

JULIAN WINKLER

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CURRENT POSITION

DPhil in Economics

Sep 2019 – Present

University of Oxford

- Supervisors: Rick van der Ploeg, J. Doyne Farmer, and Steve Bond

PAST POSITIONS

Researcher

Sep 2017 – Sep 2019

Oxford Martin Programme on Technological and Economic Change

Research Intern

Feb 2017 – Jul 2017

National Institute for Economic and Social Research

EDUCATION

MSc Economics | *Distinction*

Sep 2015 – Sep 2016

University of Warwick

BSc Economics with Honours | *First*

Sep 2012 – Jul 2015

Queen Mary, University of London

RESEARCH INTERESTS

Financial Economics, Quantitative Macroeconomics, Organizational Economics.

WORKING PAPERS

1. Semenova, Valentina, **Julian Winkler**, 'Social contagion and asset prices: Reddit's self-organised bull runs.'

This paper develops an empirical and theoretical case for how 'hype' among retail investors can drive large asset fluctuations. We use the dataset of discussions on WallStreetBets (WSB), an online investor forum with over eleven million followers, as of February 2022, to show how excitement about trading opportunities can ripple through an investor community, with large market impacts. This paper finds that people adopt a certain outlook about an asset (bullish or bearish) in part due to the opinions expressed by others. We also show that asset discussions on WSB are self-perpetuating: an initial set of investors in a stock attracts a larger and larger group of excited followers. Leveraging these findings, we develop a model for how social behaviours among investors impact asset prices. The proposed model and simulations show that social forces can have a destabilising effect on markets. We predict the socially-driven components of our model for asset prices, using data from WSB, and use our predictions to forecast stock market activity. Our estimates are statistically significant for predicting returns, volumes and volatility. These findings allow us to argue the existence of a relationship between social forces and the financial markets.

2. **Julian Winkler**, 'Accounting for variety.'

This paper proposes a decomposition of output growth between price and volume indices, plus the cross-entropy of GDP and weights assumed in constructing aggregate indices. Over time, the cross-entropy of GDP with respect to a benchmark captures the change in its distribution, analogous to 'information loss' – the degree of representation – in price and volume indices across time. The correction addresses a long-standing issue concerning estimates for historical real GDP growth, since the comparability of output in the past to output today is a function of their cross-entropy. Using US World Klems data, this decomposition demonstrates the volume of a representative 1947 product, weighted by nominal output shares, grew 1pp slower per year than the average 2014 product, despite a lower inflation rate for the 1947 product. The changing distribution of GDP is thus a more plausible explanation for small estimates of historical living standards than downward biases in CPI.

3. Goldin, Ian, Pantelis Koutroumpis, François Lafond, **Julian Winkler**, 'Why is productivity slowing down?,' *Accepted by Journal of Economic Literature*.

We review recent research on the slowdown of labor productivity and examine the contribution of different explanations to this decline. Comparing the post-2005 period with the preceding decade for 5 advanced economies, we seek to explain a slowdown of 0.8 to 1.8pp. We trace most of this to lower contributions of TFP and capital deepening, with manufacturing accounting for the biggest sectoral share of the slowdown. No single explanation accounts for the slowdown, but we have identified a combination of factors which taken together account for much of what has been observed. In the countries we have studied, these are mismeasurement, a decline in the contribution of capital per worker, lower spillovers from the growth of intangible capital, the slowdown in trade, and a lower growth of allocative efficiency. Sectoral reallocation and a lower contribution of human capital may also have played a role in some countries. In addition to our quantitative assessment of explanations for the slowdown, we qualitatively assess other explanations, including whether productivity growth may be declining due to innovation slowing down.

4. Yang, Jangho, Torsten Heinrich, **Julian Winkler**, François Lafond, Pantelis Koutroumpis, and J. Doayne Farmer, 'Measuring productivity dispersion: a parametric approach using the Lévy alpha-stable distribution.'

Value added per worker is extremely heterogeneous among firms, exhibiting heavy tails, a very large support, and a non-negligible proportion of negative values preventing log transformation. We propose to model the distribution of value added per worker using the four parameter Lévy stable distribution, a natural candidate deriving from the Generalised Central Limit Theorem, and show that it is a better fit than key alternatives. Fitting a distribution allows us to capture dispersion through the tail exponent and scale parameter separately. We compare these parametric measures of dispersion with interquantile ratios through case studies on the the evolution of dispersion in recent years and the correlation between dispersion and intangibles intensity. These results lead us to make clear suggestions for candidate statistics to be released from micro-aggregated data held by statistical offices.

OUTSIDE EXPERIENCES

| | |
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| Teaching Assistant First Principles of Financial Economics | Oct 2021 – Dec 2021 |
| Teaching Assistant Behavioural Economics | Jun 2021 – Aug 2021 |
| Teaching Assistant Oxford Summer School in Economic Networks | Jun 2018, 2019 |
| Teaching Assistant Warwick Summer School | Jul 2018 |
| R Package Author finty: Test for Finiteness of Moments in a Distribution | Apr 2020 |

AWARDS

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| Rebuilding Macroeconomics Complexity Prize, Second Place For <i>Reddit's self-organised bull runs</i> | May 2021 |
| Oxford Martin School Recognition Award For contributions to the Oxford Martin School Programme on Technological and Economic Change | Apr 2019 |

CONFERENCE PRESENTATION

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| 2022 | Royal Economic Society Annual Conference (<i>Online</i>) |
| 2021 | Royal Economic Society Annual Conference (<i>Online</i>), Networks (<i>Online</i>) |

SKILLS

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| R | Professional |
| Python, Stata, Matlab | Intermediate |
| Certification | ONS Accredited Researcher |

LANGUAGES

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| English, German, French | Fluent |
| Spanish, Mandarin | Intermediate |

REFERENCES

Available on request.