

denotes periods of economic downturn. Note that the results of the second column in Figure 8 are identical to those in the second column of Figure 7. In contrast to the previous analysis, empirical results do change significantly, depending on the choice of λ . Thus, it is important to set the penalty term adequately.

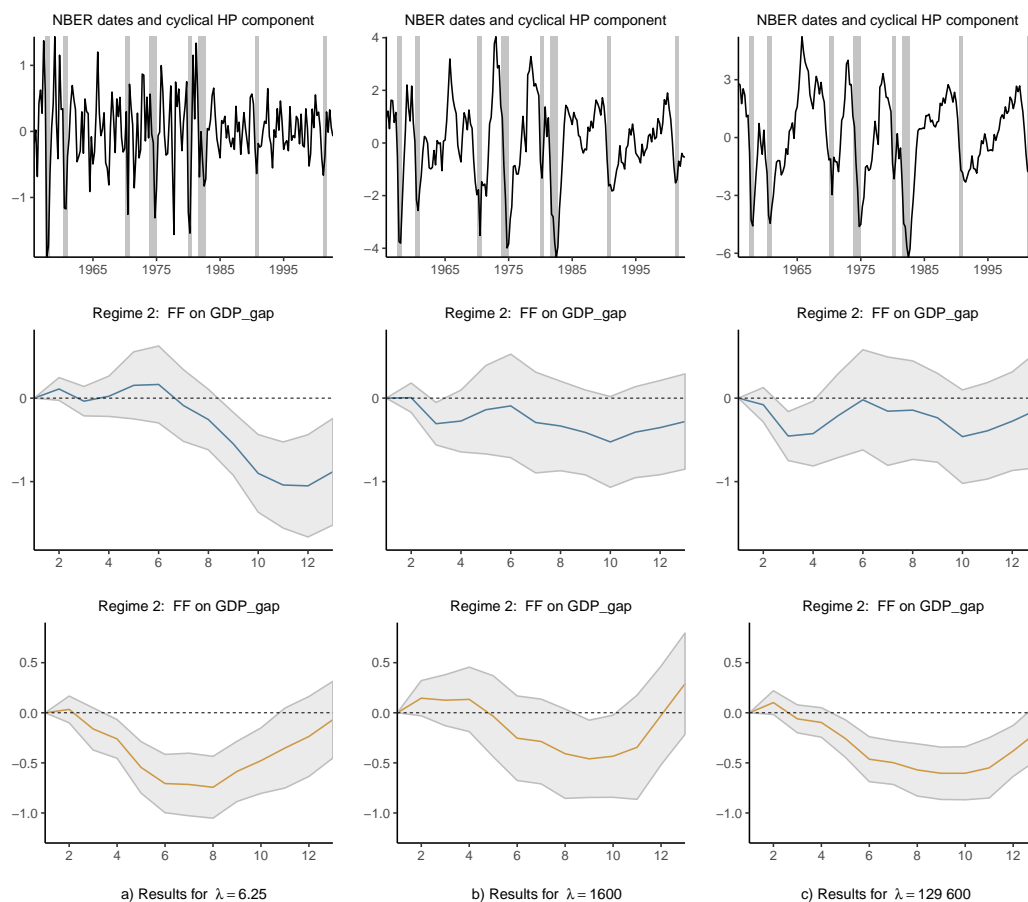


Figure 8: Comparison of nonlinear impulse responses with different values of λ for the filter by Hodrick and Prescott (1997). Each column shows the results for one parameter value (i.e., $\lambda = 6.25, 1600$, and 129600). The gray shaded areas in the first row correspond to NBER-dated recessions. The gray shaded areas in the second and third rows correspond to the 95% confidence intervals of the impulse responses.

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Bibliography

- P. Adämmer. *lpirfs: Local Projections Impulse Response Functions*, 2019. URL <https://CRAN.R-project.org/package=lpirfs>. R package version: 0.1.6. [p]
- M. I. Ahmed and S. P. Cassou. Does consumer confidence affect durable goods spending during bad and good economic times equally? *Journal of Macroeconomics*, 50:86–97, 2016. doi: <https://doi.org/10.1016/j.jmacro.2016.08.008>. [p]
- H. Akaike. A new look at the statistical model identification. *IEEE transactions on automatic control*, 19(6):716–723, 1974. doi: <https://doi.org/10.1109/TAC.1974.1100705>. [p]
- D. W. K. Andrews and J. C. Monahan. An improved heteroskedasticity and autocorrelation consistent covariance matrix estimator. *Econometrica*, 60(4):953–966, 1992. doi: <https://doi.org/10.2307/2951574>. [p]
- A. J. Auerbach and Y. Gorodnichenko. Measuring the output responses to fiscal policy. *American Economic Journal: Economic Policy*, 4(2):1–27, 2012. doi: <https://doi.org/10.1257/pol.4.2.1>. [p]
- A. J. Auerbach and Y. Gorodnichenko. Output spillovers from fiscal policy. *American Economic Review*, 103(3):141–46, 2013. doi: <https://doi.org/10.1257/aer.103.3.141>. [p]
- R. Barnichon and C. Brownlees. Impulse response estimation by smooth local projections. *Review of Economics and Statistics*, 101(3):522–530, 2019. doi: https://doi.org/10.1162/rest_a_00778. [p]
- O. Blanchard and R. Perotti. An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output. *The Quarterly Journal of Economics*, 117(4):1329–1368, 2002. doi: <https://doi.org/10.1162/003355302320935043>. [p]
- L. Brugnolini. About local projection impulse response function reliability. *CEIS Working Paper*, 2018. URL https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3229218. [p]
- Y. Croissant and G. Millo. Panel data econometrics in R: The plm package. *Journal of Statistical Software*, 27(2):1–43, 2008. doi: <https://doi.org/10.18637/jss.v027.i02>. [p]
- D. Eddelbuettel, R. François, J. Allaire, K. Ushey, Q. Kou, N. Russel, J. Chambers, and D. Bates. Rcpp: Seamless r and c++ integration. *Journal of Statistical Software*, 40(8):1–18, 2011. doi: <https://doi.org/10.18637/jss.v040.i08>. [p]
- G. Favara and J. Imbs. Credit supply and the price of housing. *American Economic Review*, 105(3):958–92, 2015. doi: <https://doi.org/10.1257/aer.20121416>. [p]
- J. Garín, R. Lester, and E. Sims. Are supply shocks contractionary at the zlb? evidence from utilization-adjusted tfp data. *Review of Economics and Statistics*, 101(1):160–175, 2019. doi: https://doi.org/10.1162/rest_a_00723. [p]
- J. D. Hamilton. Nonlinearities and the macroeconomic effects of oil prices. *Macroeconomic Dynamics*, 15(S3):364–378, 2011. doi: <https://doi.org/10.1017/S1365100511000307>. [p]
- R. J. Hodrick and E. C. Prescott. Postwar us business cycles: an empirical investigation. *Journal of Money, Credit, and Banking*, pages 1–16, 1997. doi: <https://doi.org/10.2307/2953682>. [p]
- C. M. Hurvich and C.-L. Tsai. Regression and time series model selection in small samples. *Biometrika*, 76(2):297–307, 1989. doi: <https://doi.org/10.1093/biomet/76.2.297>. [p]
- Ò. Jordà. Estimation and inference of impulse responses by local projections. *American Economic Review*, 95(1):161–182, 2005. doi: <https://doi.org/10.1257/0002828053828518>. [p]
- Ò. Jordà and A. M. Taylor. The time for austerity: estimating the average treatment effect of fiscal policy. *The Economic Journal*, 126(590):219–255, 2016. doi: <https://doi.org/10.1111/ecoj.12332>. [p]
- Ò. Jordà, M. Schularick, and A. M. Taylor. Betting the house. *Journal of International Economics*, 96:S2–S18, 2015. doi: <https://doi.org/10.1016/j.jinteco.2014.12.011>. [p]
- Ò. Jordà, M. Schularick, and A. M. Taylor. The effects of quasi-random monetary experiments. *Journal of Monetary Economics*, In press, 2019. doi: <https://doi.org/10.1016/j.jmoneco.2019.01.021>. [p]
- J. Keating. Structural approaches to vector autoregressions. *Federal Reserve Bank of St. Louis Review*, 74 (September/October), 1992. URL https://files.stlouisfed.org/files/htdocs/publications/review/92/09/Vector_Sep_Oct1992.pdf. [p]

- L. Kilian and Y. J. Kim. How reliable are local projection estimators of impulse responses? *Review of Economics and Statistics*, 93(4):1460–1466, 2011. doi: https://doi.org/10.1162/REST_a_00143. [p]
- W. K. Newey and K. D. West. Hypothesis testing with efficient method of moments estimation. *International Economic Review*, pages 777–787, 1987. doi: <https://doi.org/10.2307/2526578>. [p]
- M. T. Owyang, V. A. Ramey, and S. Zubairy. Are government spending multipliers greater during periods of slack? evidence from twentieth-century historical data. *American Economic Review*, 103(3): 129–134, 2013. doi: <https://doi.org/10.1257/aer.103.3.129>. [p]
- M. A. Petersen. Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies*, 22(1):435–480, 2009. doi: <https://doi.org/10.1093/rfs/hhn053>. [p]
- B. Pfaff. VAR, SVAR and SVEC models: Implementation Within R Package vars. *Journal of Statistical Software*, 27(4), 2008. doi: <https://doi.org/10.18637/jss.v027.i04>. [p]
- M. Plagborg-Møller and C. K. Wolf. Local projections and vars estimate the same impulse responses. *Unpublished paper: Department of Economics, Princeton University*, 2019. URL https://scholar.princeton.edu/sites/default/files/mikkelpm/files/lp_var.pdf. [p]
- V. A. Ramey and S. Zubairy. Government spending multipliers in good times and in bad: evidence from us historical data. *Journal of Political Economy*, 126(2):850–901, 2018. doi: <https://doi.org/10.1086/696277>. [p]
- M. O. Ravn and H. Uhlig. On adjusting the hodrick-prescott filter for the frequency of observations. *Review of Economics and Statistics*, 84(2):371–376, 2002. doi: <https://doi.org/10.1162/003465302317411604>. [p]
- G. Schwarz. Estimating the dimension of a model. *The Annals of Statistics*, 6(2):461–464, 1978. doi: <https://doi.org/10.1214/aos/1176344136>. [p]
- C. A. Sims. Macroeconomics and reality. *Econometrica: Journal of the Econometric Society*, pages 1–48, 1980. doi: <https://doi.org/10.2307/1912017>. [p]
- E. T. Swanson. Measuring the effects of federal reserve forward guidance and asset purchases on financial markets. Technical report, National Bureau of Economic Research, 2017. URL <https://www.nber.org/papers/w23311>. [p]
- S. Tenreiro and G. Thwaites. Pushing on a string: Us monetary policy is less powerful in recessions. *American Economic Journal: Macroeconomics*, 8(4):43–74, 2016. doi: <https://doi.org/10.1257/mac.20150016>. [p]

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Conference Report: ConectaR 2019

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About the event

ConectaR 2019: Encuentro de Usuarios R en Latinoamérica, took place during January 24-26, 2019 at the University of Costa Rica, in San José, Costa Rica. It was the first event in Central America endorsed by The R Foundation, and it was held completely in Spanish. The majority of the attendants were from Costa Rica (85%), but we had participants from 12 countries: Costa Rica, Guatemala, Peru, Colombia, Mexico, Argentina, Uruguay, Chile, Spain, the Netherlands, France and the USA. The three-day event consisted of talks, workshops, and poster sessions.

The primary purpose of ConectaR conference was to provide a space to create a community among R users in industry, academia, citizen science and teaching. In this way, we aim to encourage the use of R, promote learning and advance the development of R packages adapted to our regional needs.

ConectaR 2019 was organized by the University of Costa Rica -through the School of Statistics, the Development Observatory, and the Research Center for Pure and Applied Mathematics- the company ixpantia, and the research institution Bioversity International. The initiative originated thanks to the encouragement of Heather Turner, who contacted several networks in the region, through the R Users Groups, R-ladies groups and other connections.

From the 150 registered participants, 33% were female and 23% were full time students. Professionals from finance, government and data companies were present, as well as faculty members from all four major universities in the country. The event was possible thanks to the effort of a team of about 50 people including 4 chairs, a 23-member scientific committee and a motivated group of 23 volunteers.



Figure 1: The logo of ConectaR.

Conference program

The first two days of the conference were dedicated to talks (invited and contributed) and poster presentations. On the third day of the event (a Saturday) four workshops ran in parallel: two during the morning and two during the afternoon.

The event had four invited talks: two that were in person and two via video conference. Edgar Ruiz from RStudio, was the first keynote. He gave a remarkably clear explanation about how to use R and Spark for Data Science. During the afternoon, Maëlle Salmon from rOpenSci and Locke Data, presented the second keynote (remote), where she talked about the ROpenSci initiative (<https://ropensci.org/>), and about her experience curating R packages. She gave the audience tips on how to write R packages, a clear explanation on the importance of citing, curating and recognizing R packages as part of the scientific process.

During the second day of the event, Robert Hijmans from UC Davis, explained the use of