi.org/10.1016/j.frl.2020.101625>

Date : 03 June 2020



**Goutte S. (CEMOTEV), Porcher T., & Peran T., "Social Inequalities and Vulnerability of Population Facing the COVID-19: The Case of Seine-Saint-Denis in Ile-De-France", available at SSRN, May 20, 2020
May 20, 2020**

May 20, 2020

Authors : Stéphane Goutte (CEMOTEV) ; Thomas Porcher & Thomas Peran

Article : "Social Inequalities and Vulnerability of Population Facing the COVID-19: The Case of Seine-Saint-Denis in Ile-De-France"
Available at SSRN

May 20, 2020

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3605881



El Ouardighi, F. Khmelnitsky, E. & Leandri M., "Production-based pollution versus deforestation: optimal policy with state-independent and -dependent environmental absorption efficiency restoration process", Annals of Operations Research. Forthcoming

May 11, 2020

Authors : El Ouardighi, F. Khmelnitsky, E. and Leandri M. (CEMOTEV)

Article : "Production-based pollution versus deforestation: optimal policy with state-independent and -dependent environmental absorption efficiency restoration process"

Revue : Annals of Operations Research Forthcoming

Economics Bulletin

Volume 40, Issue 1

Does Financial inclusion affect the African banking stability?

Imen Kouki
Stephane Goutte

Abstract
This paper studies the impact of financial inclusion on the stability of African banks. Using the financial inclusion index, we construct a composite index of financial inclusion for 20 African countries over the period 2005-2018. We then investigate the impact of financial inclusion on the stability of African banks through the composite banking stability index. Our results indicate a strong positive relationship between financial inclusion and banking stability. In addition, we found significant heterogeneity in the impact of financial inclusion on banking stability across African countries.

Kouki I., Abid I., Guesmi K. et Goutte S. (CEMOTEV), "Does Financial inclusion affect the African banking stability ?", Economics Bulletin, Vol. 40, Issue 1, pp. 863-879, Mars 2020

March 25, 2020

Authors : Imen Kouki, Ilyes Abid, Khaled Guesmi and Stephane Goutte (CEMOTEV)

Article : "Does Financial inclusion affect the African banking stability ?"

In : Economics Bulletin

Volume 40, Issue 1

Pages 863-879

Date : 25 Mars 2020

The European Journal of Comparative Economics

Volume 16, Issue 2, December 2019

Determinants of corruption: can we put all countries in the same basket?

Blaise Gnimassoun, Joseph Kenek Massil

Abstract
This paper aims to study the determinants of corruption in emerging countries. Using the right to information index, we construct a composite index of corruption for 20 emerging countries over the period 2005-2018. We then investigate the impact of corruption on the right to information index. Our results indicate a strong positive relationship between corruption and the right to information index. In addition, we found significant heterogeneity in the impact of corruption on the right to information index across emerging countries.

Keywords: Corruption, Right to information, Emerging countries, Composite index

JEL Classification: D72, D73, D74, D75

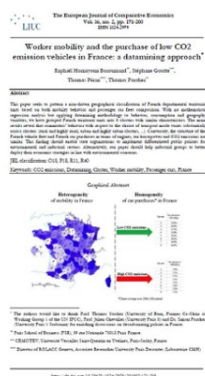
Gnimassoun B. & Kenek Massil J. (CEMOTEV), "Determinants of corruption : can we put all countries in the same basket ?", The European Journal of Comparative Economics, Vol. 16, n°2, December 2019

January 24, 2020

Authors : Blaise Gnimassoun & Joseph Kenek Massil (CEMOTEV)

Article "Determinants of corruption : can we put all countries in the same basket ?"

In : The European Journal of Comparative Economics
Vol. 16, n°2
Pages : 239-276
Date : December 2019
DOI : 10.25428/1824-2979/201902-239-276



**Boroumand R. H, Goutte S. (CEMOTEV), Péran T. & Porcher T.,
"Worker mobility and the purchase of low CO2 emission
vehicules in France : a datamining approach", The European
Journal of Comparative Economics, Vol. 16, n°2, December
2019**

January 23, 2020

Authors : Raphaël Homayoun Boroumand, Stéphane Goutte
(CEMOTEV), Thomas Péran & Thomas Porcher

Article "Worker mobility and the purchase of low CO2 emission
vehicules in France : a datamining approach"

In : The European Journal of Comparative Economics
Vol. 16 , n°2

Pages : 171-205

Date : December 2019

DOI : 10.25428/1824-2979/201902-171-205



**Goutte S. (CEMOTEV), Guesmi K., Saadi S., "Cryptofinance
and Mechanisms of exchange : The making of virtual
currency", Springer, A paraître (Janvier 2020)**

January 6, 2020

Authors : Stéphane Goutte (CEMOTEV) ; Khaled Guesmi & Samir
Saadi

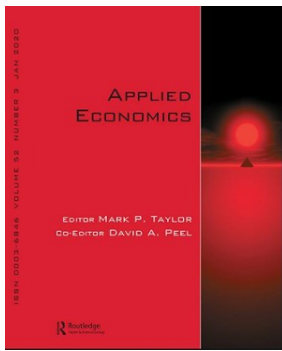
Book : "Cryptofinance and Mechanisms of exchange : The making
of virtual currency"

In : Springer

A paraître (Janvier 2020)

<https://doi.org/10.1007/978-3-030-30738-7>

**Goutte S. (CEMOTEV), Abid I., Dhaoui A. & Guesmi K,
"Hedging and diversification across commodity assets",
Applied Economics, Décembre 2019**



December 18, 2019

Authors : Stéphane Goutte (CEMOTEV) ; Ilyes Abid ; Abderrazak Dhaoui & Khaled Guesmi

Article : "Hedging and diversification across commodity assets"

In : Applied Economics

Décembre 2019

<https://doi.org/10.1080/00036846.2019.1693016>



Amédée-Manesme C-O., Barthélémy F. (CEMOTEV), Bertrand P. & Prigent J-L, "Mixed-asset portfolio allocation under mean-reverting asset returns", Annals of Operations Research, Vol. 281, October 2019

October 4, 2019

Authors : Charles-Olivier Amédée-Manesme, Fabrice Barthélémy (CEMOTEV), Philippe Bertrand & Jean-Luc Prigent

Article: " Mixed-asset portfolio allocation under mean-reverting asset returns "

Revue: Annals of Operations Research

Volume: 281 issue 1-2

Date: October 2019

Pages: 65-98

DOI : <https://doi.org/10.1007/s10479-018-2761-y>



Amédée-Manesme C-O., Barthélémy F. (CEMOTEV) & Maillard D., "Computation of the corrected Cornish-Fisher expansion using the response surface methodology : application to VaR and CVaR", Annals of Operations Research, Vol. 281, October 2019

October 4, 2019

Authors : Charles-Olivier Amédée-Manesme, Fabrice Barthélémy (CEMOTEV) & Didier Maillard

Article: " Computation of the corrected Cornish–Fisher expansion using the response surface methodology: application to VaR and CVaR"

Revue: Annals of Operations Research

Volume: 281 issue 1-2

Date : October 2019

Pages: 423-453

DOI : <https://doi.org/10.1007/s10479-018-2792-4>



Zugravu- Soilita N. (CEMOTEV), 'Trade in Environmental Goods and Air Pollution : A Mediation Analysis to Estimate Total, Direct and Indirect Effects', Environmental and Resource Economics, September 2019

September 18, 2019

Author : Natalia Zugravu-Soilita (CEMOTEV)

Article : "Trade in Environmental Goods and Air Pollution : A Mediation Analysis to Estimate Total, Direct and Indirect Effects"
In : Environmental and Resource Economics



Keneck-Massil J. (CEMOTEV) & Noah A., (2019), 'Shadow economy and educational systems in Africa', Economics Bulletin, Vol. 39, Issue 2, pp. 1467-1478

September 17, 2019

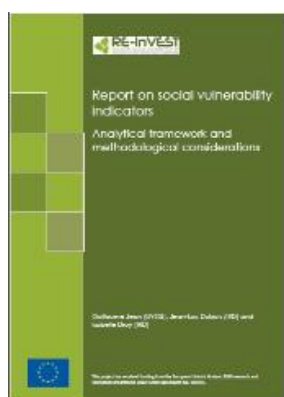
Authors : Joseph Keneck-Massil (CEMOTEV) & Alphonse Noah

Article : "Shadow economy and educational systems in Africa"

In: Economics Bulletin

Volume 39, Issue 2

Pages 1467-1478



Jean, G., Dubois, J.-L. & Droy, I. (2019). Report on social vulnerability indicators. Analytical framework and methodological considerations. RE-InVEST Working Paper Series D3.2.

April 3, 2019

Authors : Guillaume Jean (CEMOTEV), Jean-Luc Dubois (UMI Résiliences, IRD), Isabelle Droy (UMI Résiliences, IRD)

Article : Report on social vulnerability indicators. Analytical framework and methodological considerations.

Journal : RE-InVEST Working Paper Series D3.2. Marseille: IRD / Leuven: HIVA-KU Leuven.



Barthélémy F. (CEMOTEV), Martin M. & Piggins A., "The 2016 Election : Like 1888 but not 1876 or 2000", PS : Political Science & Politics, Vol. 52, January 2019

January 4, 2019

Authors : Fabrice Barthélémy (CEMOTEV), Mathieu Martin, Ashley Piggins

Article: "The 2016 Election: Like 1888 but not 1876 or 2000"

Revue: PS: Political Science & Politics

Volume: 52 issue 1

Date : January 2019

Pages: 20-24

DOI : <https://doi.org/10.1017/S1049096518001269>



Keneck Massil J., (CEMOTEV), Yogo U T., 'Presidential term limits and fiscal policy in African countries', Journal of African Economies, 2018,1-23

December 14, 2018

Auteur : Joseph Keneck Massil (CEMOTEV), Urbain Thierry Yogo
Article: "Presidential term limits and fiscal policy in African countries"

Revue: Journal of African economies

volume: 2018 1-23

DOI:10.1093/jae/ejy021

Geronimi V (CEMOTEV)., Le Meur P-Y., Arndt N., Christmann P., ' Deep-sea mining prospects in French Polynesia: Governance and the politics of time', Marine Policy , published online 2018

August 28, 2018

Auteurs :Geronimi V.,(CEMOTEV),Le Meur P-Y., Arndt N., Christmann P.

Article: " Deep-sea mining prospects in French Polynesia: Governance and the politics of time"

Revue: Marine Policy

ISSN: 0308-597X



Geronimi V., Taranco A., (2018), « Revisiting the Prebisch-Singer hypothesis of a secular decline in the terms of trade of primary commodities (1900-2016). A dynamic regime approach. », Ressources Policy, in press

August 27, 2018

Auteurs : Vincent Geronimi (CEMOTEV), Armand Taranco

Article : "Revisiting the Prebisch-Singer hypothesis of a secular decline in the terms of trade of primary commodities (1900-2016). A dynamic regime approach."

Revue: Ressources Policy, in press

Zugravu-Soilita N., (2018), ' The impact of trade in environmental goods on pollution: what are we learning from the transition economies' experience?', Environmental Economics and Policy Studies

April 18, 2018

Auteurs : Natalia Zugravu-Soilita (CEMOTEV)

Article : The impact of trade in environmental goods on pollution: what are we learning from the transition economies' experience?

Revue: Environmental Economics and Policy Studies

Pages: 01-43



Amesdée-Manesme C-O., Barthélémy F., (CEMOTEV) 'Ex-ante real estate Value at Risk calculation method', Annals of Operations Research, March 2018, Volume 262

March 1, 2018

Auteurs : Charles-Olivier Amédée-Manesme, Fabrice Barthélémy (CEMOTEV)

Article: "Ex-ante real estate Value at Risk calculation method"

Revue: Annals of Operations Research, March 2018

Volume: 262 issue 2

Pages: 257-285



Amédée-Manesme C-O., Baroni M., Barthélémy F., (CEMOTEV), Des Rosiers F., (2017), 'Market heterogeneity and the determinants of Paris apartment prices: A quantile regression approach', Urban Studies

December 27, 2017

Auteurs : Amédée-Manesme C-O., Baroni M., Barthélémy F. (CEMOTEV), Des Rosiers F.

Article : "Market heterogeneity and the determinants of Paris apartment prices: A quantile regression approach"

Revue:Volume: 54 issue: 14

Pages: 3260-3280



Amédée-Manesme C-O., Baroni M., Barthélémy F. (CEMOTEV), Des Rosiers F., (2017), 'Market heterogeneity, investment risk and portfolio allocation', International Journal of Housing Markets and Analysis Vol 10

December 21, 2017

Auteurs : Amédée-Manesme C-O., Baroni M., Barthélémy F. (CEMOTEV), Des Rosiers F.

Article : "Market heterogeneity, investment risk and portfolio allocation, Applying quantile regression to the Paris Apartment market"

Revue: International Journal of Housing Markets and Analysis Vol 10 No 5.2017

Pages: 641-666



ZUGRAVU N., (2016) « How does Foreign Direct Investissment affect Pollution ? Toward a better understanding of the direct and conditional effects » , Environmental and Ressource Economics, 66(2)

January 25, 2017

Auteur : Natalia Zugravu (CEMOTEV)

Article: How does Foreign Direct Investment Affect Pollution? Toward a Better Understanding of the Direct and Conditional

Effects

Revue: Environmental and Resource Economics, 66(2), 293-338

Date : Janvier 2017

Geronimi V (CEMOTEV)., Le Meur P-Y., Arndt N., Christmann P., ' Deep-sea mining prospects in French Polynesia: Governance and the politics of time', Marine Policy , 2016, in press

September 5, 2016

Auteurs :Geronimi V.,(CEMOTEV),Le Meur P-Y., Arndt N., Christmann P.

Article: " Deep-sea mining prospects in French Polynesia: Governance and the politics of time"

Revue: Marine Policy

ISSN: 0308-597X



Barthelemy F (CEMOTEV)., Amédée-Manesme C-O., Prigent J-L., 'Real estate investment: Market volatility and optimal holding period under risk aversion', Economic Modelling, Volume 59,

September 1, 2016

Auteurs : Barthelemy F (CEMOTEV)., Amédée-Manesme C-O., Prigent J-L

Article: Real estate investment: Market volatility and optimal holding period under risk aversion

Revue: Economic Modelling Volume 59

Pages: 543-555



C. Serfati (CEMOTEV), 2016. 'EU Integration as Uneven and Combined Development', Research on Political Economy, Vol. 30B 255-294

January 18, 2016

Auteurs : Claude Serfati (CEMOTEV)

Article: EU Integration as Uneven and Combined Development

Revue: Research on Political Economy Vol 30B

Pages: 255-294

0161-7230



F.Barthélémy, 2015, 'Ex-ante real estate Value at Risk calculation method', Annals of Operations Research

October 30, 2015

Auteur: Charles-Olivier Amédée-Manesme, Fabrice Barthélémy (CEMOTEV)

Titre: Ex-ante real estate Value at Risk calculation method

Revue:Annals of Operations Research

Pages : 1-29

ISSN :1572-9338

N. Zugravu-Soilita, 2015, «How does Foreign Direct Investment Affect Pollution? Toward a Better Understanding of the Direct and Conditional Effects», Environmental and Resource Economics (First online: 21 August 2015. DOI: 10.1007/s10640-015-9950-9)

August 21, 2015

Auteurs: Natalia Zugravu-Soilita (CEMOTEV)

Article : "How does Foreign Direct Investment Affect Pollution? Toward a Better Understanding of the Direct and Conditional Effects"

Revue : Environmental and Resource Economics

date : 2015

ISSN : 0924-6460

Online ISSN: 1573-1502



F.Barthélémy, 2015 'Cornish-Fisher Expansion for Commercial Real Estate Value at Risk', The Journal of Real Estate Finance and Economics

May 1, 2015 - November 1, 2015

Auteur: Charles-Olivier Amédée-Manesme , Michel Baroni , Fabrice Barthélémy (CEMOTEV) Donald Keenan

Titre: Cornish-Fisher Expansion for Commercial Real Estate Value

at Risk

Revue: The Journal of Real Estate Finance and Economics

Volume: 50 Issue 4

Pages: 439-464

ISSN:1573-045X

The impact of lease structures on the optimal holding period for a commercial real estate portfolio

March 1, 2015

Auteur: Charles-Olivier Amédée-Manesme , Michel Baroni ,
Fabrice Barthélémy (CEMOTEV) Mahdi Mokrane

Titre: Cornish-Fisher Expansion for Commercial Real Estate Value at Risk

Revue: Journal of Property Investment and Finance

Volume: 33 Issue 2

Pages: 121 - 139

ISSN:1463-578X

"Optimal pollution control with distributed delays"

December 1, 2014

Auteurs: Emmanuelle Augeraud-Véron et Marc Leandri
(CEMOTEV)

Revue: Journal of Mathematical Economics

Pages: 24-32

ISSN:0304-4068

Année: Décembre 2014

"Recent trends in agricultural commodity prices: challenges for development and food security. Do recent increases indicate the entry into a higher price regime ?"

October 16, 2014

L'article de C. Couharde, V. Geronimi et A. Taranco, 2012 "Les hausses récentes des cours des matières premières traduisent-elles l'entrée dans un régime de prix plus élevés ?" (RTM n°211) est maintenant disponible en anglais sur le site de CAIRN sous le titre "Recent trends in agricultural commodity prices: challenges for

development and food security. Do recent increases indicate the entry into a higher price regime ?"

**Environmental regulation and French firms location abroad:
An economic geography model in an international
comparative study**

May 1, 2012

Auteurs: Natalia Zugravu (CEMOTEV) et Sonia Ben Kheder

Revue: Ecological Economics vol 77

Pages: 48-61

ISSN: 0921-8009

Année: Mai 2012
