

Predicting Inflation with Neural Networks

Livia Paranhos (PhD Candidate, University of Warwick)

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1. Applies neural networks to forecast US inflation in a pseudo out-of-sample exercise, in particular a **recurrent** neural network
 - Designed to model time series data

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 - Real, nominal & financial data *versus* CPI data

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3. (By-product)
 - Common components
 - Stochastic initialization

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Main findings

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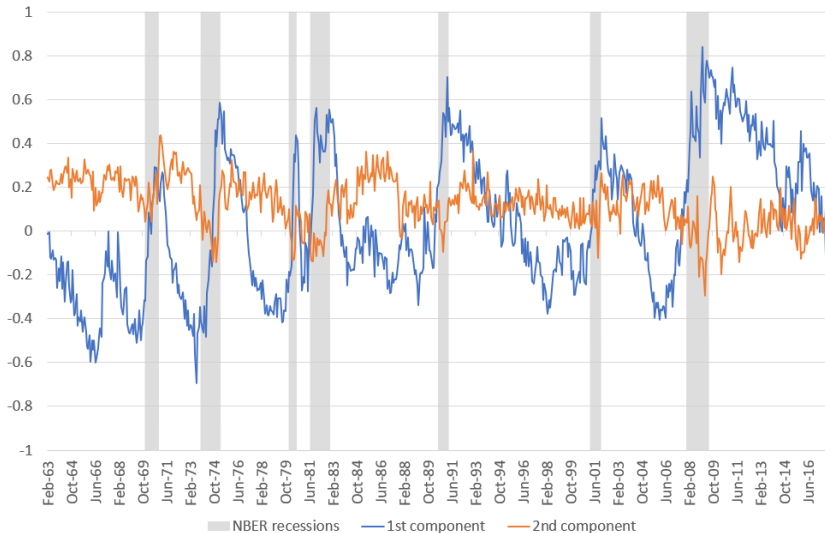
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Main findings

1. Neural nets present better performance than usual benchmarks, especially at the one and two-year horizon forecasts
2. Recurrent neural nets at least as good as the traditional feed-forward neural net at the one and two-year horizon
3. Macroeconomic information is important during periods of high uncertainty

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Thank you