

The Economist explains

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The Economist explains economics What is information asymmetry?

How greater transparency makes markets work better

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MARKETS frequently present consumers with products whose quality is difficult to judge in advance. A television, for instance, might look good in the shop, but for how long will it work? Warranties are one way of overcoming the uncertainty. Big brands offering staid but standardised products are another; the hipsterish coffee shop may well have the best brew, but the neighbouring Starbucks hopes you are unwilling to take a risk finding out. Yet despite the pervasiveness of the problem, and of solutions to it, not until the 1970s did economists begin to incorporate “asymmetric information” into their thinking.

George Akerlof was at the forefront of this effort. In his seminal 1970 paper “The Market for Lemons”, Mr Akerlof asked what would happen to the market for used cars if buyers could not tell between good and bad. Suppose a buyer would pay \$1,000 for a good set of wheels (a “peach”) but only \$500 for a malfunctioning car (a “lemon”). Each is worth slightly less to sellers, meaning that in a transparent world, trade in both would flourish. But if lemons and peaches are hard to distinguish, buyers will cut their offers accordingly. They might be willing to pay, say, \$750 for a car they perceive as having an even chance of being a lemon or a peach. The problem is that dealers who know for sure they have a peach will reject such an offer. As a result, the buyers face “adverse selection”: the only sellers who will be prepared to accept \$750 will be those offloading lemons. Smart buyers can figure this out. Knowing they will only ever be sold a lemon, they offer only \$500. Sellers of lemons end up with the same price as they would have done were there no ambiguity. But information asymmetry means no peaches are traded at all.

Subsequent research highlighted two sorts of solutions. Peter Spence, another pioneer of information economics, focused on “signalling”. His example was the labour market. Employers may struggle to tell which job candidates are best. So workers can signal their talents to firms by collecting gongs, like college degrees. Crucially, this only works if the signal is credible: if low-productivity workers found it easy to get a degree, then they could masquerade as clever types. (Warranties and brands might be credible signals of quality in other markets.) The essence of the second solution, “screening”, is to offer deals and products which only ever attract one type of punter. Joseph Stiglitz and Michael Rothschild showed how insurance markets should naturally tend towards differentiated offerings, such that high-risk and low-risk customers gravitate towards different products.

Information asymmetry remains a tricky problem for policymakers. Adverse selection is plaguing America’s Affordable Care Act, better known as “Obamacare”. Fewer healthy people than expected have signed up to the government-sponsored insurance exchanges, which limit how much premiums can vary with risk. Insurers are making losses; as a result, they are raising prices substantially (or pulling out altogether). Critics say those price rises will drive away more healthy customers, leading to a “death spiral”. Information economics should also give pause to the “ban the box” campaign, which seeks to forbid employers from asking about job-applicants’ criminal records prior to interview. Having no criminal record is a positive signal; removing that information makes information asymmetry worse. Recent research suggests that banning the box causes American firms to discriminate by race, such that employment of low-skilled black and Hispanic men falls. Adverse selection indeed.