New-breed economists say they can fix everything from social ills and illiteracy to bureaucratic bungling.

Economists like to discover what works in society and what doesn't. They like to find the stories hidden in statistics. But it's only recently that they've had the statistics to investigate what works and make a narrative out of it.

What makes crime rates fall? Why has there been a surge in oral sex among teenagers? Do small class sizes really improve outcomes? What's better for students in the developing world - blackboards or worming tablets?

These investigations might be familiar to those who frequent bookshops. Bestsellers like Freakonomics, The Undercover Economist and Predictably Irrational have introduced the new economic take on the world to a wide audience.

But the real test will come when such economists move from publishing to frontline policy.

The popularity of the economist's approach to life was obvious during a recent visit to Australia of Tim Harford, the "undercover economist". At the end of one Sydney talk he was asked by audience members if economics can be used to solve the world's obesity problems; why we don't use it to solve water shortages; if it can be used to tackle the Aboriginal crisis; and why governments can't be run along these lines.

These are big problems to place on the shoulders of a British economics journalist. Indeed, they are big problems to impose on the discipline of economics - or any other discipline, for that matter.

But the questions indicate how much faith the public has in this branch of economic inquiry and - as Harford's responses show - how much confidence economics has in its own powers.

"Economics is becoming the lingua franca of policy discussion," says Justin Wolfers, assistant professor of business and public policy at the University of Pennsylvania.

"More and more, the language used to evaluate social programs is resembling the language of
economics. Maybe I've been in economics too long, but I'm not sure whether there's anything else except costs and benefits."

The Australian-born 35-year-old is typical of the new economists. Voted by The New York Times last year as one of the hot, young economists to watch, Wolfers looks like a Bondi surfer and blogs with fellow economists about whether fine-based or embarrassment-based incentives are better for achieving their fitness goals.

Like most of the new economists, Wolfers feels free to tackle issues such as crime, divorce, dating, terrorism and addiction with economic tools. The next step is, logically, their application to policymaking.

In Australia, Andrew Leigh of the Australian National University nominates evidence-based ideas on his wish list for the 2020 Summit. "Australia does very few randomised trials," he says.

"Indigenous policies, education policies and social policies ought not be driven by rhetoric and ideology but by bold, persistent experimentation. Policymakers should be more modest about the limits of their knowledge and more rigorous in putting policies to the test."

The idea that people should be the subject of randomised trials in the same way as drugs or soft drinks irks many social scientists.

Drawing conclusions about humans from their statistical footprints ignores the influence of social, environmental and cultural influences, they argue. It's like describing a person's life by looking at their bank balance - there are clues, for sure, but not the whole story.

But for economists like Leigh, society is fair game.

"Economists use randomised trials the same way medicine does - and I suspect the results will be similar. Most new drugs don't work so it wouldn't surprise if most new social policies don't work either. But at the moment we don't know because we're not doing these trials.

"What evidence is there that the baby bonus lifts the birth rate, for instance? We spend billions of dollars on that program and we have no idea whether it works without randomised trials."

Economics' first foray into social problems came in the 1950s with the work of the academic Gary Becker, but it has only been possible for economists to do worthwhile studies since the modern flood of
information.

As Tim Harford said during his recent promotional tour for his book The Logic of Life, "What's changed is the availability of data, especially from the internet. Economists can, for example, create a program and scrape together a database of 100,000 dating advertisements to find out about dating. Also economists have more computational power, so a calculation that might have taken 12 weeks years ago can be done in a second."

The result, he says, is that "all these lovely, lovely theories that economists have had for years, we can now test".

While the world's brightest young economists are testing their skills in these new fields, John Quiggin of the University of Queensland says there have been fundamental shifts in economics that have opened the door to new inquiry.

"Attention has shifted from macro to micro, and within economics the status of mathematical theory has declined in favour of large-scale empirical work combined with the ability to tell a good story," the professor says.

They do tell a good story. For the past few years bestseller lists have featured a slew of pop economics books, by behavioural economists who explore the irrationality of human behaviour, or empirical economists who track human behaviour through statistical footprints.

Whether our view of humanity is being shaped by behaviourists or empiricists, it's certainly not being shaped by sociologists, political scientists, psychologists or any of the other social sciences.

This has stirred up old conflicts, especially among those who remember the reign of economic rationalism in previous governments.

"Does it make us uncomfortable?" asks the president of the Australian Sociological Association, professor Michael Gilding. "Some are, but it's also quite interesting because it shows up the limit of the economic framework. Economics is deeply limited in exploring social issues and even in explaining economic behaviour."

As Gilding's comments indicate, there is still a lot of tension between economics and sociology, but he is willing to grant that economics has been savvier in capturing the public imagination.
"Economics, like evolutionary psychology, has been using everyday language to reach out to a mass market and sell the discipline. I'd have to admit that it is a problem for sociology that they haven't been successful in reaching a wider audience; everyone needs to be doing that, despite inclinations for reverse snobbery," he says.

Regardless of these misgivings, Gilding hopes that, as economists and sociologists meet, the meeting "results in more of a conversation" than a battle.

"The question we all want to answer is, what drives human behaviour? Disciplinary boundaries can get in the way of understanding that. Most of the interesting things that are happening are happening in interdisciplinary areas, and most people would agree with that. I like the idea that you look at the problem and find the best method for solving it."

Whether the rise of economic theory in social policy is a failure of other social sciences or not, economists can be dismissive about other social scientists missing the moment.

Says Leigh, "This is a healthy development for economists and for other social scientists. If they care about getting answers, they should be happy when more smart heads turn their attention to areas they're concerned about."

Says Harford, "I wouldn't dismiss other social scientists, but people believe economists are going out and discovering the world, and we are.

"We're doing well and we deserve to. But 30 years ago it was evolutionary biologists that were doing well; before that it was astrophysicists and before that chaos theory. At the moment, it's the economists who have something interesting to say."

Wolfers warns "sociologists risk becoming irrelevant" if they don't appreciate the new tools of inquiry. "The idea that economics can say something interesting about how the family works was never taken seriously here. When I was studying in Australia I was told Gary Becker was a right-wing ideologue.

"But economists know very few sacred cows and, as we walk into new fields, we're coming up with surprising results and upsetting a lot of people on the way through, especially [in] those disciplines that have been informed by explicit political biases.

"The best scholars embrace the new tools that are being brought to the table. For example, one of the
most interesting intersections at the moment is the one between law and economics. But it shouldn't be a debate about quantitative versus qualitative; both can be used on the same problem, both are useful."

Upsetting people with surprising results is the forte of the new economist and this will become even more apparent when they begin to use their tools to challenge government programs and, inevitably, shape policy.

One recent example of how behavioural economics is beginning to influence policy is the recommendation that the Rudd government's promised tax cuts be channelled into superannuation on an opt-out basis.

The idea that a government directs a payment such as a tax to a purpose that is good for both the individual and the economy (such as superannuation) relies on the findings that people are so averse to losing something they don't act in their own best interests; they'll spend a tax cut on fripperies instead of putting it into savings. It also relies on people's inherent laziness.

A similar system is being proposed for organ donation, where everyone will be treated as a potential organ donor unless they go to the trouble of opting out of the system.

One of the stars of behavioural economics, Richard Thaler, tackles this subject in his forthcoming book, Nudge: Improving Decisions About Health, Wealth and Happiness. The book explores the psychology behind schemes like the opt-out ones and suggests how such an understanding can be used to draft government policy.

To some critics, this book is the watershed one. It will push "behavioural economics out of the realm of experiment and into the realm of social policy", said an American reviewer.

While American economists and many of their institutions are keen to be the anthropologists of data digging, Australian policy wonks are more circumspect about the role of economists in government.

Many still have memories of how economic rationalism dominated policymaking in the 1980s and 1990s and they fear any economic input on areas such as the family, education, health, the law and, of course, the environment.

Gilding, for one, is on guard. "Economists have, no doubt, had a disproportionate influence in government policy, especially in traditional economic areas, and as they make claims into other areas of family, Aboriginal affairs, the environment, those claims will be deeply resisted."
"Numbers have credibility. The method itself has its own authority, and that's appealing to a lot of people, especially those who don't understand the principle of rubbish-in, rubbish-out."

However, as those questions at the conclusion of Tim Harford's recent talk indicate, people do have a lot of faith in numbers and they are keen to see how numbers work in broader fields, especially areas where policies have failed.

And, as Harford replied, economists will go anywhere to test a theory. "There are very few parts of life where economics can't tell you something, and no parts of life where economics can tell you everything," he says. "As for areas like Aboriginal problems, well, it would be a great shame if [economists] weren't asked for their input. As regards climate change, with all the long-term investments and huge costs and benefits involved, only a lunatic would say we don't want economists involved, and only a lunatic would suggest that only economists be involved."

Wolfers concurs. "I have enormous faith that simple economics can help with the water crisis. As for the Aboriginal crisis, some of those problems are about economic development and others are simple observations.

"For example, teachers don't get paid more to teach in the hardest parts of the country. You can change that; it's a question of the allocation of scarce resources." Wolfers does humbly add, "The questions of addiction are more complex, so maybe we should be modest there."

Another group that might fear the inquiring minds of economists is the bureaucracy.

Says Harford, "Central to the new economics is randomised evaluation of policies, but bureaucrats don't like it, they don't want someone going back over their programs and saying it didn't work. They don't want to have to say to their bosses, 'We had this textbook program for poor schools and it didn't work'."

Indeed Andrew Leigh, who has studied such issues as the impact of class sizes, social cohesion and immigration, and the electoral chances of beautiful politicians, says Australian bureaucracy is already battening down the hatches against outside scrutiny.

"Government departments are reluctant to release data on their programs and the Australian Bureau of Statistics makes no data of any complexity available because it's constrained by political masters who place a higher value on confidentiality than on the public's right to know," he says.
"Lots of the analysis we think of as economically important has come out of having access to this sort of government data. For instance, the study on how having a black-sounding name affects job offers was only possible because economists had access to a database of 30 million names in the US."

To the new economists, cutting off access to data is as lethal as cutting blood supply. While they have critics who'd be happy to cut off their supply, they also have many fans who have seen what they can do and want to see more.

But perhaps the biggest impact of the new economists will be less in the new fields they wander into and more in the language they introduce into new territories.

As Wolfers says, economics is becoming the language of the body politic. "We're moving beyond left versus right arguments, and the question that is being asked about programs isn't about whether to intervene or not, but what are the best tools to use."

"The way we talk about environmental policy reflects this. We talk about tradable emission permits and market-based solutions and the costs and benefits of various actions. In discussions in the US, the question people are asking about all sorts of measures (such as no-fault divorce) is, What is the evidence of its effects? So, already there has been a shift to evidence-based policymaking."

The language of the new economist is also making incursions here. Before those 2020 delegates converged on Canberra this weekend, they were given briefing papers described as giving "an evidence-based story about how Australia is faring."

And as those 1000 delegates crowded into Parliament House this weekend might have divined, language can shape a debate. The "evidence-based story" they were given to background them for the weekend may also have been an invitation for them to do the same.

IN THE WORKS

The latest issue of The Quarterly Journal of Economics, a reflection of what economists are working on, includes the following articles:

· Tipping and the dynamics of segregation

· The long-term effects of Africa's slave trades
· Does job testing harm minority workers?

· Preschool TV viewing and adolescent test scores

· Contracts as reference points

· Why has CEO pay increased so much?

· Betting on Hitler The value of political connections in Nazi Germany.

· The impact of legalised abortion on crime

· Top selling economics books and the topics they tackle

· The logic of life Why do some neighbourhoods thrive and others become ghettos? Why is your idiot boss paid a fortune for sitting behind a mahogany altar?

· Predictably irrational Why a 50¢ aspirin works better than a 1¢ aspirin. Why recalling the Ten Commandments makes you more honest.

· Freakonomics How abortion laws affect crime rates. How to determine if teachers are aiding in students' cheating on standardised tests. How the organisational structure of crack gangs resemble other businesses.

· The economic naturalist Why do the keypads on drive-up cash machines have Braille dots? Why are round-trip fares from Orlando to Kansas City higher than those from Kansas City to Orlando?

· The mind of the market How did we make the leap from ancient hunter-gatherers to modern consumers? Is the capitalist marketplace a sort of Darwinian organism?

· The armchair economist Why does popcorn at movie houses cost so much? Why recycling may reduce the number of trees on the planet.

· More sex is safer sex How people may actually increase the spread of sexually transmitted diseases when they avoid casual sex. Why tall people earn more money than shorter competitors.

· The economics of life The changing role of women in modern economics, crime, immigration, drugs,
discrimination against minorities, and auctioning off immigration rights.