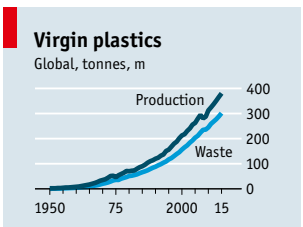
Pollution

Plastic surgery

To solve the polymer problem, look east



IT IS everywhere, as visible as it is vilified. From car parts to crisp packets, plastic has suffused the Earth, and beyond—in 1969 Neil Armstrong planted a nylon Stars and Stripes on the moon. More than 8bn tonnes has been produced since the 1950s, enough to wrap the continents in clingfilm four times over. Only 9% was recycled; 60% was dumped, mostly in landfills, too often in the natural world. Untold tonnes end up as irretrievable ocean flotsam, which sunlight and salt fragment into microscopic pieces that attract toxins and may be gulped by creatures that become seafood.

Plastic weighs heavily on the mind, too. Nine in ten Europeans worry about its impact on ecosystems; three in four fret that it can harm their own health. In Britain hatred of plastic unites the right-wing *Daily Mail*, the leftie *Guardian*, and the queen, who has banned plastic straws from her castles. But hold on. The little scientists know about plastic suggests that although it is the most noticeable pollutant, it is far from the most harmful. Using less is at best a partial solution. A better answer is to collect more—especially in Asia.

Rubbish data

The effects of plastic on nature and human health are hard to gauge. Most polymers are chemically inert. That makes them durable. It also makes them less likely to be a health risk to humans and beasts. As a pollutant, their impact is much lower than less tangible menaces. By one estimate, the environmental and social costs of plastic run to $139bn a year, chiefly from the greenhouse gases produced in its production and transport. The figure for farming is $3trn. Fertiliser run-off alone causes $200bn-800bn worth of damage to the ocean, compared with $13bn from plastic marine litter. Then look at the alternatives. A cotton tote bag must be used 131 times before its carbon footprint improves on that of a throwaway carrier bag.

This does not stop plastic from being a problem. But bans and penalties on plastic bags in rich countries may be better for the conscience than for the environment (see page 49). Prohibition makes sense in poor places like Bangladesh and Kenya that lack proper waste-management systems. It is less useful in tidy France where rubbish collection works smoothly. It would be more effective for rich countries to shore up their recycling industries. They may have little choice in any case. In January China stopped receiving imports of recyclable plastic waste. Because it took half the total traded around the world, that has left hillocks of the stuff piling up in the West.

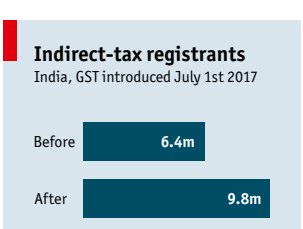
A carbon tax may spur recycling, which is less energy-intensive than producing virgin plastic. Mandating minimum recycled content in plastic containers, as California has since 1991, is also a useful tool. Governments could exempt second-hand polymers from value-added tax; after all, the tax has already been paid on the fresh source material.

But by itself, the West will not solve the problem. Among the ten biggest plastic polluters, all but two are in developing Asia. Together, they account for two-thirds of the plastic spewed into the ocean. Of these, only China could afford Western-style waste-management in the near future. Others are just waking up to the problem; before plastic began piling up, it reasonably seemed less of a priority for governments. Bangladesh may be able to copy India which, despite its 1.3bn people, falls outside the top ten thanks to armies of ragpickers. The rest, like Vietnam or Thailand, may be too wealthy for *raddiwallahs*, yet too poor for sophisticated rubbish collection. The rich world should focus its attention—and resources, including charity—on chivvying them along. That is the surest way to stem the plastic tide. ■

The Indian economy

No mere formality

Narendra Modi's battle to formalise the economy provides lessons in what to emulate—and what to avoid



FOR hulking bureaucracy, it is a thoughtful gesture. Each year the chairman of the Indian Central Board of Direct Taxation e-mails a "Certificate of Appreciation" to every resident who has paid over 100,000 rupees ($1,500) in tax. There are even helpful instructions on how best to print out this "recognition of your contribution towards building of our great nation", should you want to frame it.

Fret not for India's forests. In a country of 1.3bn, fewer than 400,000 of these precious testaments were awarded in the latest wave. Not many Indians make enough money to pay that kind of income tax, and many of those who do opt not to. Perhaps half of India's economic activity, and even more of its jobs, involve dodging tax. That is why Narendra Modi, the prime minister, has set out to formalise the economy. The results are hit and miss (see page 61). But they are clear enough to give other tax-catchers a guide to how they should cast the net.

Having a more formal economy makes sense. Taxes pay for public services. India's rampant informality is one reason why its tax-to-GDP ratio has been stuck at a measly 15% or so for decades, cramping education and health care. Formal jobs pay up to 20 times more than informal ones, by one government estimate, and formal firms are more likely to innovate, grow ▸▸

and export. Having people and businesses operate outside the rules, whether by dodging taxes or avoiding regulations, is an affront to the idea of a fair society.

But formality is easy to get wrong. Fetishising it can confuse means with ends. Countries tend to become more formal as they get richer because formal firms expand to displace informal ones. Hence a relatively smaller grey economy is more likely to be the outcome of rising prosperity than its precondition. Indeed, draconian policies to expand tax collection often hamper the very growth that brings it about.

Mr Modi's chief pro-formality policy was the "demonetisation" of most banknotes in 2016. The cost, several quarters of sub-par growth, outweighed the benefits. It caused such dislocation that it is hard to see others emulating it (even the pantomime central-planners of Venezuela rowed back after announcing that they would scrap their own banknotes). Throttling the informal sector meant hurting not just crooks and tax-dodgers, who were Mr Modi's targets, but also hundreds of millions scratching out a living in the jobs market of last resort. Most Indians would work in the formal sector if they could, but jobs are scarce. Rather than "nudging" them towards better behaviour, as policymakers are often advised to do, demonetisation was more akin to a cricket bat to the head.

A better approach is to tempt people out of the shadows. A government scheme to provide bank accounts to all citizens, and have them linked to mobile phones and biometric national IDs, has turbocharged digital payments, which are easier to track and tax. Dealings with the authorities increasingly take place online, where it is harder to get shaken down for a bribe. That makes the prospect of being a formal business less terrifying. A newish goods and services tax entitles formal businesses to refunds that are not available in the grey economy. The number of firms registered has risen by 50%.

Coax, don't coerce

The best results are those that lead to formalisation as a by-product of sensible rule-making. Small companies fail to grow into large (usually formal) ones because hundreds of unreformed labour laws make doing business legitimately a nightmare. Business taxes in India are among the highest in the world, or can be escaped only by using loopholes. Courts that formal businesses rely on often fail to help. Mr Modi is right that a more formal economy is a good thing, but he has overlooked the most effective solutions. ■

Sexism in Hollywood

#MeToo, part two

The Weinstein scandal is changing Hollywood for the better in more ways than one

IN OFFICES around the world, the scandal over Harvey Weinstein's depredations has obliged men to rethink their interactions with women. Many are struggling to decipher where the bounds of propriety lie (handshake or kiss?). In Hollywood itself, the furore has ruined reputations and ended careers. And film executives have been forced to reconsider not just workplace mores but the stories they choose to tell. It is a disorienting moment, but a promising one—for female artists, the studios themselves and for their viewers.

For such a faddish industry, Hollywood can be amazingly ossified. Female characters may no longer be tied to train-tracks and rescued by mustachioed heroes, but they still tend to be stereotyped and marginalised. Male actors do most of the talking; women are far likelier to take their clothes off. That is in part because conventional wisdom among decision-makers holds that big-budget films with female leads are liable to underperform. Not coincidentally, from boardroom to writers' room to director's chair, the vast majority of those decision-makers are men. That the Academy Awards on March 4th will feature a woman nominated for directing is a rarity; that a woman has been nominated for cinematography is a first.

Now the #MeToo movement has begun to redistribute power in Hollywood. Instead of being stymied by harassment, some women are being promoted; more are being given a chance to direct. At the same time there are signs that the studios are becoming squeamish about gratuitous sex and misogynistic violence, two staples of the silver screen (see page 70). To sceptics, those changes might look like woolly political correctness, or tokenistic positive discrimination. On the contrary, they are likely to be as good for movie-makers' profits as they are for female talent.

That is because Hollywood's chauvinistic assumptions about audience tastes are based less on scientific fact than on prejudice. Although women account for half of cinema-ticket sales in North America, for example, executives were so convinced that female-led action flicks were a turn-off that they hardly made any. The recent success of "Wonder Woman"—the third-highest-grossing film in North America last year—indicates a neglected market for strong female characters. Similarly, the triumph of "Black Panther", a chart-topper in the United States and abroad, has discredited another Hollywood shibboleth, namely that pictures with black casts could not succeed overseas.

Happily ever after

Perhaps female and minority viewers were once more tolerant of films that offered only caricatures of themselves, or omitted their likenesses altogether. Probably, many always felt short-changed, but Hollywood was too self-involved to notice. Now, however, the studios seem poised to learn from the hits these audiences turn out for, rather than dismissing them as outliers. Meanwhile women writers and directors are beginning to provide actors with more complex female roles—a trend that the scandal has accelerated.

All this matters beyond Hollywood, because its products are not like other industries'. Television and films have vast power to shape the way their audiences see themselves and other people. If the Weinstein episode circuitously leads to more rounded depictions of women on screens around the world, this grim saga might find a sort of happy ending. ■