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The future of economics – lessons from the Nobel Laureates… and beyond

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What *is* economics?

- PJ O'Rourke *Eat The Rich*: "One thing that economists do know is that the study of economics is divided into two fields, "microeconomics" and "macroeconomics". Micro is the study of individual behaviour, and macro is the study of how economies behave as a whole."

- "That is, microeconomics concerns things that economists are specifically wrong about, while macroeconomics concerns things economists are wrong about generally"

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Public perceptions of economists

- Public image is almost entirely about macro-economics
- Economists in the media talk about future prospects for the economy
- They try to explain what has just happened e.g. in financial markets
- They set interest rates at the Bank of England
- All these are ‘big’ things

Macro economics: the Queen's question

- PJ O'Rourke has more or less got it right
- Even one year ahead, forecasts for the economy have a very bad track record e.g. output growth, changes in inflation
- No agreement amongst economists about what happens if, say, interest rates are increased
- No sign of forecasts getting better, or of agreement increasing
- Conventional macro theory was completely ignored by policymakers in the financial crisis – lessons from 1930s used instead

Micro economics

- This what a lot of economics is actually about
- Economics is essentially a theory about *individual* behaviour
- How do individuals react when things change?
- This is much more useful – gives a lot of insights into the how the world operates
- Textbooks can be misleading: economics is not a set of received wisdoms about how the world works. It is a way of thinking about how the world works

The conventional model

- The rational agent
- The agent gathers all available information in any given context
- The agent then processes this information and makes the ‘optimal’ decision *given* his/her tastes and preferences
- These tastes and preferences are assumed to be fixed

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It is NOT an empty box

- Theories are only as good as their assumptions
- In situations where the assumptions – complete information and the ability to make the 'best' choice - are *reasonable* approximations to reality, the theory is powerful
- Incentives matter: the only general law in the social sciences
- Does not mean people act 'rationally' in the face of incentives

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Bounded rationality

- George Akerlof and Joseph Stiglitz (2001 prize)
- Agents may not have complete information
- Different agents may have different amounts of information
- But agents still make the ‘best’ choice given the information they have
- Extends the realism of conventional theory and has been widely absorbed into mainstream economics
- The basis of a lot of policy and regulation ‘market failure’

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Abandoning rationality

- Daniel Kahneman and Vernon Smith, 2002
- ‘Agents reason poorly and act intuitively’: Kahneman
- Nobel lectures in *American Economic Review*, June and December 2003
- Supported by almost the entire discipline of psychology, and much of sociology and anthropology
- Has *not* been absorbed by the mainstream – abandons maximisation and requires behavioural rules to be customised to each situation

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Going further (1)

- Copying/imitation is an important aspect of much behaviour, especially in an increasingly connected world

- Agents ‘act intuitively’ by copying
- Tastes and preferences are *not fixed*

- Classic experiments by Asch (1953, 1955) on copying: either because the agent believes the group has superior information, or from a desire to conform

- ‘Most popular....’ on many websites is the most popular because it is popular, not on account of its inherent qualities

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Going further (2)

- Thomas Schelling (2005): ‘binary choice with externalities’
- Agents either buy a brand or they don’t
- Agents are optimistic or pessimistic
- Agents are solvent/not solvent
- Agents believe ideology X or ideology Y
- *Your* decision might change directly the decisions of those who might be influenced by you, and vice versa : ‘externalities’

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What *is* rational behaviour now?

- In the late 19th century, there were relatively few products available and they were simple to evaluate
- Also, whilst fashion and fads existed, the world was not *that* connected
- In the early 21st century, products are complex, hard to distinguish
- ‘‘The number of SKUs in the New Yorker’s economy is not precisely known, but using a variety of data sources, I very roughly estimate that it is on the order of tens of billions.’ Eric Beinhocker, *The Origin of Wealth*
- We are much more aware of other people’s opinions, choices, actions
- Copying is the rational way to behave!

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The music download experiment: an example of copying

- Salganik, Dodds, Watts, ‘Experimental study of inequality and unpredictability in an artificial cultural market’, *Science,* 2006
- Columbia students downloaded previously unknown songs either with or without knowledge of previous participants' choices

- *Increasing the strength of social influence increased both inequality of outcome and unpredictability of success*

- Success was also only weakly determined by quality: the best songs rarely did poorly, and the worst rarely did well

- *But any other result was possible i.e. outcomes are only weakly determined by intrinsic quality of the product*

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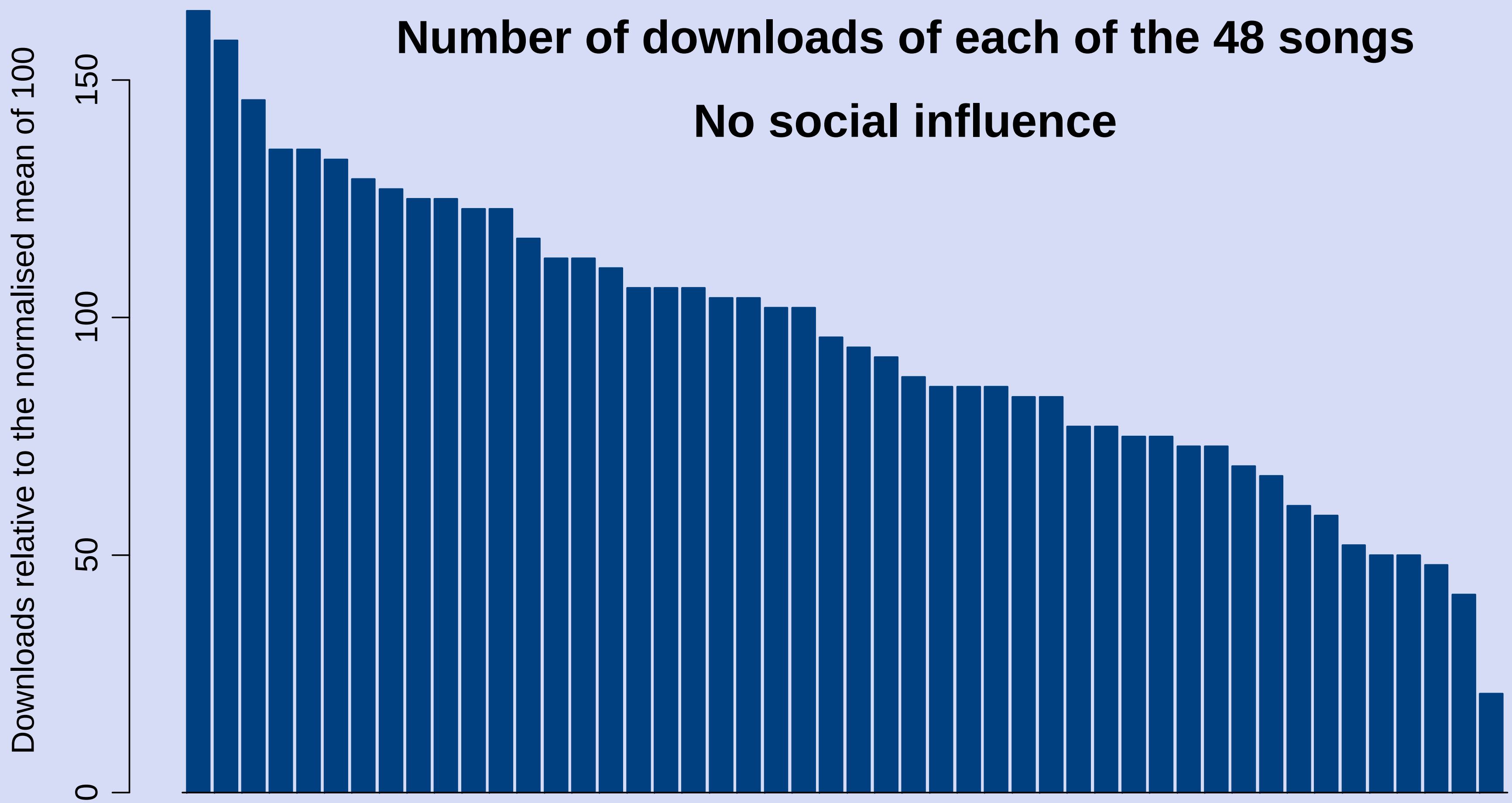

Number of downloads of each of the 48 songs
No social influence
Downloads relative to the normalised mean of 100
0
50
100
150

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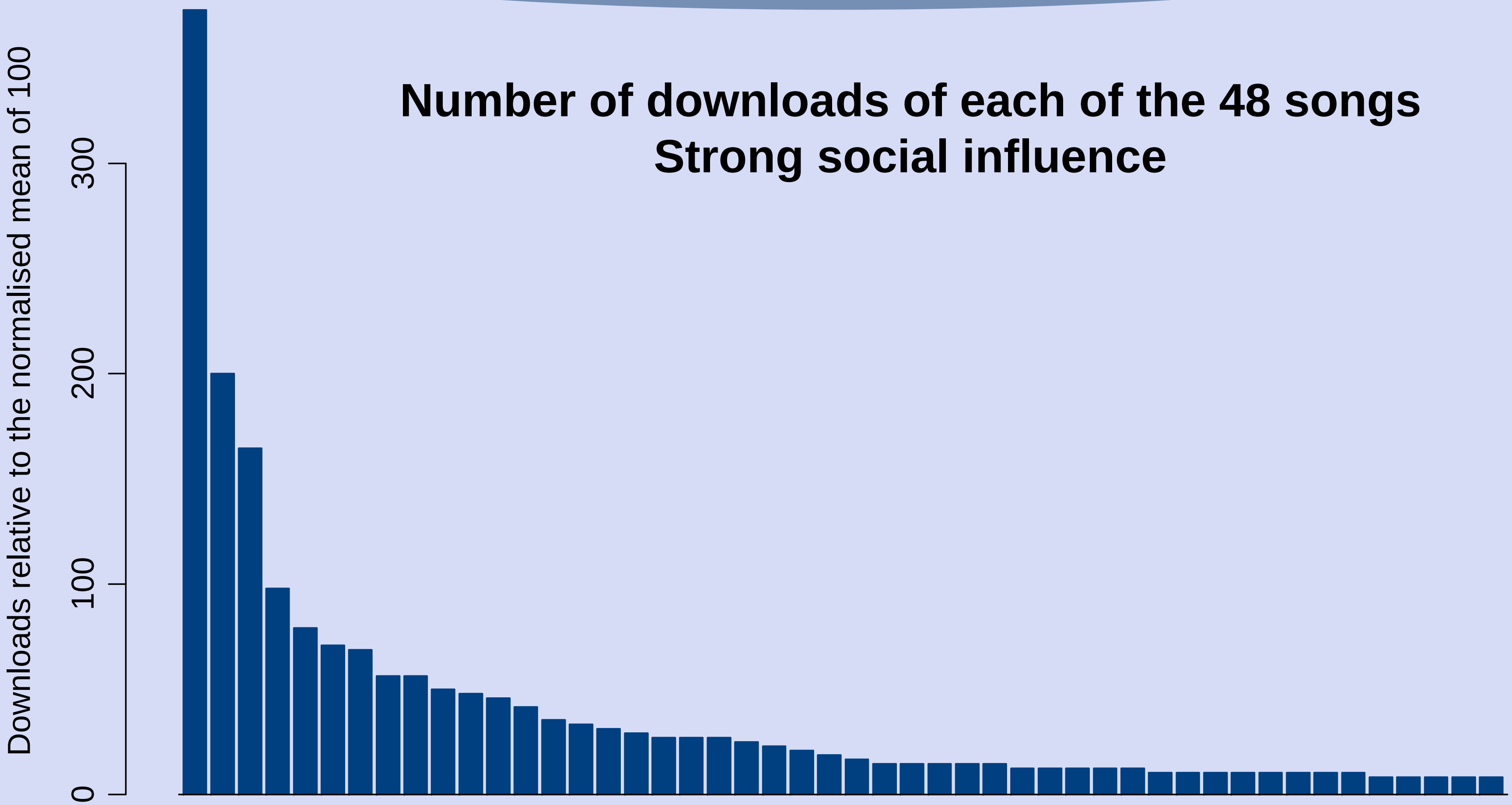

Number of downloads of each of the 48 songs
Strong social influence
Downloads relative to the normalised mean of 100
0
100
200
300