МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ АВТОНОМНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ «САМАРСКИЙ НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИМЕНИ АКАДЕМИКА С. П. КОРОЛЕВА» (САМАРСКИЙ УНИВЕРСИТЕТ)

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АНГЛИЙСКИЙ ЯЗЫК ДЛЯ МАГИСТРОВ НАПРАВЛЕНИЯ «ЭКОНОМИКА»

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PART 1 WRITING A SUMMARY

Steps to Writing a Summary

1. Read and understand the prompt or writing directions.

What are you being asked to write about?

Example:

Summary of an Article

Write a summary of the article. Your writing will be scored on how well you:

- state the main ideas of the article;
- identify the most important details that support the main ideas;
- write your summary in your own words, except for quotations; and
- express the underlying meaning of the article, not just the superficial details.

2. Read, think about, and understand the text.

Review the material to make sure you know it well. Use a dictionary or context clues to figure out the meaning of any important words that you don't know.

3. Take notes.

Write down the main ideas and important details of the article.

4. Write a thesis statement.

In a single sentence, state the main idea of the article. The thesis statement should mention the underlying meaning of the article, not just the superficial details.

5. Organize and outline ideas.

Write down the important details you need to include in the summary. Put them in a logical order.

Topic Sentence:

Evidence:

#1.

#2:

#3:

6. Write your essay.

- Your summary should be about one third of the length of the original article.
 - Focus on the main point of the article and the most important details.
- Use your own words; avoid copying phrases and sentences from the article unless they're direct quotations.

7. Revise.

Have you indented all paragraphs? Have you captured the main point of the article? Have you included the most important details? Is there sentence variety? Have you avoided writing short, choppy sentences? Are there transitional words and phrases to connect ideas?

8. Proofread and edit.

Check your spelling, grammar, and punctuation. Is the verb tense consistent? Are all names spelled correctly and capitalized? Have you avoided writing run-on sentences and sentence fragments?

9. Write your draft.

Use blue or black ink. Skip lines. Write on one side of the paper only. Include a title on the top line.

10. Read your summary one last time before you turn it in.

Look for careless spelling, punctuation, and grammar errors, especially omitted words or letters. Cross out errors neatly with a single line and write the correction above.

STUDY THESE EXAMPLES

No 1

Summarise the following article in about 75 words

South Korea is planning to move its capital from Seoul to a new site in the middle of the country. Although Seoul has been the capital since the fourteenth century, the city of over 20 million is now very crowded, and also close to the hostile armies of North Korea. The new capital is planned to cost \$45 billion, with construction finishing by 2012.

There is, however, strong opposition to the project, since similar schemes in other countries have taken far longer and cost much more than originally planned. Australia, for example, took over 70 years to finish building Canberra, while Nigeria has never completed its planned new capital, Abuja. Both Brazil and Malaysia have found that the building of new capitals (Brasilia and Putrajaya) can sharply increase the national burden of debt. Even if the government does eventually move to the new

capital, it is unlikely that South Korea's main businesses will follow it, so Seoul will probably continue to be the country's principal city.

Model answer

It is planned to move South Korea's capital from Seoul to a central site by 2012, at a cost of \$45 billion. Although Seoul is crowded and too near the border, critics claim that this scheme will be too expensive and take too long. Businesses are unlikely to move away from Seoul when the government does. Other countries have experienced severe problems with capital relocation.

№2 Summarise the article

THE MEASUREMENT OF HAPPINESS

In the last 50 years there has been no apparent increase in personal happiness in Western nations, despite steadily growing economies. In both Europe and the USA surveys have found no greater level of happiness since the 1950s, which seems strange since wealthier people generally claim to be happier than poorer people. In America, for example, more than a third of the richest group said they were 'very happy', while only half this number of the poorest made the same claim. Although it would be logical to expect that rising national wealth would lead to greater national happiness, this has not happened. Individually, more money does seem to increase happiness, but when everyone gets richer, no one appears to feel better.

Economists have recently paid more attention to studying happiness, instead of the more traditional GDP per person. One suggestion has been that people rapidly get used to improvements, and therefore devalue them. Central heating is a good example: whereas 30 years ago it was a luxury item, today it is standard in nearly every home.

A further explanation for the failure of wealth to increase happiness is the tendency for people to compare their own position to that of their neighbours. Studies show that people would prefer to have a lower income, if their colleagues got less, rather than a higher income while colleagues got more. In other words, happiness seems to depend on feeling better off than other people, rather than on any absolute measure of wealth. Further research suggests that having free time is also closely linked to happiness, so that the pattern of working harder in order to buy more goods is unlikely to increase well-being. Yet Western societies generally encourage employees to spend as much time at work as possible.

Penec, A. 'The measurement of happiness' Applied Econometrics 44. -2003.-p.18

Model answer

Penec (2003) argues that although Western economies have expanded since the 1950s, there has been no parallel growth in happiness. Surveys indicate that rich people generally say they are happier than poor people, but it appears that although individuals may become happier society as a whole does not. One possible answer is that people soon become accustomed to improvements and so do not appreciate them.

Another explanation Penec presents that happiness is often dependent on a comparison with others, so that if neighbours are also getting richer there is no apparent improvement. A further factor relates to leisure, which is widely equated with happiness. Consequently the idea of increasing workload to be able to purchase more goods or services is not going to result in greater happiness.

TEXTS FOR WRITING A SUMMARY

Text №1

Circuit breaker

The tech cold war is turning red-hot. That is a danger to investors and consumers -and to America

When trade talks between America and China fell apart on May 10th, the effect on financial markets was muted. Most firms and investors are betting on a long struggle between the superpowers but not a sudden crisis or a financial panic. As the conflict over the tech industry escalates, however, that assumption looks suspect. On May 15th America's Commerce Department said that companies would need a special licence to deal with Huawei, China's hardware giant, which it deemed a threat to American interests (it later said the order would not take full effect for 90 days). Fears that other Chinese tech firms will be blacklisted have caused their shares to tumble. A chain reaction is under way as a giant industry braces for a violent shock.

The hawks in the White House may believe that isolating the tech industry will slow China's long-term development and that isolation is a good negotiating tactic, since China has more to lose in the short term than America does. In fact the brutal fallout from a full-blown tech war would rapidly be felt by financial markets as well as by America's allies and the world's consumers. In the long run it may even make China self-sufficient.

The tech confrontation began in earnest in April 2018, when America blacklisted ZTE, a Chinese hardware firm, for breaching sanctions on Iran and North Korea and then lying about it. Unable to buy American semiconductors and other components, or to deal with Western banks, ZTE almost collapsed (President Donald Trump reversed the ban). Since then the scope of American actions has broadened and the burden of proof fallen. The Huawei ban comes after a campaign to stop American allies from using its 5g gear. Further bans are likely. According to the *New York Times*, the blacklisted firms will include Hikvision, which makes systems used for surveillance of the beleaguered Uighur minority in Xinjiang. Suppliers and customers are cutting these firms off. Google and Arm, a British chip-design firm, have both said they will limit supplies to Huawei. Telecoms firms in Britain and Japan have said they will stop selling some Huawei phones.

The confrontation is a reminder of America's awesome power. By stopping foreign firms from using its intellectual property and financial system, it can put them out of business. The White House is also right that the bill for a tech war will at first be asymmetric. American firms will lose perhaps \$10bn a year of licensing revenue for chips and components. But much of China's hardware-manufacturing industry depends on American components that cannot easily be sourced from elsewhere or produced at home. Huawei carries only 80 days of inventory and has 188,000 staff. A hiatus in the trade of tech goods would cause huge job losses in China's coastal cities.

Tech is not like the other industries, such as steel and soya-beans, that obsess the White House's trade warriors. The supply chain is so complex that it more closely resembles the interconnected global financial system before the crisis of 2007-08. Tech hardware firms around the world, which mostly depend on production in China, have a total market value of \$5trn. Apple, which makes a fifth of its profits in China, could find itself banned or its products boycotted; its cash-rich balance-sheet could survive the shock, but its shares would slump. Hundreds of smaller suppliers with rickety finances could go bust.

The ripple effect would hurt America's allies in Asia, because they host factories that supply China's tech-manufacturing hubs and are home to companies that operate in China. In October 2017, for example, components for smartphones accounted for over 16% of exports in Malaysia and Singapore and over 33% in Taiwan. Two Taiwanese giants, TSMC (which makes chips) and Foxconn (which assembles devices), straddle the fault line of the tech cold war, having production and customers in both America and China. The same is true of South Korea's champion, Samsung. America's allies face an impossible test of loyalty.

Consumers will suffer, too. Until now, the cost of the trade war has been masked, because tariffs are paid by producers who absorb their cost or pass it on stealthily to consumers. Now the bill could become visible. Huawei has sold 300m handsets outside China in the past five years. Their buyers may soon find that their phones no longer work properly. And just imagine if Americans were suddenly unable to buy Chinese-made iPhones.

The cost of a rupture means that both sides are likely to back down. Yet the battle will hasten the race to develop an indigenous capacity to supply every vital technology in China - and in every aspiring power, including India. America's hold over the digital economy lets it enforce its will. But by unleashing its power so clumsily, it will hasten the end of its own dominance. (4130)

Text №2

The great jobs boom

The rich world is enjoying an unprecedented employment bonanza, which capitalism's critics have missed

Everyone says work is miserable. Today's workers, if they are lucky enough to escape the gig economy and have a real job, have lost control over their lives. They are underpaid and exploited by unscrupulous bosses. And they face a precarious future, as machines threaten to make them unemployable.

There is just one problem with this bleak picture: it is at odds with reality. As we report this week, most of the rich world is enjoying a jobs boom of unprecedented scope. Not only is work plentiful, but it is also, on average, getting better. Capitalism is improving workers' lot faster than it has in years, as tight labour markets enhance their bargaining power. The zeitgeist has lost touch with the data.

Just the job

In America the unemployment rate is only 3.6%, the lowest in half a century. Less appreciated is the abundance of jobs across most of the rich world. Two-thirds of the members of the OECD, a club of mostly rich countries, enjoy record-high employment among 15- to 64-year-olds. In Japan 77% of this group has a job, up six percentage points in six years. This year Britons will work a record 350bn hours a month. Germany is enjoying a bonanza of tax revenue following a surge in the size of its labour force. Even in France, Spain and Italy, where joblessness is still relatively high, working-age employment is close to or exceeds 2005 levels.

The rich-world jobs boom is partly cyclical - the result of a decade of economic stimulus and recovery since the great recession. But it also reflects structural shifts. Populations are becoming more educated. Websites are efficient at matching vacancies and qualified applicants. And ever more women work. In fact women account for almost all the growth in the rich-world employment rate since 2007. That has something to do with pro-family policies in Europe, but since 2015 the trend is found in America, too. Last, reforms to welfare programmes, both to make them less generous and to toughen eligibility tests, seem to have encouraged people to seek work.

Thanks to the jobs boom, unemployment, once the central issue of political economy, has all but disappeared from the political landscape in many countries. It has been replaced by a series of complaints about the quality and direction of work. These are less tangible and harder to judge than employment statistics. The most important are that automation is destroying opportunities and that work, though plentiful, is low-quality and precarious. "Our jobs market is being turned into a sea of insecurity," says Jeremy Corbyn, leader of Britain's Labour Party.

Again, reality begs to differ. In manufacturing, machines have replaced workers over a period of decades. This seems to have contributed to a pocket of persistent joblessness among American men. But across the OECD as a whole, a jobs apocalypse carried out by machines and algorithms, much feared in Silicon Valley, is nowhere to be seen. A greater share of people with only a secondary education or less is in work now than in 2000.

It is also true that middle-skilled jobs are becoming harder to find as the structure of the economy changes, and as the service sector - including the gig economy - expands. By 2026 America will have more at-home carers than secretaries, according to official projections. Yet as labour markets hollow out, more highskilled jobs are being created than menial ones. Meanwhile, lowend work is becoming better paid, in part because of higher minimum wages. Across the rich world, wages below two-thirds of the national median are becoming rarer, not more common.

As for precariousness, in America traditional full-time jobs made up the same proportion of employment in 2017 as they did in 2005. The gig economy accounts for only around 1% of jobs there. In France, despite recent reforms to make labour markets more flexible, the share of new hires given permanent contracts recently hit an all-time high. The truly precarious work is found in southern European countries like Italy, and neither exploitative employers nor modern technology is to blame. The culprit is old-fashioned law that stitches up labour markets, locking out young workers in order to keep insiders in cushy jobs.

Elsewhere, the knock-on benefits of abundant work are becoming clear. As firms compete for workers rather than workers for jobs, average wage growth is rising, pushing up workers' share of the pie – albeit not as fast as the extent of the boom might have suggested. Tight labour markets lead firms to fish for employees in neglected pools, including among exconvicts, and to boost training amid skills shortages. American wonks

fretted for years about how to shrink disability-benefit rolls. Now the hot labour market is doing it for them. Indeed, one attraction of the jobs boom is its potential to help solve social ills without governments having to do or spend very much.

Nonetheless, policymakers do have lessons to learn. Economists have again been humbled. They have consistently underestimated potential employment, leading to hesitant fiscal and monetary policy. Just as their sanguine outlook on finance in the 2000s contributed to the bust, so their mistaken pessimism about the potential for jobs growth in the 2010s has needlessly slowed the recovery.

The left needs to accept that many of the criticisms it levels at capitalism do not fit the facts. Life at the bottom of the labour market is not joyous—far from it. However, the lot of workers is improving and entry-level jobs are a much better launch pad to something better than joblessness is. A failure to acknowledge this will lead to government intervention that is at best unnecessary and at worst jeopardises recent progress. The jobs boom seems to be partly down to welfare reforms that the likes of Mr Corbyn have vociferously opposed.

The right should acknowledge that jobs have boomed without the bonfire of regulations that typically forms its labour-market policy. In fact, labour-market rules are proliferating. And although the jury is out on whether rising minimum wages are harming some groups, such as the young, they are not doing damage that is large enough to show up in aggregate.

The jobs boom will not last for ever. Eventually, a recession will kill it off. Meanwhile, it deserves a little appreciation. (5367)

Text №3

A Gulf case study

The lessons of Bahrain, a state that tried to wean itself off oil

The orange helmets are a burst of colour in the desert, where drab aluminium potlines stretch for almost a mile across the sands. Workers at Alba, Bahrain's aluminium smelter, are finishing a \$3bn expansion. A country of just 1.5m people will soon produce 1.5m tonnes of aluminium a year, more than 2% of global output. Alba will add another 500 to its staff of 3,200. Almost 90% are citizens, meaning the firm will employ 2%

of the national workforce. The aluminium industry will account for 15% of GDP, says Tim Murray, the CEO. "People don't realise it's that big."

All six members of the Gulf Co-operation Council (GCC) have lofty plans to wean their economies off oil. Bahrain is in many ways a forerunner of this effort. It built a financial sector back in the 1980s. More recently it passed a bankruptcy law, allowed 100% foreign ownership of firms and introduced flexible visas that allow some migrants to freelance. "Everything those guys are doing now, we tried already," says Ausamah al-Absi, who heads the labour regulator. The results have been mixed with lessons for Bahrain's neighbours.

Compared with other Gulf states, the job market in Bahrain looks vibrant. Two-thirds of citizens work in the private sector, compared with 55% in Saudi Arabia and 10% in Kuwait. Unemployment is 4%. In Saudi Arabia, where joblessness is three times higher, the government is raising work-permit fees to drive out migrants. In Bahrain such fees are low. Most migrants toil in low-wage jobs that locals spurn. Bahrainis do not want to lay bricks.

Bahrain ploughs 80% of the take from work-permit fees back into the domestic economy through Tamkeen, which offers subsidised loans and grants to help businesses buy equipment and training. Though it has a few national champions, Bahrain has tried harder than other GCC states to cultivate small firms. Businessmen praise its simpler bureaucracy. A restaurateur says he needs nine licences to operate a fast-food joint in his native Kuwait. Bahrain consolidated its permits into one.

Yet the fiscal picture is bleak. Oil provides about 70% of government revenue - and there is not enough of it. Last year's deficit was a yawning 12% of GDP. Wealthier Gulf countries had to offer a \$10bn bailout. Bahrain trimmed subsidies for power and water consumption in 2016. But more reforms planned for this year were postponed for fear they would trigger unrest.

Cutting subsidies will only get Bahrain so far. But even though Bahrain introduced a 5% value-added tax in January, a corporate or income tax seems politically impossible. Without new taxes the Gulf states will struggle to balance their budgets.

State jobs still pay 70% more than those in the private sector, a figure that has grown over the past decade as the monarchy doled out increases and stipends to buy political calm. The gap fuels unrest in a country where the Shia majority is often frozen out of state jobs. Flexible work permits

might slowly drive up wages in migrant-heavy sectors - but unhappy employers are trying to kill the programme.

Oil still accounts for more than half of exports. Sameer Abdulla Nass, the head of the chamber of commerce, complains that 100% foreign ownership has brought only "retail and restaurants", not industry. Bankers talk giddily about fintech as a growth industry. In a venture-capital firm overlooking the Gulf, though, investors complain that universities do not produce enough entrepreneurs. Nor do they provide the sort of training that might help graduates land well-paid technical jobs.

Bahrain has done well at convincing its citizens to try the private sector instead of counting on cushy state gigs. But it has not upended the social contract, whereby oil pays the bills and foreigners do the manual labour. Some day, it will have to, says Mr Nass. "We have no choice." (3259)

Text №4

Gold blush

How can a country export so much more gold than it mines?

Deep in pits hewn from the earth dozens of teenage boys slam their hammers into the rock. Other men pan the crushed ore by hand in tubs filled with water and mercury. Uganda does not have many gold mines and most, like this one in Busia, in the east of the country, are neither sophisticated nor especially productive. Yet this small east African nation exports a fantastic trove of the yellow metal.

According to official statistics, gold exports surged to \$514m in 2018 from less than \$10m a decade ago. Last year gold surpassed coffee as Uganda's biggest earner of foreign currency.

The open secret of Uganda's gold boom is that most of this metal is dug up elsewhere. Its central bank reckons that only 10% of the exported gold comes from local mines. It blandly says the rest comes from elsewhere in Africa. Officials insist that the trade is all legal and untarnished. But industry insiders gesture over the border to the Democratic Republic of Congo, whose lawless eastern provinces are rich in minerals including gold, and which levies a 3% tax on gold exports. They think that more than 90% of Congo's gold production is illegally whisked to neighbours such as Uganda and Rwanda and then onto planes flying to Dubai. Some go direct. In 2016 customs officials in Dubai checked the rather overweight

baggage of a Congolese frequent-flyer from Lubumbashi. In it was 150kg of gold. One investigation for the OECD, a club of mostly rich countries, found that airline passengers were regularly stopped by security officials at Entebbe airport trying to sneak off with gold bars crammed into their carry-on bags.

Uganda, too, used to tax gold exports, but in 2014 Uganda's president, Yoweri Museveni, waived the tax. In 2015 Belgian investors spent \$15m building African Gold Refinery after being assured of tax exemptions for both the import of raw gold and the export of refined gold for at least ten years. Since then the refinery has exported more than 31 tonnes of gold to Dubai and Antwerp. Last year a competitor, Bullion Refinery, entered the market, and is now thought to be exporting similar quantities.

Uganda's export boom ought to be a shining example of how governments can spur investment and minerals beneficiation with sensible tax policies. Yet investigators for the UN have singled out Uganda for shame and named both refineries in a report to the Security Council on how gold smuggling funds warlords and militias.

Their report says that middlemen selling gold to the refineries are linked to Congolese smugglers. The Sentry, an American watchdog backed by George Clooney, an actor, last year estimated that \$300m-600m of gold is smuggled out of Congo each year. African Gold Refinery says it selects its suppliers carefully and complies with laws prohibiting the trade in minerals from conflict areas. Bullion Refinery, whose website welcomes "small, medium and large scale suppliers" of "raw gold dust and powder", did not respond to a request for comment.

Most of the gold processed in Uganda comes from areas controlled by armed militias that extort money from artisanal miners. A report for the UN found that one militia forces miners to sell their gold at \$25 per gram, far less than the \$60 they would get on the open market, and charges miners a monthly fee for access to the pits. Rebel militias are not the only ones getting rich. Another UN report alleges that officers in Congo's army illegally own mines or extort gold from miners.

Mr Museveni shows little interest in policing the trade. At the opening of a gold refinery he said he would deal harshly with officials who were "frustrating" investors in the industry. Some locals may profit, but gold smuggling fuels violence in the country's large, unstable, neighbour. (3179)

Text №5

Inglorious isolation

An American export ban will be excruciating for China's biggest tech firm

America is no fan of Huawei. Its officials have spent months warning that the Chinese giant's smartphones and networking gear could be Trojan horses for Chinese spies (something Huawei has repeatedly denied). They have threatened to withhold intelligence from any ally that allows the firm in. On May 15th they raised the stakes. President Donald Trump barred American firms from using telecoms equipment made by firms posing a "risk to national security". His order named no names. But its target was plain.

For all the drama, the import ban hardly matters. Huawei has long been barred from America, in practice if not on paper. More significant was the announcement by the Commerce Department, on the same day, that it was adding Huawei to a list of firms with which American companies cannot do business without official permission. That amounts to a prohibition on exports of American technology to Huawei.

It is a seismic decision, for no technology firm is an island. Supply chains are highly specialised and globally connected. Cutting them off - "weaponising interdependence", in the jargon – can cause serious disruption. When ZTE, another Chinese technology company, received the same treatment in 2018 for violating American sanctions on Iran, it was brought to the brink of ruin. It survived only because Mr Trump intervened, claiming it was a favour to Xi Jinping, China's president.

Huawei matters more than ZTE. It is China's biggest high-tech company, and is seen as a national champion. Its name translates roughly as "Chinese achievement". Revenues of \$105bn put it in the same league as Microsoft. Only Samsung, a South Korean firm, sells more smartphones. Huawei holds many crucial patents on superfast 5g mobile networks, and is the largest manufacturer of telecoms equipment. Were it to go under, the shock waves would rattle all of tech world.

By May 20th the impact of the ban was becoming clear. Google said it had stopped supplying the proprietary components of its Android mobile operating system to Huawei. A string of American chipmakers, including Intel, Qualcomm and Micron, have also ceased sales. Later that day the

Commerce Department softened its line slightly, saying that firms could continue to supply Huawei for 90 days, but for existing products - for instance, with software updates for Huawei phones already in use. New sales, on which Huawei's future revenue depends, remain banned.

Interdependence, of course, cuts both ways. Shares in American technology firms fell after the announcement, because Huawei is a big customer. Qorvo, which employs 8,600 people and makes wireless communication chips, derives 15% of its revenue from Huawei. Micron is in the memory business, of which Huawei is a big consumer. A report from the Information Technology & Innovation Foundation, a think-tank, also released on May 20th, guessed export controls could cost American firms up to \$56bn in lost sales over five years.

Unlike Intel, Qualcomm or ZTE, Huawei is privately owned, so lacks listed shares whose price swing would hint at the extent of its distress though the price of its listed bonds has dropped to 94 cents on the dollar. In public, the firm is staying calm. Ren Zhengfei, Huawei's founder, said it would be "fine" without access to American technology. Huawei has spoken of activating a "Plan b" designed to keep it in business despite American sanctions. It has been stockpiling crucial components for months, and has made a conscious push to become less reliant on American technology over the past few years. Its phones in particular make extensive use of chips designed by HiSilicon, its in-house chip-design unit.

Yet few analysts are as sanguine as Mr Ren. Three business areas in particular look vulnerable. Without Google's co-operation, new Huawei phones will lack the latest versions of Android, and popular apps such as Gmail or Maps. That may not matter in China, where Google's apps are forbidden. But it could be crippling in Europe, Huawei's second-biggest market. Its telecoms business needs beefy server chips from Intel. The supply of software to manage those networks could dry up too. Huawei is developing replacements for all three, but they are far from ready.

Two questions will determine whether or not Huawei can weather the storm, says Dieter Ernst, a chip expert and China-watcher at the East-West Centre, a think-tank in Honolulu. The first concerns America's motives. The timing of the ban, a few days after broader trade talks between China and America had broken down, was suggestive. On one reading, it is a tactical move designed to wring concessions from China. If so, it might prove short-lived, and Huawei's stockpiles may tide it over.

Paul Triolo of Eurasia Group, a political-risk consultancy, is doubtful. Rather than a negotiating tactic, he sees the ban as "the logical end-game of the US campaign to take down Huawei". A long-lasting ban would force the firm to look for alternative chips and software that Chinese suppliers would struggle to provide.

The second question concerns the reach of American power. The tangled nature of chip-industry supply chains, says Mr Ernst, means that many non-American companies make use of American parts or intellectual property. They may therefore consider themselves covered, wholly or partially, by the ban. Take Arm, a Britain based firm whose technology powers chips in virtually every phone in the world, including those made by HiSilicon. Arm says that it will comply with the Commerce Department's rules. That suggests that Arm will not grant Huawei new licences. It is unclear if Arm will offer support for existing licences, however. As Arm's technology advances, Huawei risks being left behind.

Other non-American companies are as important. One industry insider with contacts in Taiwan says that American officials are pressing Taiwan Semiconductor Manufacturing Company (TSMC), a big and cutting-edge chipmaker, to drop Huawei, which is its third-biggest customer. That would be a crushing blow, for Chinese chip factories are not up to the task of manufacturing HiSilicon's sophisticated designs. TSMC's only peer is Samsung – and South Korea is another of America's allies. TSMC said on May 23rd that it would continue supplying Huawei for now.

Even if the optimists are right, and the ban is lifted in exchange for trade concessions, a return to business as usual seems unlikely. America has twice demonstrated a willingness to throttle big Chinese companies. Trust in American technology firms has been eroded, says Mr Triolo. China has already committed billions of dollars to efforts to boost its domestic capabilities in chip-making and technology. For its rulers, America's bans highlight the urgency of that policy. Catching up will not be easy, believes Mr Ernst, for chips and software are the most complicated products that humans make. But, he says, if you talk to people in China's tech industry they all say the same thing: "We no longer have any other option." (5967)

Text №6

Seed bump

Big Agribusiness wants to make the Andean grain more mainstream

A mid growing appetite in the West for healthy food, the UN declared 2013 the International Year of Quinoa. Exports boomed out of Bolivia and Peru, the two largest producers. Prices tripled to \$4,800 per tonne; organically grown stuff fetched \$6,800. Poor Andean farmers who are the grain's traditional custodians benefited. Protein-rich profits also lured Big Agribusiness. Intensive farms sprang up in South America's fertile coastal plains. By 2015 supply topped 228,000 tonnes - and outstripped demand. Prices collapsed. Sales to America, the largest importer, have been flat. Traders' margins have fallen by almost half, to 6% or so. Four out of Peru's five leading exporters have gone bust.

This has led some to talk of "peak quinoa". Not everyone, though. Distributors in America and Europe think the slowdown is temporary. To help this come true, they are promoting production at home.

To be more adventurous in their use of quinoa foodmakers need a more dependable supply, says Shrene White, general manager of Ardent Mills, America's biggest flour-maker. Its adoption as an ingredient in higher-margin processed food has been hampered by volatile prices and inconsistent produce. A truckload imported by Andean Naturals, which is based in California and buys from thousands of Bolivian farms, can contain half a dozen different quinoa varieties. These behave differently when processed, and so are hard to convert reliably into flour or snacks.

To remedy this, last year Ardent Mills launched a unit that works with breeders and food scientists to sponsor American growers, starting in its native Colorado and the Pacific north-west. It is eyeing California. Andean Naturals is testing a 32-hectare site in the state. It wants, optimistically, to convert 5% of California's 223,000 hectares of rice fields to quinoa by 2025. France and Spain already have 3,000 hectares each. Early results look encouraging. Food producers are launching more quinoa snacks, says Ms White. Kellogg's, the inventor of cornflakes, adds quinoa from Andean Naturals to frozen meals and cereal bars. A Nevadan subsidiary of Kameda Seika, Japan's largest maker of rice biscuits, sprinkles it on its crackers. The Honest Kitchen, a startup in San Diego, uses it to enrich dog food.

Sergio Núñez de Arco, Andean Naturals' boss, expects the market for processed quinoa (outside its Andean home) to grow from\$900mtoday to \$2.2bn by 2025. South American exporters want a bite. Since its first shipment to China in December, Sindan Organic, a Bolivian firm, has dispatched 700 tonnes to the country - 5% of its sales. Its boss gushes about the potential of China's 1.4bn mouths. Health-conscious Chinese urbanites may take to the trendy grain, he believes - especially if it comes in readily munchable form. (2407)

Text №7

Havenly as ever

Despite an overhaul, Switzerland will remain a low-tax centre for big firms

Switzerland is known for its delicious chocolate, its luxury watches – and its lightly taxed multinationals. Some 24,000 international companies are domiciled there to benefit from low-tax deals offered by its 26 cantons, which set their own rates on top of the federal corporate income-tax rate of around 8%. Zug, a canton near Zurich, alone is home to some 1,800 of them, including global commodity traders, pharmaceutical giants and a cluster of blockchain and cryptocurrency firms.

When federal and cantonal taxes are combined, Switzerland has an average effective corporate-tax rate of just under 20%, not far below Italy's and higher than Britain's. But sweetheart deals with cantons reduce it to as little as 9% for some big firms. That is set to change – a bit – after Swiss voters approved reforms on May 19th.

These were crafted under pressure from the European Union, which had accused the Swiss of "harmful" tax practices and threatened retaliation. From next January cantons will still be able to set their own rates, but not offer better deals to foreign companies than to domestic ones.

The Swiss have taken further steps to prevent an exodus of multinationals to low-tax rivals such as Ireland and Singapore. The reforms include new sweeteners for research and development and for patent-derived income.

Not all multinationals own enough intellectual property to benefit greatly from such schemes; commodity traders have a lot less of it than pharmaceutical firms. So, besides installing "patent boxes" (frowned upon by tax-fairness campaigners but compliant with international tax rules), cantons are cutting their ordinary corporate-tax rates. In Basel, which is particularly popular with drugmakers and logistics-and-trading firms, it is set to fall from 22% to 13% (including the federal portion).

In short, says Peter Uebelhart of KPMG, an accounting firm, Switzerland is "using all the room for manoeuvre it has" to remain competitive while complying with international standards. The average combined income-tax rate for multinationals that have made Switzerland their home will tick up only slightly once the changes kick in, he reckons, from 9-11% to 12-14%. "Our sense is that most of them consider that acceptable," he says, especially combined with Switzerland's other attractions, such as political stability, its central location in Europe – and all that chocolate. (2099)

Text №8

Late in the day

The joys and pains of investing in a mature business cycle

In 14th-century Germany a heretical cult grew up around the figure of Frederick II, a dead emperor. Its adherents believed that the apocalypse was close at hand. "In all countries a hard time sets in," is how a prophecy from the period begins. "Rapine and arson go hand in hand," it continues. "Everyone is at everyone else's throat. Everyone harms everyone else in his person and his belongings. There is nobody but has cause to lament."

This is not the sort of language used in investment-bank research notes and hedge-fund letters, or by pundits on CNBC and Bloomberg News, however troubled the outlook might seem for financial markets. Yet there is a parallel between today's market chatter and the prophecies of medieval cults. The millenarians believed they were living in the end times or "last days"; and so, in a way, do today's investors. Much of the talk is of "late-cycle" market conditions - the kind that prevail after a long expansion, when economic slack is largely used up and assets are richly priced.

The late-cycle mindset is a battleground for two impulses. On the one hand, it recognizes that these are the good times. The economy is strong, jobs are plentiful, and factories and offices are humming with activity. Animal spirits are higher than they were in the earlier stages of the business

cycle. So there is money to be made. And who knows? Perhaps the good times might last a little longer than usual. On the other hand, if it is late in the cycle a recession cannot be far off. Jitters about anything that might bring that day forward – rising interest rates; a prolonged trade war – are understandable.

These warring impulses set the pattern for late-cycle markets. The general tendency is for prices of risky assets (stocks, corporate bonds and so on) to go up – perhaps by a lot. But recurring fears of recession mean this rising trend will be punctuated by sometimes-violent sell-offs.

To understand this push-and-pull dynamic, go back to last year. By September a wave of optimism about the strength of America's economy, buoyed by tax cuts, had taken the S&P 500 index of leading stocks to a fresh peak. Then a host of growth risks suddenly loomed. China's economy was losing momentum. The Federal Reserve was bent on tighter monetary policy. By Christmas Eve the S&P index had fallen by 19.7% from its peak. Credit spreads - the extra yield investors demand as a buffer against default - blew out. Then, just as suddenly, the markets recovered. A succession of policy changes, including tax cuts, convinced investors that China would not let its economy go down. The Federal Reserve changed tack, taking interest-rate increases off the table, at least for this year. The good times were back again.

Yet a feature of late-cycle markets is that recession scares recur. Another is brewing. This one has its origins in the growing breach between America and China over trade. Earlier this month America stepped up its tariffs on Chinese imports. It has now opened a new front in the dispute by requiring American firms wishing to supply Huawei, China's technology champion, to seek licences. Markets are choppier, though more in Asia than America. Investors seem fairly calm. But few yet want to bet against a quick resolution.

This latest leg of the trade dispute started with a tweet from President Donald Trump. It might also be ended by one. So why sell now? But the longer it goes on, the more harm it will do to business confidence in America, China and elsewhere. If a deal is not struck at or before the G20 Summit in Japan on June 28th and 29th, another sell-off seems likely.

The foreign-exchange market may be the place to watch for trouble. The yuan is still a long way from being widely used outside China. But it increasingly reflects, and to some degree sets, the tone for global currency markets. Other major currencies, including the euro, have tended to track its movements up and down against the dollar. A stronger yuan has thus often implied that the dollar is weaker against a range of currencies. At the start of the year the yuan rose against the dollar in line with better news on China's economy. But it has fallen again and is now close to the seven-yuan mark, widely seen as a meaningful threshold, not least within China.

That has fuelled speculation that China might use its currency as a weapon in the trade war. Were the yuan to go through seven to the dollar, from this perspective, the gloves would be off. A weaker yuan would mean a stronger dollar—certainly in Asia and probably across the board. Not only would that squeeze American exports, it would also spark a broad sell-off in stocks and in credit. For the dollar is also a thermostat for global risk appetite: it rises with a weak dollar and falls with a strong one. Yet China has so far been "very responsible" in its handling of the yuan, says Steven Englander of Standard Chartered, a bank. Were the yuan to break the seven mark, he reckons, it would be in response to a wave of risk aversion hitting Asia; China would not be the initiator.

If trade peace breaks out, a fresh growth scare will emerge sooner or later. As Willem Buiter of Citigroup notes, each of the world's three biggest economies has a financial frailty: corporate leverage in America, a debt mountain in China and rickety banks in Europe. Even so, he argues in a recent note, it might still take a severe shock to kick off a global recession. If the economy keeps surviving—and it may take a fresh dose of stimulus from China or the Fed to lift spirits - the conviction that the cycle can keep going may take hold. Market "capitulation" usually means a sudden loss of unwarranted optimism. But in the present circumstances capitulation is "melt-up, not meltdown", says Eric Lonergan of M&G, a fund-management group.

For now it is hard to see past the trade skirmish and the G20 Summit. Today's late cyclists might envy the faith of the medieval millenarians. They were hedged. The apocalypse would mark the start of their longed-for salvation. But if it were to be delayed a little, it would be no great loss. (5103)

Text No9

Chubby cats

Managing money for the proletariat

If the best way to get rich is by managing other people's money, it helps if your clients control a lot of it. For private-equity firms and hedge funds, that means courting pension-fund managers, investment bankers and the like. For the top wealth managers, the money in question belongs to the super-rich, whom they advise on asset allocation, tax planning and even which artists should adorn their walls.

Now some are starting to tout for the custom of the merely well-heeled. On May 16th Goldman Sachs paid \$750m in cash for United Capital Financial Advisors, a wealth-management firm based in California that manages \$25bn – worth of assets for 22,000 clients. It was Goldman's biggest acquisition in two decades.

It accelerates the firm's shift of emphasis under David Solomon, who became its boss last year, away from volatile businesses such as trading towards more stable fee based ones. It also broadens Goldman's target market for wealth-management services. Until now, the bank's individual customers were drawn almost entirely from the ranks of those with at least \$25m in investable assets. United Capital serves those who have \$1m-5m.

The non-filthy rich used to find it surprisingly hard to get customised help with managing their money. The fees they generated were not fat enough to satisfy full service wealth advisers at the biggest investment banks. But the mass-market offerings of brokers and retail banks were not sufficient. Into this gap came firms like United Capital, founded in 2005 by Joe Duran, its chief executive (who will join Goldman as a partner). The firm's platform enables its advisers to manage relationships more efficiently. The client's age, career status and so on are used to build up a financial profile, and advisers can send video updates about major market moves to those whose portfolios are affected.

The acquisition fits well with Goldman's evolving thinking about wealth management. In 2003 it acquired Ayco, which specialised in managing the assets of top-ranking company executives. Ayco has since expanded into offering financial planning services to everyone at the companies it serves, says Larry Restieri, the Goldman partner who runs

Ayco. Moreover, uninvested deposits with United Capital can conveniently be funnelled to Goldman's consumer bank, Marcus.

Competition to serve the mass affluent is heating up. In February Morgan Stanley, which is around the same size as Goldman but makes twice as large a share (40%) of its revenues from wealth management, announced that it would buy Solium for \$850m. The software company, since rebranded Shareworks by Morgan Stanley, provides a platform for companies to administer shares and stock options paid as part of compensation. The acquisition is appealing in two ways, says Jonathan Pruzan, Morgan Stanley's chief financial officer. It brings an opportunity to acquire younger customers who may one day be very rich, and it allows the bank to use Shareworks to offer those employees access to Morgan Stanley's own products.

The mass-affluent market is becoming better served in other ways, too. Online financial advisers such as Betterment, which manages \$16.4bn in assets, are developing clever new ways to counsel customers on what to do with their savings. Investment banks, it seems, are not alone in deciding that the best way to get rich is not to manage rich people's money, but to manage everyone's. (2908)

Text №10

Into the big league

TransferWise becomes Europe's most valuable private fintech

The tea building, in London's hip Shoreditch district, used to hold factories making biscuits and bacon. Now it is home to tech startups and media firms. Yet their ideas require space, too. In the outsized lifts, still operated by push buttons as big as traffic lights, a pair of movers have just finished a job. TransferWise, which rents Floor 6, is taking over another level, barely three years after moving in.

On May 22nd the cross-border payments firm, which was founded in 2011, said it had collected \$292m in fresh capital. The fundraising round, led by Lead Edge Capital, Lone Pine Capital and Vitruvian Partners, venture-capital firms known for backing tech stars such as Uber, Snap and Spotify, valued it at \$3.5bn - a doubling in 18 months. Now Europe's most valuable private fintech firm, it plans to add 750 staff in the next 12 months to its existing 1,600.

TransferWise allows users to send money along 1,600 currency routes at 15% or less of the fee banks typically charge. Unburdened by old it systems and focused on moving money, it has automated many of the steps required. It also aggregates transfers and nets them out against payments going the other way, which means it need borrow less currency offshore to meet customers' requests. And it seeks to build direct relationships with multiple banks, even as those lenders are trimming the old "correspondent" banking networks they use to send money across borders.

Matt Briers, TransferWise's chief financial officer, says it did not need to raise more capital. Unlike many "unicorns", as startups worth over \$1bn are known, it is profitable. But it needed patient capital to provide an exit to its "angel" investors - wealthy individuals with an appetite for risk. It now counts funds managed by BlackRock, the world's biggest investment firm, among its backers. In due course it will consider going public, though Mr Briers acknowledges that its latest fundinground may have delayed that moment.

Analysts who watch the sector reckon the valuation is fair. The firm's revenue grew by over three-quarters in the 12 months to March 2018, to £117m (\$155m). Though it is already the largest fintech focused on cross-border consumer transfers, there is no sign that growth is close to tapering off, says Daniel Webber of FXC Intelligence, a data provider. It processes \$60bn a year - a fraction of the \$2trn market.

There are three ways it can meet investors' lofty expectations. The first is to seek dominance beyond Britain, where it accounts for 15% of outbound consumer transfers, more than any bank. Though America is a tough market for fintechs, because regulations vary from state to state, the firm says its American unit is growing fast (it may help that Chinese rivals are less welcome than they used to be). It is also improving its service for small businesses, of which it is signing up 10,000 a month.

Its main hope, however, is to convert foes into clients by selling its services to banks, to offer in turn to their own customers. That might mean sacrificing margin, but in return for greater volume and economies of scale. It already has tie-ups with BPCE, France's second-largest bank, and with three digital banks: Monzo, based in Britain, n26, in Germany, and bunq, in the Netherlands. More are likely. "Technology is enabling it; consumer demand is requiring it," says the head of fintech at one of Britain's biggest high-street banks. "You either join the game or you lose out." (2954)

Text №11

Soda stream

How to tax sugary drinks

Sugar taxes are on a high. Around 40 countries and seven American cities have started to tax sugary drinks, mostly in the past few years. Supporters say such levies compensate for the costs imposed on health services by higher rates of obesity, diabetes and heart disease. They might also help short-termist buyers avoid the long-term consequences of sugary indulgences. Opponents counter that such levies are a fun-killer, souring people's pleasure, and regressive, because poorer people spend a bigger share of their incomes on soft drinks.

Two working papers published on May 20th seek to help policymakers find the sweet spot. Hunt Allcott of New York University, Benjamin Lockwood of the University of Pennsylvania and Dmitry Taubinsky of the University of California, Berkeley, compute the "optimal" tax rate that maximises social well-being, taking into account differences in consumers' income and behavioural biases.

Consumer data show that a soda tax does indeed have regressive effects. American households earning less than \$10,000 a year buy twice as much sugary drink as those earning \$100,000. Weighed against that, the gap between desired and actual consumption is wider for poorer people than it is for richer ones. The authors surveyed households to gauge their knowledge of sweet drinks' nutritional content and how much their consumption outstrips what they regard as ideal. The average household, they conclude, would consume a third less if it had expert nutritional knowledge and perfect self-control. That rises to a half for poorer households.

One of the main determinants of the optimal tax rate turns out to be the price elasticity of demand for sugary drinks. If demand is sensitive to changes in price, then a tax will change behaviour, benefiting poorer people's health and aligning their behaviour more closely with what they say they desire. Those gains would offset the regressive effects. But if consumers really have a sweet tooth – that is, demand is price-inelastic – then the regressivity effects dominate and a sugar subsidy would actually help redistribute income from the rich to the poor.

By analysing shoppers' behaviour, the authors find that demand is elastic enough that a tax, and not a subsidy, is socially beneficial. They compute an optimal tax rate of 1-2 cents per ounce of soft drink in America. That is higher than the average rate of 1 cent in those cities with a tax.

But there is a wrinkle. In the real world, if taxes in one place get too high shoppers will arbitrage the rules by travelling to buy soft drinks elsewhere. Taking this into account they reckon that the optimal rate for cities is 0.5 cents, although a more efficient system would be a state or national tax to control America's sugar rush. (2341)

Text №12

A mouthful of zollars

After a sharp devaluation, Zimbabwe's fledgling currency is struggling for life

Most currencies have snappy names, like yen, won, kip or lek. Some have unfortunate ones: dong or colyn. Few have names as cumbersome as Zimbabwe's Real-Time Gross-Settlement Dollars, also known as RTGS-dollars or "zollars". Hard to say, the new currency is also hard to price. Last week it lost about 20% of its value against the American dollar, according to Market Watch, which tracks the currency's movements on the black market. This week it zagged, then zigged again. "You have to follow Zimbabwe hour by hour," says an economist in Harare.

Zimbabwe's previous homegrown currency was destroyed by the hyperinflation of 2007-08, forcing the country to adopt the American dollar (and other foreign currencies) instead. That worked well until 2015. But in the final years under Robert Mugabe, the longstanding dictator ousted in November 2017, the government could not muster enough genuine dollars to meet its spending ambitions. Instead it paid people with money of its own creation, transferred electronically into their dollar bank accounts. These "zollars", it claimed, were identical to a dollar. But if depositors withdrew them from the bank they received not greenbacks, but "bond notes": paper currency issued by the Reserve Bank of Zimbabwe, the country's central bank.

Last October the new government, led by Emmerson Mnangagwa, admitted that zollars and dollars were not the same, allowing depositors to keep them in separate accounts. By mid-December the banking system had

almost 9.7bn in zollar deposits and only \$660m in dollars. But the government insisted that a zollar could fetch \$1.

If only. In reality, the central bank sold only small amounts of the American currency at the official one-to-one exchange rate, reserving a portion for grain and fuel imports, another for essential inputs to production and the remainder for favoured insiders. Dollars could be bought for higher prices on the black market. But that was not an option for many listed companies and foreign multinationals, which were wary of breaking the rules. They struggled to find hard currency. Delta Corporation, a beverage firm that bottles Coca-Cola, had to stop making fizzy drinks for months.

With the economy going flat, the government finally dropped the pretence of parity, devaluing the official exchange rate by 60% in February. But this forced move was not accompanied by a plan to build the new currency's credibility. It was a "kick-and-rush strategy", says one observer. Like an English football team in the 1980s, the government hoofed the currency upfield, with no guarantee of regaining control.

Three months later the gap between the official and unofficial exchange rates has only widened. The finance ministry can boast a narrower budget deficit, thanks partly to higher fuel duties and a 2% tax on financial transactions. The central bank is also apparently planning to limit the growth of the money supply, narrowly defined, to 8-10% this year. And the government has asked the IMF to monitor its progress, even though it will remain ineligible for any IMF money until it has settled more than \$5.6bn of arrears to other official creditors, including the World Bank.

None of this, however, has brought the new currency under the government's spell. In March the economy suffered from Cyclone Idai, which displaced 16,000 households and damaged crops that were already suffering from severe drought. The water shortage has also parched the country's hydroelectric dams, contributing to widespread power cuts. Last week the state electricity utility said it cannot import more electricity from South Africa and Mozambique until it has settled its \$80m debts to their producers. Its search for dollars may have contributed to the latest sharp turn in the exchange rate.

Over the weekend the Reserve Bank said it would step in, selling some of the \$500m it has reportedly borrowed from the African Export-Import Bank, a multilateral lender based in Cairo. And on May 21st it did so. But this support for the local currency was overwhelmed by another revelation.

The central bank said Zimbabwe's petrol companies would no longer receive dollars at highly favourable rates, leaving them unsure if they could cover their costs. The confusion has prompted long queues at petrol stations, a further loss of confidence and another dash for dollars.

The new currency is becoming less widely used as well as cheaper. Shops and even schools are increasingly demanding dollars in payment, or setting zollar prices forbiddingly high. Inflation surpassed 75% in the year to April. If the government cannot restore faith in its own currency, the country may once again adopt America's instead. That should restore price stability: Zimbabwe's inflation averaged less than Japan's from 2012 to 2016. But it would also obliterate many households' zollar savings, create a shortage of small bills and coins, and limit the room for macroeconomic manoeuvre. The dollar has a simple name. But redollarisation could be as ugly as it sounds. (4314)

Text №13

The plaza discord

As the trade war heats up, China looks to Japan's past for lessons

History is never far from China's mind in its trade dispute with America. A few months ago, when negotiations looked on track, staunch nationalists warned of echoes with the "unequal treaties" that foreign powers had forced upon China in the 19th century. In recent weeks the breakdown in talks has led state propagandists to draw comparisons with the Korean war of the 1950s, a bloody struggle between China and America. But the analogy that haunts Chinese economists does not involve China itself. They fear a replay of the Plaza accord of 1985, when Japan, under American pressure, tried to resolve trade tensions by pushing the yen higher. That calmed the tensions but, most Chinese economists think, at an intolerable price: stagnant Japanese growth for two-plus decades.

The parallels are imperfect. Dependent on America for security, Japan was constrained in its pushback. The Plaza accord also involved Britain, France and West Germany. Jeffrey Frankel of Harvard University has called it "a high-water mark of international policy co-ordination", which is not President Donald Trump's trademark. The substance was different, too. The five countries announced that they wanted the dollar to depreciate and intervened in currency markets to make it happen. Within a year the

yen soared by nearly 50% against the dollar. By contrast, currencies are just one part of today's tussle between China and America. Over the past decade China worked to address complaints that the yuan was too low. So there are no calls for appreciation, only demands that China does not weaken it to help its exporters.

Looked at more generally, though, there are similarities. The Plaza accord is best understood not as a one-off event but as a critical stage in a multi-year dispute, which ranged from agriculture to electronics. America accused Japan of stealing intellectual property and plotting to control future industries. Robert Lighthizer, America's lead negotiator against China today, earned his spurs in these earlier battles. In 1990 the two countries agreed to a "Structural Impediments Initiative", which bears a striking resemblance to the crux of the debate today. America wanted Japan then – and wants China now – to improve its competition laws, open more widely to foreign investors and weaken its giant conglomerates (keiretsu groups in Japan, state-owned firms in China).

The case against the Plaza accord is that it set Japan on a path to doom. To counter the effect of a strong yen, an obvious drag on exports, Japan slashed interest rates and unleashed fiscal stimulus. These moves brought about an economic rebound. But they also generated asset bubbles: stock and land prices tripled within five years. In 1990 these bubbles burst and the economy slumped, never to recover its former mojo. In nominal terms Japanese stocks are still 40% below their peak on the final trading day of 1989. The Plaza accord, in this view, did succeed in defusing tensions between Japan and America, but only because it neutered Japan as a challenger. This has percolated into official thinking in China. As Cui Tiankai, China's ambassador to America, said last year: "Give up the illusion that another Plaza accord could be imposed on China."

The sequence of Japan's woes does seem to make for a damning indictment. But a closer look at each step shows that nothing was preordained. One point, clear in retrospect, is that Japan overcompensated for the slowdown in exports. Within 18 months of the Plaza accord, it had cut benchmark interest rates from 5% to 2.5%. It also announced a big stimulus package – increasing spending and cutting taxes – in May 1987, though by then its recovery was already under way. It did not shift gears and raise rates again until 1989, when its asset bubbles were already a few years old.

As the International Monetary Fund has argued, there were at least two other factors that could have led to a different outcome. Excessive stimulus, by itself, did not guarantee that Japan would suffer an asset bubble. It was that much more dangerous when combined with financial deregulation, which led banks to lend more to property developers and homebuyers. And the bursting of the bubble did not guarantee that Japan would suffer a lost decade, let alone three. A sluggish response by regulators compounded the trouble. Rather than pushing banks to raise capital, they encouraged them to go on lending to zombie firms.

So the simplistic story – that the Plaza accord felled Japan – misses the mark. Rather, China should draw two lessons from Japan's experience of trade tensions with America. First, it must get its domestic-policy response right. Japan feared that the deal with America would cause its growth to suffer; China fears the same about the absence of a deal. But the bigger dangers for Japan were over-stimulus and flawed regulation. China seems to grasp that. So far it has been cautious about pumping up growth. The real test will come if the trade war continues to escalate.

Ask the bellboy

A second lesson is the danger of resisting America's demands, just because it is America that is making them. Had Japan acted on some of America's long-standing gripes, it might have fared better in the 1990s. Domestic competition would have been stronger. A bigger role for foreign investors might have prompted Japanese banks to tackle their festering problems. Similarly, it is China, not America, that would be the biggest beneficiary if it moves more quickly to open its economy to foreign firms.

China might also note a historical curiosity. The talks in 1985 were in New York's Plaza Hotel, which was bought three years later by a property tycoon named Donald Trump. He paid nearly \$1bn in today's money. At the time he said he had "knowingly made a deal which was not economic", because the hotel was a masterpiece, not just a building. Sure enough, in 1992 the Plaza Hotel entered bankruptcy. That Mr Trump ended up harming himself might be comforting for China. That he went ahead despite knowing the risks should be less so. (5125)

Text №14

Presidential credentials

The ECB is Europe's most powerful institution. Erkki Liikanen should be its next boss

One of the biggest jobs in Europe is up for grabs: head of the European Central Bank (ECB). It sets interest rates across much of the continent, supervises banks and underwrites the euro, used by 19 countries with 341mcitizens. The ECB's outgoing boss, Mario Draghi, who steps down in October after eight years in charge, has done a sterling job in difficult circumstances. His tenure illustrates what is at stake. After a sovereign-debt crisis in 2010-12 threatened to sink the euro, it was Mr Draghi who ended the financial panic by pledging that the ECB would do "whatever it takes" to stop the euro zone from breaking up.

Although he saved the euro, Mr Draghi leaves behind problems. The economy is faltering; a recession at some point in the next eight years is possible. There is little prospect of fiscal easing – Germany doesn't want to borrow more and southern Europe can't afford to. So monetary policy is the main lever to stimulate growth. Unfortunately interest rates are close to zero. And the risk of another debt crisis bubbles away. Italy's populists have been ignoring demands from the European Commission to take control of the public debt, now132% of GDP.

Europe's political leaders will gather on June 20th and 21st to divide up the top jobs in Europe, including the ECB presidency. The temptation will be to make the central-bank position part of the horse-trading, picking the new chief on the basis of nationality. Instead, for Europe's sake, the selection should be determined by three tests: economic expertise, political talent and sound judgment.

Technical competence matters. Interest rates are so low that the bank's toolbox may need to be expanded in creative ways. Political nous is more important than at other big central banks such as the Federal Reserve. The new boss must build support in the bank's 25-strong rate-setting body, and across 19 national governments and their citizens. The bank must also make the case for further reform to the euro zone, without which banking and sovereign-debt crises are a constant danger. And, if a crisis does strike, sound judgment becomes paramount. If the markets sniff equivocation or muddle from the ECB president, the financial system could rapidly spiral out of control, as panicky investors dump the bonds of weaker banks and countries.

When Mr Draghi was appointed in 2011, he was already a strong candidate. Since then he has passed the three tests. He expanded the ECB's toolkit by standing ready to buy up unlimited amounts of sovereign debt, known as outright monetary transactions, or OMTS (the promise was enough to reassure investors and the policy has never been implemented). He put his personal authority on the line and marshalled support outside the ECB.

None of today's leading contenders is as impressive. Some risk undermining the bank's hard-won credibility. Jens Weidmann, the head of the Bundesbank, opposed OMTS. In a crisis, markets might worry that he would be prepared to let the euro zone collapse. Olli Rehn, the newish head of the Bank of Finland, could invite doubt, too. In a previous role in Brussels he was an enforcer of austerity on southern European countries, which might in the future need the ECB's help. Benoît Cœuré, the head of the ECB's market operations, is clever and impressive. But the bank's fuzzy rules appear to bar him from a second term on its board.

Erkki Liikanen, a former boss of Finland's central bank, has the best mix of attributes for the role. Although he is less technically strong than some other candidates, Philip Lane has recently taken over as the ECB's chief economist: the bank will not lack intellectual clout. Mr Liikanen was a vocal advocate of unconventional tools. His political skills have been tested both as a commissioner in Brussels and as finance minister in Helsinki. Mr Draghi has transformed the ECB, but 21 years after its creation, there are still nagging doubts about its strategy and firepower. With Mr Liikanen at its helm, they might be put to rest at last. (3447)

Text №15

Sovereign wealth, sovereign whims

Gulf sovereign-wealth funds are growing more ambitious

A decade ago, few people in Silicon Valley had heard of Uber or the Public Investment Fund (PIF). The former had not provided its first ride. The latter, a Saudi sovereign-wealth fund, was a small entity with investments in local industry. But when the ride-sharing firm went public in May the PIF was among its five largest shareholders. It had bought a 5% stake in 2016 when Uber was valued at \$49 per share. It started trading at \$42. On paper, Saudi Arabia took a \$200m loss.

The world's sovereign-wealth funds control \$8trn in assets. More than a quarter of that is held by four Gulf countries: Kuwait, Qatar, Saudi Arabia and the United Arab Emirates (UAE). In decades past this was a dull business. The Saudi central bank parked the nation's oil wealth in Treasury bonds and other low-risk, low-return assets. Kuwait had one of the first standalone sovereign-wealth funds. It too invested in bonds and blue-chip companies.

No longer. All six Gulf sovereign-wealth funds are growing more adventurous. A few act like venture capitalists. Others use their billions to cement political alliances. The rest are trying to give a leg-up to local businesses and industries.

Gulf economies need to modernise and diversify away from oil and gas. Saudi Arabia, especially, needs to create good jobs for its swelling number of underemployed citizens. Sovereign-wealth funds can help. Some were originally set up to do little more than smooth the flow of revenue arising from bumps in commodity prices. Now, they are being given more ambitious goals. The princes who call the shots in the Gulf want to make their countries' savings work much harder. Others fret that the princes themselves are part of the problem – that tens of billions of dollars should not change hands on a royal whim.

Saudi Arabia is the most aggressive risk-taker of the lot. Though the central bank still holds \$500bn in assets, it is being eclipsed by the PIF, a pet project of the crown prince. Five years ago the fund had \$84bn under management. Today it has \$320bn. It has become an unexpected patron of Silicon Valley, with big stakes in Tesla and Lucid Motors, a rival electric-car manufacturer, as well as Virgin Galactic and Magic Leap, a maker of virtual-reality headsets. Another \$45bn went into a high-tech fund managed by SoftBank, a Japanese conglomerate. These deals could be lucrative – if the firms ever turn profits. Uber never has. The tie-up with SoftBank made the kingdom an investor in WeWork, a property startup that is posting huge losses as it pursues rapid growth.

Qatar, by contrast, seems to use its fund as an adjunct to diplomacy. It has a tiny population and the world's third-largest gas reserves, so its rulers worry little about short-term investment returns. "We don't have unemployment. All Qataris can find a job," says Ahmed al-Sayyed, a former director of the Qatar Investment Authority (QIA), which holds \$1m in assets for each of the emirate's 300,000 citizens.

In its early days it ploughed money into swanky investments in Europe: QIA owns a large chunk of London, including the Harrods department store. A subsidiary owns the Paris Saint-Germain football club.

Lately its investments have taken on a political tinge. Last year it secured a 19% stake in Rosneft, a Russian energy giant. The emir also pledged to invest billions in Turkey (though Qatar has not yet done so). Both countries are important partners. Russia's military intervention in Syria made it a power in the region. Turkey has troops stationed in Qatar. No one questions these deals. The chairman of QIA and his deputy are relatives of the emir.

Bahrain and Oman lack the oil and gas wealth of their neighbours, and their holdings are an order of magnitude smaller. But they seem determined to use them as tools to modernise their economies. Bahrain's fund, Mumtalakat, was founded in 2006 with 8bn dinars (\$21bn) in assets. Its early investments were domestic. It bought a stake in Gulf Air, the state telecoms firm and other national champions. Just 3% of assets went abroad. Today the figure is 30%. Instead of risky tech firms, it focuses on companies offering services such as education and health care. It hopes to convince some to open regional offices in Bahrain, which positions itself as a services hub for the Gulf.

Other Gulf states are making similar attempts at state-directed capitalism. Abu Dhabi's Mubadala has made big investments in renewable energy, building solar and wind farms across the country. A \$200m subsidiary of Oman's main sovereign-wealth fund wants to bring high-tech firms to the sultanate. "The agenda is to develop the local ecosystem, not just to have capital flow to Britain or America," says Ali Qaiser, an Omani venture capitalist.

All could do well to look at the world's wealthiest sovereign, Norway, which manages about \$1trn in its oil-surplus fund. Parliament oversees its investments. A recent decision to dump oil and gas stocks and pour money into renewables was the subject of long public debate.

Funds in the Gulf lack such transparency. Some do not even publish regular financial statements. Each is controlled by a few officials close to the monarch. Qatar has bought assets that look more like vanity projects than sound investments. Saudi Arabia may regret gambling on tech firms beset with regulatory and managerial problems. Khadem al-Qubaisi, the former director of an Abu Dhabi fund, was arrested for his dealings with 1MDB, a defunct Malaysian development fund that was a cesspit of corruption.

Governments in the Gulf urge citizens not to worry about the future: when oil and gas revenue stops flowing, sovereign-wealth funds will pick up the slack. Those promises mean little if the funds are run like personal fiefs. (4876)

Text №16

The break-up conversation

Monopoly-busting tough talk does not necessarily mean big tech is in trouble

"If we will not endure a king as a political power, we should not endure a king over the production, transportation and sale of any of the necessaries of life." Advocates of a muscular approach to antitrust often quote the words of John Sherman. In 1890 the senator urged Congress to pass the antitrust act that carries his name. On June 11th they were uttered by someone who many believed would be less keen on such action. Makan Delrahim, boss of the antitrust division of America's Department of Justice (DOJ) used a speech in Tel Aviv to deliver the latest sign that America's long slumbering antitrust machine has woken up and is looking around threateningly, particularly at the country's tech giants.

Signs of renewed vigour in antitrust enforcement are growing. Last week it emerged that the Federal Trade Commission, another antitrust agency, and the DOJ had agreed to divvy up the work, with the former looking into Facebook and Amazon and the latter Apple and Google (an investigation of the search firm is reportedly imminent). On June 11th, a Congressional committee opened an investigation into the impact of big tech firms on the news industry. And more than a dozen state attorneysgeneral are soon expected to do something similar. In another sign that big business is under antitrust scrutiny, on the same day a group of states sued to block a \$26bn merger between Sprint and t-Mobile, two big mobile operators.

In laying out a case against big tech, Mr Delrahim has used some of the same arguments as many of the industry's critics. Important digital markets, he explained, tend to be dominated by one or two firms, thanks to network effects. Such dominance is not necessarily bad for consumers. Even monopolies, such as that of Standard Oil, have led to lower prices. But price effects, he correctly argued, are "not the sole measure of harm to competition". The view in antitrust circles is that only price matters. Web browsers, for instance, are free, but in the 1990s Microsoft's bundling of one with its dominant Windows operating system hurt competition and innovation. The government's successful case against Microsoft, he said, "arguably paved the way for companies like Google, Yahoo and Apple to enter the market."

Mr Delrahim also hinted at what will be scrutinised. One area is "exclusivity agreements", where a dominant firm imposes deals on suppliers, for instance when Microsoft forced makers of PCS to give preference to its browser. The other is mergers and acquisitions. These can be good for competition, he said, but added that there is "potential for mischief if the purpose and effect of an acquisition is to block potential competitors, protect a monopoly."

Critics of big tech shouldn't get their hopes up. Mr Delrahim stopped short of pointing to any specific case of how the big platforms may have run afoul of antitrust law, nor what he would do about it. And he seems intent to stay within established limits. Not only does he think that the law as it stands is fit for purpose, but he did not mention the role of data, which underpins much of the power of the tech titans.

Rather than the start of a big antitrust push, the speech can be read as a reaction to mounting pressure to rein in big tech. Democrat politicians who want to be their party's presidential candidate have found calls for breaking up the firms to be popular but Mr Delrahim's speech is more likely a response to Republicans. They are increasingly worried that the growing efforts of platforms to moderate content produced by users limit free speech, particularly conservative voices.

Then again, Mr Delrahim has the courage to act. In 2017 he went to court to block the megamerger of AT&T with Time Warner, though he lost the case on appeal. But if the Microsoft antitrust case is any guide, it will take years before a final decision in any potential case is handed down. America's antitrust machine is revving loudly but it is unclear whether it will ultimately produce anything more than noise. (3424)

Text №17

Constrained optimisation

Europe is all about backroom deals. The ECB is distinct, but not immune

"The longest lunch in history" is how Jonathan Powell, an adviser to Tony Blair, a former British prime minister, has described the appointment of the first head of the European Central Bank (ECB) in 1998. The French, keen to have their man in the job, had convinced the Germans that Wim Duisenberg, a Dutchman, should serve only half of his eight-year term before making way for a Frenchman. Mr Duisenberg resisted, giving in only after midnight.

The choice in 2011 of the third and current president, Mario Draghi, an Italian, involved less drama. Even so, France and Italy fell out after Lorenzo Bini Smaghi, another Italian on the bank's six-strong executive board, initially refused to give way to a French national. "What can I do? Shall I kill him?" Silvio Berlusconi, then Italy's prime minister, asked Nicolas Sarkozy when his French counterpart complained.

Mr Draghi departs in October. What tales will be told of his successor's selection? The scope for theatrics is greater than ever. The choice is always political: national leaders make nominations and eventually agree on a name. But Mr Draghi's term ends in the wake of European elections, as they are also deciding other top jobs. At a summit on June 20th-21st the European Council of leaders aspires to pull off a package deal covering the key roles. Succeed or no, the next few months will be a test of whether the process for choosing the next ECB leader has become any more sensible.

No one knows precisely who is in the running: there is no formal nomination process. Among the five leading contenders, pictured above, is Jens Weidmann, the hawkish chief of the Bundesbank. As a former adviser to Angela Merkel he helped form her hard line on Greece during its sovereign-debt troubles. Olli Rehn, the head of the Bank of Finland and a former EU commissioner, is also seen as a candidate.

Erkki Liikanen, Mr Rehn's well-liked predecessor in Helsinki and also a former commissioner in Brussels, is in contention, as is François Villeroy de Galhau, the governor of the Banque de France. So is Benoît Cœuré, a Frenchman already on the ECB's executive board, though the ECB's rules seem unlikely to permit him a second term as a member. Klaas Knot, the Dutch central-bank head, Klaus Regling, the head of the EU's bail-out fund, and Sylvie Goulard, deputy head at the Banque de France, are also mentioned.

Officials in Berlin and Paris claim that they see the ECB presidency as distinct from the three more political jobs of the heads of the commission and European Council and the high representative, or the EU's foreign-policy chief. They describe their approach as "3+1", says Mujtaba Rahman of Eurasia Group, a consultancy. Perhaps Mr Draghi's crucial role in keeping the currency union together during the sovereign-debt crises in 2010-12 has taught everyone that the bank's president needs more than a modicum of competence.

Looming economic threats should remind them why their decision matters. A trade slowdown is hammering the euro area's economy. A row between Rome and Brussels over public debt risks unnerving investors. Market expectations of eurozone inflation in five years' time have drifted below the bank's 2% target. On June 6th Mr Draghi said the bank would keep interest rates low for the next year, and raised the possibility of further asset purchases.

Mr Weidmann is the most contentious candidate. His vocal opposition to ECB asset-purchase programmes was reportedly derided by Mr Draghi as "Nein zu allem" ("No to everything"). Appointing him would be a mistake, says Christian Odendahl of the Centre for European Reform, a think-tank: the bank would be less activist in downturns and less supportive of fiscal easing. That prospect could lose him the support of countries keen on further integration, such as France and Spain, in which case Germany might instead plump for another northerner, perhaps one of the Finns.

But the decision cannot be divorced entirely from the EU's tiresome preoccupation with balance of various sorts. Despite their noble talk about "3+1", leaders still want national balance on the bank's six-strong executive board, which, together with the 19 governors of national central banks, constitutes its policymaking body. Having had an Italian at its helm for eight years, and a Spanish vice-president, the received wisdom is that the ECB presidency now belongs to a northerner – if not to Germany, which has yet to hold the post.

Such calculations, surprisingly, are the reason Mr Weidmann seems to have support from Italy, even though it is the country most likely to benefit from the unconventional policies he has spoken against so forcefully. Its finance minister, Giovanni Tria, has said that he would be "open" to Mr Weidmann as president. The reason seems to be that once the top job is allocated, any compatriots already on the board tend to step down. If the job goes to a Frenchman or German, that would leave a gap for Italy to

claim. Italian economists suspect further Machiavellian plotting: if the ruling populists were to elevate an official at the Bank of Italy to the ECB, that in turn gives them a chance to install one of their own at the bank in Rome, realising their ambition to gain influence over it.

The obsession with balance extends across European institutions. Leaders want to ensure that nationalities, genders and party affiliations are well-represented across the top jobs. Emmanuel Macron, France's president, sees the commission presidency as the prize, says Mr Rahman. The price could be a German at the ECB.

All this means that expertise is not the sole criterion for replacing Mr Draghi. And until the commission presidency is decided, there are plenty of permutations. A drawn-out process raises the risk that the job is traded for other positions. Other names could emerge. A fudge, with the 68-year-old Mr Liikanen doing half a term and giving way for someone else, is not impossible. Just as a break with the past cannot yet be ruled out, nor can a reversion to it. (5106)

Text №18

The Indian growth fable

Official GDP figures have been disavowed - by a former official

Almost two years ago Arvind Subramanian, then India's chief economic adviser, published a little-noticed passage in the finance ministry's annual economic survey. The previous two years posed a "puzzle", he wrote. India had reported miracle growth in GDP (averaging 7.5%) despite miserable growth in investment, exports and credit. He looked for comparable examples elsewhere since 1991. He found none. No country had grown faster than 7% in such circumstances. None, in fact, had grown faster than 5%. India's rapid expansion, he warned, might be hard to sustain.

Or, indeed, hard to believe. Mr Subramanian's official position meant he could not say that loudly then. But he is saying it now. In a paper published by Harvard University, where he is a visiting fellow, he argues that India's growth figures have been greatly overstated. From the 2011-12 fiscal year to 2016-17, its economy officially expanded by about 7% a year, eventually outpacing China's to become the fastest-growing big economy. That boast has helped entice over \$350bn of foreign investment

in the past seven years. But India's true growth, Mr Subramanian thinks, is more like 4.5%. Rather than outperforming China, India has underperformed Indonesia.

His paper starts by reporting a variety of indicators that have slowed sharply since 2011-12, even as growth has remained steady. He then tries to measure the size of the problem. Looking at more than 70 countries from 2002 to 2016, he estimates the typical relationship between GDP growth and four other indicators: the growth of credit, exports, imports and electricity. Before 2011 that relationship also held in India. But after it, India became an outlier. Its reported growth was over 7%, even as the weakness of imports, exports and credit suggested growth closer to 4.5%.

If India's statistics are overstated, who or what is to blame? Political meddling is an inadequate answer, although this government, under Narendra Modi, has done plenty to arouse suspicion. In November statisticians revised down growth figures from last decade, taking the shine off the previous government's record. In January they revised up growth in 2016-18, the two fiscal years most affected by Mr Modi's daft and disruptive decision to remove high denomination bank notes from circulation. Both exercises raised eyebrows.

But Mr Subramanian sidesteps these two recent controversies, excluding the latest revisions from his analysis. Instead he concentrates his fire on a more fundamental technical change: a new method of calculating GDP, from 2011-12 onwards, that was adopted in early 2015. Much of the preparation for this switch dated back to the previous government. And one of the new method's strangest results was an upward revision of growth in the tumultuous year before Mr Modi took office, when the economy was reeling from high inflation and capital outflows. That contradicts the charge of political interference. Why would Mr Modi's government fiddle the figures to flatter its hated predecessor?

The new method may nonetheless suffer from other shortcomings. It may, for example, have failed to cope with the drop in oil prices in 2014. To illustrate: if an Indian company imports 10,000 rupees-worth of crude oil and adds 100 rupees of value to it, it might sell the refined product for 10,100 rupees. If the oil price subsequently halves, the company might try selling the same product for 5,110 rupees, boosting its margin. An unwary statistician might conclude that Indian prices have dropped dramatically. But the Indian part of the total (the only bit that matters for GDP) has increased in price (from 100 to 110 rupees). The confused statistician may

then treat an increase in rupee profits as evidence of real growth, not merely higher prices. Such problems are less likely in more developed G20 countries, which keep better track of the prices of inputs.

As a check on his results Mr Subramanian searched for other outliers – countries growing much faster than alternative indicators would suggest. A big example is China, a familiar target of statistical scorn. During India's spells of real and imagined miracle growth, it has often aspired to be the next China. In the production of dubious data, it is catching up fast. (3653)

Text №19

An economic institution

Adviser to presidents, teacher and mentor to young economists

For a half-century Martin Feldstein was everywhere you looked in American economics. He was an astoundingly prolific columnist, sometimes churning out several a week, for several newspapers, on the big economic stories of the day. He was a fixture at conferences and seminars and the teacher, for two decades, of Harvard University's introductory economics course. He served presidents of both parties. In short Mr Feldstein, who died on June 11th aged 79, was an American economic institution.

Born in New York City, he spent most of his life in Cambridge, Massachusetts, at Harvard, where he moved in 1967 after a doctorate at Oxford. His early career was remarkably productive. In 1974 he published an influential paper examining how Social Security, America's public pensions system, affects saving patterns. Astonishingly, he concluded that the programme reduced personal saving by between 30% and 50%; throughout his life he was a staunch advocate for its reform.

In work with Charles Horioka he identified one of the great enigmas in international economics, now known as the Feldstein-Horioka puzzle. Economists reckon that capital free to move should go where returns are highest. There should therefore be little correlation between a country's savings and domestic-investment rates, since places with too little investment should offer investors higher returns, sucking in capital from abroad. In fact, they pointed out, the two rates are quite closely linked, an oddity that still motivates research. For his academic work Mr Feldstein

was awarded the John Bates Clark medal in 1977, given (then every second year, now annually) to the top American economist aged under 40.

His work earned him the attention and respect of politicians. As the chair of Ronald Reagan's Council of Economic Advisers from 1982 to 1984, he helped shape the Tax Reform Act of 1986, which dramatically simplified the tax code and slashed tax rates. Two decades later he served Barack Obama as a member of the Economic Recovery Advisory Board, convened to gather ideas for addressing America's worst economic crisis since the Depression.

Yet Mr Feldstein's most enduring contributions are likely to be to the profession of economics itself. For 30 years he led the National Bureau of Economic Research (NBER), helping to secure its place as an essential conduit for economic scholarship. He convened regular meetings of scholars to encourage collaboration, and built the NBER's working-paper series into one of the world's most respected vehicles for publicising new research.

Just as important, he mentored and inspired scores of young economists, including some who became giants of the field and prominent public servants, among them Larry Lindsey, an adviser to George W. Bush, and Larry Summers and Jason Furman, who advised Mr Obama. For quite some time to come, Mr Feldstein's influence will still be there, everywhere you look in American economics. (2556)

Text № 20

Open book

How to stop governments borrowing behind their people's backs

In 2016 the government of Mozambique confessed to secret debts of \$1.4bn, or 11% of GDP, mostly as loan guarantees for state-backed companies. Growth faltered, the currency slumped and foreign donors pulled back. The results have been "devastating", says Denise Namburete, a civil-society activist, describing health centres that have gone two years without medicines. American prosecutors are pursuing eight people involved in the scandal, including three foreign bankers and a former finance minister, on charges of money laundering and fraud.

The Mozambique case may be unusual - or not. Even the IMF is scratching its head about how much governments truly owe. In some places the mystery is loans from China and other emerging lenders. In others it is

advance payments from oil traders, liabilities from public-private partnerships or hidden loans from commercial banks. The Institute of International Finance (IIF), a group of banks and financial institutions, has responded to mounting concern by drafting principles on debt transparency. Finance ministers of G20 countries endorsed them at a summit in Fukuoka, in Japan, on June 8th-9th.

The IIF principles are voluntary and would apply only to lending from the private sector, not from states. Lenders would disclose any loans they make to low-income governments or state firms within 60-120 days of funds being released. Details would include the loan's purpose and structure, and a range within which the interest rate falls. The data would be held by an international institution, perhaps the IMF or World Bank.

The G20 countries could use their voting power at the IMF to insist it stores the data. Their endorsement will have weight with the private sector, says Sonja Gibbs of the IIF. Although lenders benefit from knowing more about government debts, some are reluctant to share information they consider commercially sensitive. They will need to be pressed to take part. "It will be a name and shame game," says Mark Plant of the Centre for Global Development, a think-tank. "That sometimes works, it sometimes doesn't."

How to give the scheme bite? One proposal is that sovereign-loan contracts that are not publicly disclosed within 30 days of signature should be unenforceable in court. Most international loans are made under New York or English law – as Mozambique's dodgy deals were – so tweaking the rules in those two jurisdictions would be a good start. Case law and legal institutions are so well established that business would be unlikely to move elsewhere, argues Tim Jones of Jubilee Debt Campaign, the British charity behind the idea. Some 51 MPS have written to the British chancellor to support Jubilee's proposal, among them former Labour and Conservative secretaries of state for international development. On June 5th the Labour Party said it would implement the idea if it wins power.

Legal changes are not yet on the G20's agenda. But rising debts are fuelling a sense of urgency. The IMF reckons that 44% of low-income countries are in debt distress or at high risk of it – even without more nasty surprises. The average developing country's external-debt payments have risen from 6.6% of government revenue in 2010 to 12.2% in 2018, calculates Jubilee. Clandestine debts could mean the actual picture is even worse. (2836)

Text №21

The tail that wags

The market believes the Fed will cut rates by September. Should it?

The federal reserve is changing direction. In December it predicted that it would raise the federal funds rate twice in 2019, to 2.75-3.0%. In March it thought it would hold rates steady instead. Investors now think there is a one-in-five chance that it will cut rates at its meeting on June 19th, and a 95% chance that it will do so by September (see chart). Jerome Powell, the Fed's chairman, has said it is "ready to act".

The reason for the change is a darkening world economy, caused primarily by the failure of America and China to strike a deal to bring their trade war to an end. Yet for all the ructions, the visible impact on America's hard economic data has so far been relatively small. True, American firms hired only 75,000 workers in May, on first estimate, well below the recent monthly average. But jobs data are volatile, and the unemployment rate is a very low 3.6%.

Where the pain of the trade war has shown up is mainly in financial markets. The ten-year Treasury yield, for instance, was 2.5% in early May but has since fallen to 2.1% as investors have rushed to safety and anticipated rate cuts. Large moves like these raise an uncomfortable question for the Fed. Should it yield to the market, thereby risking the appearance that monetary policy is set by traders? Or should it consider only backward-looking economic data, which move slowly?

Markets provide the aggregated wisdom of a crowd of individuals with money on the line. In most contexts their forecasts will outperform those of a financially disinterested committee, even one made up of experts. But there are other reasons why an apparent discrepancy between the two may endure.

The first is that there is not really a discrepancy at all. Suppose the Fed and the market make the same judgment about the risk of an economic shock such as a trade war. "The Fed has the luxury of more time," says Torsten Slok, an economist at Deutsche Bank. It can wait to see what happens before changing policy, whereas investors must hedge their bets immediately to account for even unlikely events.

The second is that markets agree with the central bank about the economic outlook, but are confused about how it will act. "The Fed might have failed to communicate well," says Frederic Mishkin, a former rate-setter.

Only if these possibilities can be ruled out can central bankers conclude that markets are telling them something they need to hear about growth and inflation. Discerning this signal becomes trickier the more the Fed appears to respond to the market. To see why, suppose that the Fed ignores market movements completely, and instead sets policy in an entirely predictable way, responding only to hard data on growth and inflation. Any change in market expectations about Fed policy would then reflect only changes in investors' perception of the outlook for those variables. "If Fed policy is clear and systematic," says Charles Calomiris of Columbia University, "policymakers can glean useful information from markets." The more the Fed responds to the market, however, the more it is "looking in the mirror", as Alan Greenspan, a former Fed chairman, supposedly once quipped.

If monetary policy were entirely automated, however, the information embodied in markets would be useful but unused. What is more, reacting only to real data is like driving while looking only in the rearview mirror. Central bankers often say that monetary policy works only with a lag of 18 months or two years. Many economists believe that flat-footedness at the Fed has been to blame for numerous post-war American recessions.

If the Fed wants to glean useful information from markets, it cannot pander to them. "The Fed needs to be the dog that wags the tail," says Mr Mishkin. But when market movements have a fairly clear cause – in today's case, the trade war – and the reaction is severe, it is likely that a rate cut will eventually be necessary. The short term risk of moving in anticipation of events is that the outlook brightens and the rate cut then sparks inflation. Yet to the extent that economic data are telling a clear story, it is that inflation is contained. Consumer-price inflation, for example, slowed to 1.8% in May. That suggests it would be better for the Fed to get on with the rate cuts that the market expects. (3641)

Text №22

More is less

A promising-looking attempt to cut poverty grew, and flopped

A year and a half ago *The Economist* wrote about a promising approach to cutting poverty in Bangladesh ("On their bikes", January 27th 2018). RDRS, a charity, was offering small loans to more than 100,000 poor farmers on the condition that they migrated temporarily to a city for work.

Everything seemed to be set fair. Smaller randomised controlled trials had shown that many men could be persuaded to move while the rice crop is growing, when there is not much work to be done at home. Although the migrants found only low-paid jobs, as rickshaw drivers, building labourers and the like, their fortunes had greatly improved. It looked like a true poverty cure.

Sadly, things soon began to go wrong. Evidence Action, the charity overseeing the scheme, heard rumours that somebody involved with the project may have sought to bribe a government official, though it could not substantiate them. More damningly, as the data came in, it became clear that in 2017 few men had been persuaded to migrate. On June 6th Evidence Action announced it was shutting down the scheme. What looked like a miracle cure for poverty now seems like a warning about the pitfalls of development projects.

Do-gooding schemes that work brilliantly in trials often fail when they are scaled up, says Justin Sandefur of the Centre for Global Development, a think-tank. Trials are often overseen by determined Phd students. When large charities or government officials take over, as they must if a project is to be done at scale, much changes. Rules and regulations multiply; bad behaviour becomes more likely. Big schemes can attract hefty opposition.

One charity in Kenya had shown that hiring teachers on fixed-term contracts improved pupils' test scores. So the government rolled out the contracts across the country. But a political backlash meant that the contracted teachers were promised trade-union representation, just like ordinary teachers. Not surprisingly, an evaluation by Mr Sandefur and others found that the government's reform had no effect.

In Bangladesh the problem may have been targets. Many of the "migration organisers" who fanned out to villages, offering to subsidise journeys to cities, seem to have been expected to sign up 450 migrants each. They may have done what anybody would do in that situation: approach men who had migrated before or were especially eager to travel. Because most of those men would have made the journey anyway, the project had little effect.

Mushfiq Mobarak of Yale University, who helped develop the Bangladesh migration project, says that the episode shows how important it is to keep collecting and analysing data as schemes grow. But, as he points out, it is possible that exactly the opposite lesson will be learned. Rigorous, ongoing analysis of development projects is slow, expensive,

hard – and, as researchers keep discovering, liable to turn up uncomfortable facts. It is much easier just to assume that your project is doing good. (2548)

Text №23

Against the clock

Robert Merton and the effect of time on portfolio choice

Finance theorists are, as everybody knows, unworldly people who can scarcely tie their shoelaces, still less change a car tyre. Robert Merton confounds this stereotype. As he talks amiably at the London office of Dimensional Fund Advisors (he is the firm's "resident scientist"), you sense that here is a man who could fix a flat in no time. He would probably deliver a cheerful lecture on the importance of the correct tyre pressure while he was tightening the wheel nuts.

Mr Merton has always had a bent for engineering, whether financial or mechanical. He bought his first stock aged ten and completed a risk-arbitrage trade (on a takeover by Singer, a maker of sewing-machines) aged 11. He rebuilt his first car aged 15. In 1997 he won the Nobel prize for economics aged 53 – a career high. A year later, a career low: LTCM, the hedge fund he co-founded, imploded. These markers of the passing years matter. For Mr Merton's specialism is the mathematics of time applied to finance.

His first paper on the subject was published almost exactly 50 years ago. Its title – "Lifetime Portfolio Selection under Uncertainty: The Continuous-Time Case" – is forbidding. The ten pages of equations that follow are daunting. But for Mr Merton, the equations are tools, no different from a car jack. They allowed him and subsequent researchers to clarify an important question: when does time horizon matter in investing and when does it not?

To start to understand the paper's importance, go back more than half a century to the birth of modern portfolio theory. Finance theory had been mostly a collection of stories and rules of thumb. Some was useful ("sell down to the sleeping point"). Little was rigorous. A new generation of scholars changed this. Their first step was to assume that investors seek the highest returns for a given amount of risk. Stocks are riskier than bonds. The issue for portfolio choice is how much of this risk to bear. That will vary. Each person should indeed hold as much as is compatible with sound sleep.

In this new, formalised set-up, investors decide once and for ever how to divide their financial wealth. But real-life investing is a movie, not a snapshot. Time is a factor, on top of risk appetite. Mr Merton wanted to go further and discover how investors, faced with an uncertain future, should decide at each moment on their mix of risky and safe assets. The folk wisdom of the time said that young people should hold a riskier portfolio than older ones, because the passing of time makes stocks less risky. That turned out to be wrong – or, at least, it was not quite right.

In two papers published in August 1969, Mr Merton and his mentor, Paul Samuelson, showed that time horizon should make no difference to portfolio choice. But the result holds only if risk appetite is unchanging and stock prices are unpredictable Alter these assumptions, as future researchers would, and the results change. Mr Merton's use of continuous time mathematics created a valuable template. Finance theorists were able to apply the same toolkit to solve related problems, says Hugues Langlois of HEC Paris, a business school. The best example is the Black-Scholes model for pricing financial options, for which Mr Merton was awarded the Nobel prize, along with Myron Scholes.

A lot of finance theory that came later would tease out the circumstances in which time horizon really does matter. The reckoning changes, for instance, when wealth is looked at in the round to include non-tradable human capital – knowledge, skills and abilities. Sitting in a London office, Mr Merton gives an illustrative example.

Say, a young person's human capital, which determines his future earnings, is 90% of his lifetime wealth, with the balance in stocks. And say that for an almost-retired person the proportions are reversed. If the stockmarket crashes by 40%, the young person has lost only 4% of his wealth. But the nearly retired person has lost 36%, which is much more serious. For older people, having all their financial wealth in stocks is not a sensible risk to take, says Mr Merton. Human capital is low-risk. If you have lots of it, you can take more financial risk.

The best lifetime strategy is a complex problem to solve, even for brainy people such as Mr Merton. But he hopes that, with the passage of time, the pension industry will create more user-friendly products. Cars are easy for their users; the complex work is done by designers and engineers. Pensions should be the same. Needs drive innovation, says Mr Merton. "That is why I'm an optimist." (3860)

Text №24

The giants are coming

Digital technology is likelier to strengthen America's big banks than usurp them

By almost any measure, America's biggest banks are behemoths. JPMorgan Chase's balance-sheet weighs in at \$2.7trn, Bank of America's (BofA) at \$2.4trn. Citigroup tips the scales at almost \$2trn and Wells Fargo at \$1.9trn. Their combined market value is nearly \$1trn. Last year they raked in over \$100bn after tax.

Yet by one gauge, the titans are curiously tiny. Together that quartet holds only about a third of Americans' deposits. The biggest names in other rich countries, from Canada to Sweden, have far larger shares. Perhaps only Germany's market, with its hundreds of municipal and cooperative banks, is similarly fragmented.

Despite years of mergers, including several mid-crisis in 2008-09, America still has over 5,300 banks. Almost 5,000 are "community" banks, mostly with assets below \$1bn, which collectively hold 15% of deposits. Even the giants are still filling gaps, the fractured geography of their retail networks reflecting the genealogy of past mergers. BofA opened branches in Pittsburgh only last year and in Salt Lake City in January. The first Chase branches in Boston and Washington opened in late 2018.

Digital technology is already reshaping the landscape. After 147 years of disdain for retail banking, in 2016 Goldman Sachs launched Marcus, a consumer bank. It has snared \$35bn of deposits, helped by a posh brand and generous interest rates. "Our advantage is that we are unencumbered by legacy systems," says Harit Talwar, Goldman's global head of consumer business. Goldman built its platform in 11 months.

Many reckon that banks, burdened with old it and ever-emptier branches, will suffer the fate of retailers and taxi drivers. The closure of Finn, JPMorgan's mobile brand for millennials, reported on June 6th, looks like further evidence that banks are not nimble enough for the digital age.

Not surprisingly, they disagree. Fragmentation means that even the biggest have room to grow; they believe digitization will help. Their advantages start with sheer firepower: JPMorgan Chase spends \$11bn-odd a year on it. They have tens of millions of customers and lots of data on their incomes and outgoings. Their brands are household names. Their funding costs are low, whereas financial-technology companies with no

banking licences lack access to cheap, federally insured deposits. "They have to build something we already have," says Dean Athanasia, president of BofA's consumer bank – which in the past year has cut its cost-to-income ratio from an already decent 51% to 45%. Put all this together and, in the phrase of Mike Mayo, an analyst at Wells Fargo, "Goliath wins."

More surprisingly, most big banks still see branches as assets. Yes, they are closing lots. But to grow, they need to spread. The biggest cannot simply buy their way into new markets, because takeovers that create banks with more than 10% of all deposits are barred. So in the past few years BofA has also set up shop in Denver, Indianapolis and Minneapolis; Ohio's big cities are next. JPMorgan Chase said in 2018 it would enter 20 markets and open 400 branches. It too is coming to Minneapolis this summer. Both are formidable competitors, aiming to reach the top three wherever they attack.

"We go in digital first," says Mr Athanasia. "But without the branch you can only get so far. Countless people have tried digital-only, and they never develop any scale." Branches of Merrill Lynch, BofA's investing arm, have also been a bridgehead. But technology makes it easier and cheaper to reach customers. "Plenty of people download the app," says Jamie Dimon, JPMorgan Chase's chief executive. "But, in America, they hardly ever open a bank account until we open a branch nearby."

By contrast Citi, whose branches are concentrated in half a dozen cities, sees little need to open many more. A vast fee-free ATM network and its huge credit-card business, which offers both own-branded cards and co-branded ones for American Airlines, Costco and others, mean it already has a mighty digital presence, says Stephen Bird, its global head of consumer banking. Citi hopes to persuade credit-card customers to open current (checking) and savings accounts, using extra card rewards as a lure. Drawing on its experience in Asia, it is offering digital lending products through its mobile app; people who would pay a credit-card bill at once may roll over a loan at a lower rate.

As giant banks expand, who loses? Community banks may seem most at risk. The smallest are already vanishing at a rate of five per week, mainly through mergers. But as a class, local lenders are more resilient than they look, thanks largely to their expertise in small-business lending. "The CEO of a small business can talk to the CEO of a small bank," says Aaron Fine of Oliver Wyman, a firm of consultants. "That value proposition is pretty solid."

Regional lenders, with neither the giants' heft nor the community banks' small-town appeal, may face a harder fight. This year BB&T and SunTrust, two southeastern banks, agreed to merge, creating America's sixth-biggest retail bank. More may bulk up to beat the behemoths.

But the biggest regionals are not exactly surrendering. Betsy Graseck of Morgan Stanley notes that us Bank, based in Minneapolis, gained share in the year after BofA opened; Wells, the city's other leading bank, gave up ground. US Bank, meanwhile, will this year open its first branch in Charlotte – by chance, BofA's hometown. Tim Welsh, head of consumer and business banking, says that it already has an office serving thousands of mortgage, car-loan and credit-card customers there.

American banking is unlikely ever to be as concentrated as in many other rich countries. But digitisation will help the biggest get bigger. Though giants are rarely nimble, it still takes a lot to tell them. (4942)

Text №25

The dip deepens

Policymakers prayed the slowdown would be temporary. Instead it is intensifying

"Simply awful" is how Phil Smith of IHS Markit, a data provider, describes the latest survey reading of Germany's manufacturing output. For months the purchasing-managers' index has languished below 50, indicating contraction. An early release published on September 23rd showed it had slid to 41.4, signifying the sharpest decline in manufacturing activity since 2009. The services sector also lost momentum – for the first time in over four years, managers said they were winning less new business.

A slowdown in Germany's economy that started a year ago was initially expected to be short-lived. But the gloom has deepened. Output shrank in the second quarter, and many economists, including those at the Bundesbank, think it is still contracting – satisfying the definition of a recession. As a consequence, the euro zone seems set barely to grow.

Global trade has moderated, and with it industrial activity across Europe. The continent has suffered collateral damage in the trade war between America and China. But there are other reasons for its woes. Take Germany's exports to both countries, for instance. Carsten Brzeski of ING,

a Dutch bank, points out that these have held up better than exports to other markets. Brexit-related uncertainty means that exports to Britain have taken a bigger hit. Even so, researchers at the European Central Bank (ECB) find that external causes explain only around a third of the decline in the euro zone's industrial production over the past year. The rest of the trouble originates within the currency union.

Much of it appears to stem from supply disruptions in Germany. Its manufacturing sector has taken a much more severe beating than those of France, Italy or Spain. Oliver Rakau of Oxford Economics, a consultancy, reckons that stalling car production alone explains nearly half of the fall in Germany's industrial output in the second quarter. Once the effects on the rest of the supply chain are added, it might explain as much as three-quarters. Distracted by the fallout from the emissions cheating scandal, and by new emissions testing procedures, carmakers delayed production and postponed new models.

Surveys suggest that European demand for cars is holding up well. Mr Rakau thinks that Germany's carmakers should recover market share as they launch new models in the autumn and work off a large backlog of orders. But the risk is that the country's auto giants struggle to regain ground lost to foreign competitors. Meanwhile, trade headwinds could strengthen and fears of protectionism could deter companies from investing. Economists are downgrading expectations for economic growth in 2020 in both Germany and the euro zone.

The silver lining so far has been that the domestic economy was on an upswing. Unemployment rates have returned to pre- crisis lows, and pay is growing at its fastest pace in a decade. But on September 23rd Mario Draghi, the head of the ECB, told members of the European Parliament that the longer the manufacturing slowdown continued, the more likely that the rest of the economy would follow. Analysts at Capital Economics, a consultancy, recently said that services such as technical support and logistics that are exposed to manufacturing are already decelerating.

The ECB's decision on September 12th to launch a package of easing measures, including cutting interest rates and restarting asset purchases, might thus seem well timed. But since then the heads of several national central banks, including France's and Germany's, have said that restarting bond-buying is unnecessary. Klaas Knot, the head of the Dutch central bank, went as far as releasing a statement describing the ECB's stimulus package as "disproportionate". Mr Draghi fretted to EU parliamentarians

that outspoken dissent risked undermining the bank's pledges to keep interest rates low and to continue with asset purchases until it achieved its inflation target. On September 25th Sabine Lautenschläger, a member of the bank's executive board, resigned unexpectedly, even though her term expires only in 2022. She gave no reason for her decision, but is known to have opposed restarting asset purchases.

It is thus even more important for national governments to heed the ECB's oftrepeated pleas, and do more to counter the slowdown with fiscal stimulus. That government-bond yields in many countries are sub-zero bolsters the case. On September 17th the Netherlands took a tentative step in that direction, announcing tax cuts amounting to €3bn (\$3.3bn, or 0.3% of GDP), and promising to publish plans next year for a public-investment fund. Germany pledged spending measures to cut carbon emissions, though these are fiscally neutral. It will take even more dreadful data releases for Europe's politicians to stop trying to balance the books at the expense of growth. (4150)

PART 2 TEXTS FOR WRITTEN TRANSLATION

Text 1

Flash boys in the pan

An iconoclastic stock exchange loses a battle – but not yet the war

Technology has robbed stock exchanges of their theatrics. Opening days are an exception. Blue-chip firms listing on Nasdaq, America's second-biggest exchange, get an hour of exclusive advertising on its tower in Times Square. On the New York Stock Exchange (NYSE), the biggest, they earn the right to be deafened by a bell above a 116-year-old trading floor.

Yet behind the pageant, competition for listings is cut-throat. Last year Nasdaq snatched 18 listings from NYSE; six went the other way. Now Investors Exchange (IEX), an independent upstart created in 2012, is giving up the fight. On September 23rd it said it would shut its listings unit to focus on trading and new services. "We've spent many, many, many hours flying around the world trying to educate companies," says Brad Katsuyama, its boss. "The return on our efforts was not where it needed to be."

Under America's equity-exchange duopoly, Mr Katsuyama argues, retail investors pay too much for data and a fast connection, and are outpaced by high-speed traders' algorithms (Cboe, the third-largest, focuses on exchange-traded funds). IEX's fees, he says, are fair and simple by comparison. It also routes orders over a "speed bump", a coil of fibre-optic cable that slows access to the market by 350 microseconds.

Listings were not originally part of its plans. All exchanges can trade any stock, wherever it is listed; indeed few do listings at all. But "Flash Boys", a bestseller on high frequency trading published in 2014, cast Mr Katsuyama and IEX as champions of ordinary investors against rigged markets. The publicity piqued companies' interest. Listings can be lucrative: Nasdaq earned \$290m in listings fees last year. And winning listings from the giants would have been a pleasing endorsement.

Yet after 18 months IEX had secured just one: Interactive Brokers, an electronic brokerage that switched from Nasdaq last October (this week it said it would go back).

Market participants say IEX may have been held back by its relatively low trading volumes. Exchanges determine the opening and closing prices of stocks they list; more bids should mean more accurate, less volatile quotes. Price discovery seems to have mattered more to prospective listers than IEX's modest fees and championing of the little guy.

Despite the failed listings experiment, IEX is still making inroads. Though small compared with Nasdaq and NYSE, it trades 6,000-7,000 stocks and exchange-traded funds each day, making it the world's seventh-largest exchange operator by trading value. It has plans for new business lines, such as IEX Cloud, which offers data to software developers, and IEX Astral, a data platform built with fund managers. It is rolling out IEX Signal, machine-learning software that predicts short-term price movements to help companies time stock buy-backs.

And IEX has helped focus attention on its pet issues. Supported by large asset managers, the Securities and Exchange Commission, America's main financial regulator, is waging court battles against NYSE and Nasdaq over data and transaction fees. Other newcomers, such as the Long-Term Stock Exchange and Members Exchange, are also gearing up to trade equities. Meanwhile, IEX's main innovation is being copied. By 2020 a dozen markets, from Toronto to Moscow, plan to use some sort of speed bump. Enough, perhaps, to ring alarm bells in Times Square. (2918)

Text 2

Ray of light

The government stuns markets and delights businesses by slashing corporate tax

Indian businessfolk have been morose of late. GDP growth is slowing. Corporate earnings and sales have been dismal, with the automotive industry walloped particularly hard. Redundancies are rising, suggesting that a broader downturn is around the corner. Though the government of Narendra Modi has offered a few goodies and pick-me-ups, including abandoning a new levy on foreign investment, India Inc has been sunk in gloom.

On September 20th the malaise lifted, with a surprise announcement by Nirmala Sitharaman, the finance minister, of steep reductions in corporate taxes. There were reports the plan had been cobbled together in a breathless 36 hours – and suspicions that the government hoped to get ahead of further bad economic news. If so, it will have been gratified by the response. Stock trading, which had been lethargic, perked up. The benchmark Sensex index saw its strongest two-day rise in a decade, of 8.3%.

The suddenness was characteristic of Mr Modi's government, which has a penchant for dramatic moves. It says the tax cuts will leave an additional \$20bn, or 0.7% of GDP, in companies' coffers. Tanvee Gupta Jain, an economist at UBS, puts the figure a bit lower, at \$15bn. She adds that the tax cut should raise India's GDP growth rate by 0.2 percentage points, this year and in the future, by helping to attract manufacturers keen to move out of China. So far most have gone to Bangladesh, Indonesia, Thailand or Vietnam instead, since they offer lower taxes and fewer legal pitfalls.

Earnings for the big firms in the Nifty 50 index will be boosted by 8-10%, analysts reckon. The biggest winners will be profitable businesses paying the highest rates, such as supermarkets, brewers and consumer-product companies. Firms that already have temporary tax breaks, such as it consultancies, will eventually benefit when their perks expire.

India's tax system is so fiddly that it can reduce even grizzled executives to tears. Accountants were besieged by clients seeking guidance. Hitesh Gajaria, a partner at KPMG, a global accounting firm, said the tax reduction was the largest he had seen in his 34-year career – and so too was the number of people wanting to hear the details. Nearly 1,500 dialled into two webinars he held on September 23rd.

The current base rate for the largest companies is 30%. But surcharges push this above 35%, on top of which companies are taxed on the dividends they pay. The recipients of those dividends may have to pay yet more tax. Another levy was recently imposed on share buy-backs. The new base rate will be 22% (25.2% with surcharges). The buy-back tax has been lifted for some firms, but the dividend tax remains.

A new discounted rate of 15% (17.2% with surcharges) is supposed to attract manufacturers. That is better than the overall rate in any other large

country, and nearly matches low-tax Singapore. The average for all firms in Asia, says Mr Gajaria, is 21%, and for the world 24%. Manufacturers who take the plunge in India will be unable to accept any other incentives, such as accelerated depreciation, credits for research and development, or perks that result from locating in a particular place.

Simplification is a virtue of the plan. But in India nothing is entirely simple. Debate has already started about the precise definition of manufacturing and thus who is eligible for the new incentive for the sector. Existing manufacturers in India are pressing to be included, asking why they should be penalised for committing when others held back.

Tax is only one reason why India has failed to capture a windfall as supply chains shift away from China. Restrictive labour and land-acquisition laws hamper hiring and construction. Changing these would require state governments' approval. Sadly for Indian businesses, that rules out another welcome surprise.

Text 3

Sugar lump

A sickly tale of price distortions

Oceans of cloying *chai*; coils of sticky *jalebi*—Indians cannot get enough of the sweet stuff. Already the world's largest consumer of sugar (though with relatively low consumption per person, at 19kg per year, against a global average of 23kg), last year India pipped Brazil to become the world's biggest producer. On September 30th its sugar industry's bookkeeping year ends. A reckoning is due.

A production bonanza, spurred by the brief scare of a shortfall in 2016-17 and by higher-yielding sugar-cane varieties, has driven India's output to record levels. This year it is expected to hit 33m tonnes of crystalline sugar, compared with domestic demand of about 26m tonnes. The cumulative build-up of sugar means that the mills crushing fresh-cut cane could end up sitting on as much as 14.5m tonnes. That is thought to be the most sugar any country has stockpiled, ever.

India has long granted sugar-cane farmers special perks. It forces mills to pay skyhigh prices for sugar cane and makes it hard for them to import it. Uttar Pradesh, the state with the greatest acreage of cane, sets an extragenerous "state-advised price", which guarantees farmers a huge return on their basic costs and labour. Thanks to such artificial pricing, processing sugar anywhere in the country is more expensive than in other big producing nations. Mills often don't pay their bills. This month some farmers in Uttar Pradesh are burning their crops in protest at the mills' arrears. Abinash Verma of the Indian Sugar Mills Association notes wistfully that Australian and Brazilian mills buy cane at a price linked to what they can get for the juice, meaning they have healthy margins.

India rigs the sugar market for social and political reasons. The industry is a colossal employer of poor people, in particular in two politically weighty states, Uttar Pradesh and Maharashtra. The average farmer of sugar cane grows it on just 1-2 hectares and so must – the thinking goes – be protected from volatile world prices. Some 35m-50m people are directly employed in sugar-cane cultivation; 7.5% of the rural population depends upon the crop. Complicating things further, sugar barons often become politicians, and vice versa. A survey of 183 sugar mills in Maharashtra between 1993 and 2005 found that most had chairmen who had run for office.

World sugar prices are close to a ten year low. Despite this India has sold 3.4m tonnes abroad this year (though that fell short of a target of 5m tonnes). Indonesia has promised to take more, though talk of shipping sugar-laden barges down riverways to Bangladesh was inconclusive. On August 28th India said it would pay mills a bonus of 10.5 rupees (15 cents) per kilo exported adding up to 63bn rupees (\$877m).

India thus supports farmers to grow sugar, and then subsidises its export. Far better to follow Brazil's lead and help the industry diversify by using sugar-cane juice to distil ethanol, an alternative fuel. Tarun Sawhney of Triveni Engineering & Industries, which owns seven mills, says investors might be keener on the ethanol industry if the government set out a transparent framework for prices, rather than simply announcing them each year. Mr Verma believes that officials make sure that the price of ethanol tracks that of sugar cane. At which point the logic of price controls – such as it is – reaches a limit. Ethanol is a fuel for cars, not for people. (2875)

Text 4

Juicy analysis

A new paper compares an old economic theory with reality

In 1970 George Akerlof penned one of the most famous papers in economics. "The market for lemons" shows how, in markets where sellers know more than buyers, trade can dry up. His example is not fruit but used cars – a "lemon" is one with hidden defects. Buyers want reliable wheels, or "peaches". Not knowing which they are buying, they shave their offers. That puts off peach-sellers, some of whom exit the market, raising the chance of buyers getting a lemon, pushing prices down still further. It becomes impossible to sell a peach for what it should be worth.

Such "adverse selection" can be found in markets from insurance to education. The paper helped to win Mr Akerlof the Nobel prize. But although it contained path-breaking theoretical insight, it cannot be taken literally, because not all used cars for sale are lemons. A new paper examines the extent to which lemons really are a problem.

Richard Blundell of University College London and four co-authors analysed car prices, administrative data on car ownership and income-tax records in Denmark. They estimated the value of cars in their sample by depreciating sale prices over time. They then calculate how big a discount, according to their model, peach-owners had to accept to sell their car to a (lemon-fearing) dealer.

The results provide clear evidence of market failure. The authors find a "lemons penalty" of 18% in the first year of car ownership, and of 8% in the second year. The effect decreases further over time. The lemons penalty for cars that were owned for at least three years hovers around 2-5%. It completely vanishes by the ninth year of ownership. If a car is sufficiently old, it seems, dealers do not expect hidden defects – perhaps because its problems are obvious. A new car for sale, however, might arouse suspicion. "There is a different car market for different ages," says Hamish Low of Oxford University, one of the authors.

The lemons problem might therefore help explain a well-known phenomenon: that brand-new cars lose a great deal of their value the moment they are bought. However, although the lemons penalty is enough to deter transactions, as Mr Akerlof predicted, the authors found that some

peaches still get sold. Sellers may accept a cut-price sale because they badly need cash, or because they have a burning desire to upgrade to something better. Reality is always more complicated than theory. It is enough to send economists bananas. (2098)

Text 5

Over the line

The Trump administration's trade agenda is making slow progress

President Donald Trump teased tradewatchers on September 25th when he reannounced a deal with Japan (just weeks after announcing an agreement in principle). He promised it would mean "really big dollars for our farmers and for our ranchers". A White House press release boasted about the extra access American exporters of beef, pork and cheese would get to the Japanese market. Robert Lighthizer, the United States Trade Representative, told journalists that American tariff reductions would arrive by January 1st. But despite all the fanfare, the text of the deal remained unpublished.

There had been hopes that Mr Trump might sign a mini-deal with India, too, during his meeting with the country's prime minister, Narendra Modi, on September 24th. American companies complain that India's price controls on heart stents and knee implants force them to sell at below cost price. The hope was that, in return for a package that solved that problem, India might be reinstated as a member of America's Generalised System of Preferences, which offers lower tariffs on some products. But negotiators failed to resolve their differences in time.

The mismatch between the demand for photo opportunities and the supply of worked-out trade deals explains both anticlimaxes. Such agreements are complex legal documents, and the language needs to be clear enough that neither side can squeeze out more concessions on the sly. This is trickier when neither trusts the other. The deal with Japan was as difficult as any other, even though the negotiators had relatively recently sealed the Trans-Pacific Partnership (TPP), an agreement including America and Japan negotiated by the Obama administration, only to be rejected by Mr Trump.

Despite the lack of detail, one thing is clear: the deal will be narrow. Apart from some rules on digital trade, it seems to be focused on tariff barriers. It omits cars and car parts, even though these account for around two-fifths of Japanese goods exports to America. This has drawn criticism. Myron Brilliant of the US Chamber of Commerce, a lobby group, described the agreement as "not enough".

The narrow scope is partly because the Trump administration wants to avoid having to seek full congressional approval. (American trade law allows small tariff concessions to be made without it.) But it raises questions about whether the agreement complies with the rules of the World Trade Organisation, which say deals must include "substantially all the trade" if they are to withstand legal challenge.

The WTO does permit smaller interim agreements – and, *mirabile dictu*, that is how the Trump administration describes this one. The leaders' joint statement said that within four months of the mini-deal coming into force, the two countries hope to finish consultations and "thereafter" start negotiating a deal that would address issues including barriers to trade in services and investment.

Some are sceptical. Wendy Cutler, a former negotiator on the TPP, fears "negotiating fatigue". Even with domestic pressure from American producers to whom the interim deal offered nothing, "it's difficult to see how the second stage would be concluded on an expedited basis," she says.

Further doubts stem from the leverage that has been granted to Japanese negotiators. They were brought to the table after America walked away from the TPP by the threat of tariffs on cars and car parts. Now they have concessions they can roll back if the Trump administration enacts those. Threats have worked once. But they could be less use in securing the big concessions needed if this supposed staging post is not to become the final destination. (3140)

Text 6

Spoiler alert

The island's bourse seeks to snap up the London Stock Exchange

Recent months have been eventful for bosses in Hong Kong, including Charles Li, the head of the island's stock exchange. Last month, just days after a huge deal in his industry was announced – an agreement by the London Stock Exchange Group (LSE) to buy Refinitiv, a data provider, for

\$27bn – the Chinese People's Liberation Army released a video of troops performing anti-riot drills, a scenario that Mr Li had warned Beijing against. The protests continue, but Hong Kong Exchanges and Clearing (HKEX) is keeping calm and carrying on. On September 11th it made an audacious bid to scupper the Refinitiv-LSE deal and buy the British exchange for J31.6bn (\$39bn) itself.

In normal times pundits might have hailed the proposal as visionary. Hong Kong is the world's fourth-largest financial centre. Combined with London, it could rival New York. It is well positioned to benefit from the strength of Asian emerging markets. In its proposal HKEX dangled the prospect of Britain capturing growth as China's currency, the yuan, internationalises – for example, with more Chinese firms listing in London.

And under Mr Li HKEX has proved an adept buyer of foreign assets. Its acquisition of the London Metal Exchange in 2012 for \$2.2bn has gone well. As other exchanges have done, HKEX has diversified beyond listings into trading services, derivatives and data. Its mix of fast-growing businesses adds up to far more than an opportunistic play on China.

But most of the LSE's shareholders look likely to back the bourse's prompt rebuff of HKEX. The board will examine the bid in detail, but called it "unsolicited, preliminary and highly conditional". It reiterated its commitment to the Refinitiv transaction, which is due to be approved by shareholders before the end of the year.

The chief obstacle to the East-West tie-up is political risk. Cross-border exchange deals often founder on national sensitivities, as happened with the LSE's own attempt in 2017 to merge with Deutsche Burse. HKEX's proposal would mean a Chinese firm owning the main equity markets of Britain and Italy (the LSE bought Borsa Italiana in 2007) and key clearing infrastructure for European debt markets. British politicians and regulators, desperate to juice up the economy post-Brexit, might prove relaxed. American and continental European ones probably will not.

Mr Li is no patsy for China. Last summer he tussled with Beijing when the Shenzhen and Shanghai exchanges blocked mainland investors from buying shares in Hong Kong-listed firms with dual-class structures. Nevertheless, six members of HKEX's 13-strong board are appointed by Hong Kong's government, notes an investment banker close to the LSE. HKEX could try to increase its independence by asking the territory's financial secretary to refrain from exercising his right to choose its board members, but changing the rule itself is not on the agenda. For their part,

LSE shareholders are unlikely to see HKEX's offered price, at a relatively low premium of 23%, as sufficient temptation to abandon the Refinitiv deal for one that has a serious risk of being blocked.

Backers of the agreement with Refinitiv, the owner of Eikon data terminals, are therefore confident. They note the market's welcome for the LSE's further expansion into data and analytics. The exchange's shares had risen 20% from the date of that offer to just before HKEX's bid.

The Refinitiv deal also faces regulatory hurdles, however. Like HKEX, the LSE swims in politically treacherous waters. China's desire to exert control will have been one of the motives for the Hong Kong exchange's London gambit. As for the LSE, the EU's fears that post-Brexit London will be a freewheeling offshore centre could prompt its regulators to seek to limit the British exchange's growth. The Refinitiv deal faces a gruelling competition review in Brussels over concentration of financial-data ownership. Mr Li's bid to escape trouble at home may not succeed. But the Refinitiv deal is not home and dry either. (3428)

Text 7

A porcine phenomenon

Soaring pork prices hog headlines and sow discontent in China

Economists rarely think about the average gestation period of pigs (115 days) or the length of time a sow needs to reach sexual maturity (roughly six months). But in China, a basic knowledge of hog-breeding cycles is part of the job. Pigs are so central to the Chinese diet that the ups and downs of pork prices have an outsized impact on inflation. Once again, porcine expertise is in demand: African swine fever has devastated China's pigs, complicating its economic outlook.

New data show that pork prices leapt by 23% in August from July, the highest monthly jump on record. On an annual basis they were up by 47%. The feed-through to broader inflation has been modest so far. But pork is certain to become more costly in the coming months, pushing consumer prices up further.

In the past, when pork prices soared farmers quickly produced more pigs. That is harder now because the population of breeding sows has collapsed. The central bank has started to ease monetary policy as growth weakens, but the spectre of porkled inflation, even temporary, could limit its space for cutting interest rates.

China consumes 55m tonnes of pork annually, as much as the rest of the world combined. Hu Chunhua, a vice-premier, said in August that the supply shortfall this year will be about 10m tonnes, more than is traded on international markets. The government has announced subsidies and low-interest loans to encourage pig farmers to expand. But since at least a third of China's hog herd has been wiped out, these measures will not generate instant results.

Several cities have started offering limited amounts of discount pork. Others are giving cash to low-income residents. China has also started to release meat from its frozen-pork reserves – created in the 1970s for just such emergencies. But they cover barely a tenth of the shortfall. On September 10th *Life Times*, a Communist Party managed newspaper, had an unusual banner headline: "Pork, it's better for you to eat less". It dressed up its article as healthy-eating advice, but readers surmised that it was trying to put lipstick on a very pricey pig.

Yet the government's big concern for now is affordability, not inflation. Pork, together with rice, has long been close to a daily necessity in China. The word "meat" by itself almost always refers to pork. But during the past decade pork has diminished in importance, as a share of both dinners and overall spending. Beef and fish have grown in popularity. Middle-class urbanites, not to mention the wealthy, are spending their money on much else besides. Analysts now reckon that pork is little more than 2% of China's consumer price index, down from 3% a few years ago.

Moreover, it takes more than pork for inflation to be a problem. In 2008 and 2011, inflationary spikes followed big increases in the money supply; price rises, though pronounced for pork, were a much broader phenomenon. Over the past couple of years the money supply has grown much more slowly as regulators have pushed banks to reduce their leverage. Prices of industrial goods have fallen into deflationary territory. The central bank will thus be inclined to write off African swine fever as a supply shock. The risk is that sky-high pork prices spread to other food items, placing unwanted upward pressure on wages.

In the meantime people are adjusting. Liu Zhiqiang, a retired factory worker in Beijing, used to treat his family to pork ribs once a week. "Now I just toss some pork shavings into fried dishes and have more eggs instead," he says. Xishaoye, a restaurant chain popular for pork-filled crispy buns, said that it was researching whether it could use chicken as an alternative.

All going well, China will eventually emerge from this mess with bigger, better managed pig farms. The hog cycle would become less volatile, and pork cease to matter as an inflation indicator. China's pigs would once more be braised by chefs rather than appraised by economists. (3363)

Text 8

Sewn up

A World Bank bigwig looks set to take the fund's top job

Kristalina Georgieva has been mentioned in connection with every leadership role going at international organisations, from secretary-general of the un to the head of the European Commission. Were the presidency of the World Bank decided on merit alone, with no consideration of nationality, Ms Georgieva, its chief executive, might have been a shoo-in. She briefly stood in as president after Jim Yong Kim resigned in January, but in April the job went to David Malpass, an American.

Now the Bulgarian seems at last to have nabbed one of the top jobs on a permanent basis. A transatlantic understanding dating back to the Bretton Woods conference in 1944 means that an American leads the World Bank while a European leads the IMF. In August Ms Georgieva became Europe's nominee to replace Christine Lagarde at the fund's helm. Despite noises from the British that they would put forward their own candidate, the deadline for submitting nominees passed on September 6th with Ms Georgieva the sole contender. Her official appointment by early October seems assured.

Since 2017 she has been responsible for much of the running of the World Bank, where, before a stint at the European Commission, she also spent many years as a staffer. As chief executive she is credited with smoothing over differences between Mr Kim and the staff, and leading negotiations with the bank's shareholders for a capital increase.

Her good relations with large shareholders, including America and China, should prove an asset to the IMF, which risks being caught in the middle of the very trade and currency wars it was set up to avert. It may also have to advise governments on coping with a global economic slowdown. Although she has less macroeconomic expertise than some

other early contenders, such as Mark Carney, the governor of the Bank of England, former colleagues point out that she was active in assessing countries' fiscal positions while in Brussels, and helped beef up the European Union's bailout mechanism.

As an academic she wrote a textbook that is still used by undergraduates in Bulgaria. Her expertise in environmental economics is likely to come in handy, too. Masood Ahmed of the Centre for Global Development, a think-tank, reckons that assessing the impact of climate change on macroeconomic and financial stability will become more important for the fund.

The first half of Ms Lagarde's tenure was dominated by Europe's sovereign-debt crisis. The IMF's focus has since shifted to emerging and fragile states. Ms Georgieva will inherit a mess in Argentina. One World Bank staffer notes that other European candidates would probably only have been familiar with emerging markets from their holidays.

Ms Georgieva, by contrast, has spent decades working with the poorer countries that are the target of most of the fund's programmes. And her home country made the transition from communism to a market economy in the 1990s. By the fund's own classification Bulgaria is still an emerging economy, with GDP per person less than a quarter that of France, which has supplied four of the fund's last six chiefs.

Ms Georgieva's stature and experience may explain the absence of challengers, which ensured that Europe retained the position despite fraught haggling over the nomination. It was the second such row of the summer. (The first, in June, had been over a package of top EU roles, which created the vacancy at the fund when Ms Lagarde was appointed to lead the European Central Bank.) For the IMF job eastern Europeans backed Ms Georgieva, whereas northerners preferred Jeroen Dijsselbloem, a former Dutch finance minister.

When consensus eluded them, the EU's 28 national finance ministers resorted to voting by email (though Britain abstained), at which point Ms Georgieva gained most support and Mr Dijsselbloem bowed out. Europe's choice, though the result of much wrangling, is set to prevail. One relic of the Bretton Woods era somehow continues to defy the odds. (3378)

Text 9

Exceptionable exceptionalism

Were Mauricio Macri's mainstream policies doomed from the start?

"Whenever I visit a country they always say... here it is different," Rudiger Dornbusch, a legendary economist, once told his students at the Massachusetts Institute of Technology (MIT). "Well, it never is." For most countries, his words are a warning. For Argentina, they are a comfort. The country has lurched from one economic crisis to another, culminating in the recent reimposition of currency controls and rescheduling of debts. Its voters, who also lurch from populists to liberals and back, look poised to oust Mauricio Macri's liberal government in October in favour of a populist duo, Alberto Fernández and Cristina Fernández de Kirchner, the former president. It is therefore easy to believe that Argentina is different. Just not in a good way.

Dornbusch's words provide the epigraph for a new paper* by Federico Sturzenegger, a former MIT student and Mr Macri's central-bank governor from when he took office in 2015 to mid-2018. It makes a contrarian defence of Mr Macri's fiscal gradualism and inflation targeting. These policies worked elsewhere and could have worked in Argentina, he argues, had they been faithfully followed.

Mr Macri inherited a troublesome budget deficit. To avoid the austerity associated with previous right-leaning governments, he proposed to balance the books at a politically palatable pace. The problem was not that he reduced the deficit only gradually, Mr Sturzenegger argues, but that he did not reduce it even gradually. In his first year the primary budget deficit increased from 3.8% to 4.2% of GDP (a figure flattered by a one-time tax amnesty). The improvement in 2018 owed a lot to surging inflation, which cut the cost of public pensions indexed to price increases in 2017.

Mr Sturzenegger's second claim is more controversial. After a brief transition, Mr Macri's central bank adopted a conventional macroeconomic framework, using interest rates to target inflation and treating the exchange rate with benign neglect. By the end of 2017, Mr Sturzenegger argues, this policy was working. Core inflation had fallen by half, to below 20%. It was expected to drop below 15% the next year.

Headline inflation was, however, far higher. That gave the government an excuse to relax the inflation target on December 28th (a date on which Argentines traditionally play pranks on the unsuspecting). Analysts hoped it was merely bringing the target in line with reality. In fact, says Mr Sturzenegger, it sought a gentler pace of disinflation in order to reduce the cost of those backwardly indexed pensions. The raised target, plus two cuts in interest rates in January 2018, delivered a "permanent shock" to the central bank's credibility.

Inflation targeting appealed to Mr Macri's team partly because it was mainstream. But Argentina adopted it at a level of inflation far outside the norm. The targets also implied an unusually aggressive reduction in price pressure, points out Rafael Di Tella of Harvard Business School. He thinks the early success owed a lot to an economic contraction in 2016.

To reduce the pain, Mr Di Tella says, the government should have considered limits on inflationary wage claims. One of Mr Fernández's advisers has proposed just such a pact. Another advocate was Dornbusch himself. Keeping spending (public and private) in check is essential to killing high inflation, he argued in 1986. But the collateral damage to growth and jobs can be reduced with income policies, which serve as a coordination device: when inflation is high, no one will moderate their wage claims unless everyone else does too.

According to Mr Sturzenegger, Mr Macri's government rejected a wages pact because it was unorthodox. But if Mr Di Tella is right, then Argentina's self-conscious attempt to act normal may have helped prevent it from becoming so. Normal countries do not need incomes policies. But, Dornbusch might have retorted, countries in Argentina's position normally do. (3390)

^{* &}quot;Macri's macro: The meandering road to stability and growth", by Federico Sturzenegger. BPEA conference draft, Fall 2019.

Text 10

Home truths

Steven Mnuchin begins reforming America's giant mortgageguarantee firms

"The last unfinished business of the financial crisis": that is the rallying cry of those seeking to reform Fannie Mae and Freddie Mac, the two giant government-sponsored enterprises (GSES) that back much of America's mortgage industry. In 2008, amid the wreckage of the housing market, they were bailed out by the federal government to the tune of \$188bn and placed in "conservatorship", a form of government control. On September 5th Steven Mnuchin, the treasury secretary, published a long-awaited plan to reprivatise them. "We want to make sure they are not in conservatorship on a permanent basis," he told the Senate on September 10th.

Mr Mnuchin set out two alternatives. The first, more sweeping, would need congressional approval. The second could be carried out by the Treasury and the Federal Housing Finance Agency (FHFA). Mr Mnuchin says passing reform through Congress is his preferred option. A senior Treasury official says administrative actions will start promptly, in part to lay the groundwork for legislation. But the administration will proceed whether or not Congress acts. The Trump administration is presenting America's housing-finance industry with a "fork in the road", says Jim Parrott of the Urban Institute, a think-tank.

The two GSES have been central to America's housing market for decades. Fannie was founded as a government agency in 1938, during the Great Depression, and rechartered in 1968 with private capital and shareholders. Freddie was set up by Congress as a competitor in 1970. Both buy mortgages, mainly from banks, add a guarantee to repay the principal and interest if borrowers default, and bundle them into securities. These they either retain on their own balance-sheets or sell to investors.

Their guarantees transfer some credit risk from the private sector to the government. In the run-up to the financial crisis, that transfer started to balloon. In the 1970s Fannie and Freddie held less than 10% of single-family mortgages in America. Now they hold more than \$5trn of housing-related securities and guarantees, nearly half the total. Politicians often say they want the government to get out of the mortgage business entirely. But that is a distant prospect. Taxpayers' assumption of some of the credit risk

in mortgage lending is what drives the mortgage-backed-securities market (particularly since the financial crisis, which devastated private-label issuance). Investors are keen on the GSES' securities because they isolate the interest-rate risk associated with mortgages, allowing 30-year fixed-rate loans, which are almost unknown outside America. These are hugely popular with consumers (and voters).

With exit politically untenable, the priority is cutting the pair down to size. Before the bail-out they operated as private companies with a public charter, implying that the government would bail them out if they ran into trouble. Rather than nationalizing them during the crisis, the Treasury guaranteed to keep their net worth above zero. In return it took warrants representing 80% of their common stock.

The result is an even odder hybrid, with private shareholders but government-run. Under public control they have been forced to hand the Treasury the bulk of their profits – and, since 2012, the lot – to repay the bail-out. Since 2008 Fannie has returned \$181bn, and Freddie \$120bn. Their capital buffers have also been run down and handed to the government. Last year these fell so low that both GSES required an injection of taxpayer cash. They now have just \$3bnworth of capital apiece.

Shareholders, whose rights were suspended in 2008, sued the government. On September 6th a panel of federal judges in New Orleans overturned a ruling that had backed the government's appropriation of Fannie's and Freddie's profits. The arrangement had been made in a time of "dire calamity", the judges acknowledged. But they added that "expedience does not license omnipotence". When markets reopened on September 9th the GSES' share prices jumped by 40%. Mr Mnuchin has said he may appeal to the Supreme Court.

By the time the legal wrestling is over, however, the profit sweep may be, too. Instead of the government getting the lot, Mr Mnuchin wants Fannie and Freddie to pay an explicit fee for their government guarantees. For the past three years they have paid, on average, \$18.2bn each year. Under the new system they would retain any earnings above the agreed amount.

Donald Layton of Harvard University says that the FHFA's proposed capital rule for Fannie and Freddie would require them to hold (very) roughly \$125bn-worth of capital. It would take at least seven years – longer if the government's fee is high – to build this up through retained earnings. Though the Treasury could help by selling down its stakes, a balance will

have to be struck between a fee that reflects the risk of default and allowing the GSES to build up capital. Last May Mark Calabria, the FHFA's boss, said that retained earnings might take too long and that an IPO might come in the first half of 2020. If it were to raise the \$100bn-120bn needed, it would be four to five times the size of the largest initial public offering to date: Alibaba's in 2014.

However it is done, recapitalization would be just the first step towards reprivatisation. Mr Mnuchin wants government support for the housing market to become explicit, rather than implied, as now. He wants the securities Fannie and Freddie issue to have a "full faith and credit" guarantee, meaning the securities, not the issuers, are state-backed. He also wants such guarantees to be offered by more firms. These putative rivals for the GSES would be chartered and overseen by the FHFA.

But all that would require congressional approval – hard when Congress is divided and elections are looming. More likely is that the administration will seek other ways to increase competition by lessening the privileges granted to the GSES. They are exempt from onerous disclosure rules that apply to banks and issuers of mortgage backed securities with private credit guarantees, for example. Their capital is a fraction of what banks must hold. Securitising loans with Fannie or Freddie protects banks from lawsuits brought by defaulting borrowers seeking to hold on to their properties by claiming failures of due diligence.

These privileges helped the GSES to grow so huge. It is within the administration's power not just to end the profit sweep and conservatorship, but to level the playing field. If Congress disagrees with the administration's vision for Fannie and Freddie, it can set out its own. Either way, the mortgage monsters will soon be finding a new home. (5676)

PART 3. GRAMMAR EXERCISES

Numbers and symbols

1. Zero, oh and nought

For the number **0** on its own, we say **zero.**

Before a decimal point we say either zero or nought:

0.5 zero point five or nought point five

After a decimal point we say oh:

0.001 nought point oh oh one

We also say **oh** in telephone numbers, years, hotel room numbers, bus numbers, etc.

0121-602 0405 – Her number is oh one two one, six oh two, oh four oh five.

1805 The Battle of Trafalgar was in eighteen oh five.

Room 802 I'm on the top floor, in room eight oh two.

(For football scores we say *nil*: Real Madrid three, Ajax Amsterdam nil (3-0); for tennis we say love: 15-0, fifteen-love. Nobody knows why!)

2. Points and commas

In English we use a point (.) and not a comma (,) for decimals. We only use commas when writing numbers greater than 999:

15.001 fifteen point oh oh one 15,001 fifteen thousand and one

3. Decimals

In English, we usually read all the numbers (digits) after a decimal point separately, especially if there are more than two decimal places:

0.125 nought point one two five

5.44 five point four four

3.14159 three point one four one five nine

0.001 nought point oh oh one

Another way of saying 0.001 is 10^{-3} ten to the power of minus three

If you say 0.125 as zero point a hundred and twenty-five, an English speaker will instinctively hear 125, and ignore the zero point, thinking that you have made a mistake, or changed your mind while speaking. If you are doing deals on the telephone, you could quickly lose a lot of money by getting this wrong...

But if the number after a decimal point represents a unit (of money, etc.) it is read like a normal number:

£1.50 one pound fifty \$3.15 three dollars fifteen 2m 18 two metres eighteen

4. Telephone and fax numbers

We usually say telephone and fax numbers (and car registration numbers, bank account numbers, and so on) as individual digits:

010 41 01273 315052 – oh one oh, four one, oh one two seven three, three one five, oh five two

An exception is 'doubles':

0171-225 3466 – oh one seven one, double two five, three four double six

5. Hundreds, thousands, millions and billions

a hundred

200 two hundred (not two hundreds)

1,000 a thousand

100,000 a hundred thousand (not thousands) 1,000,000 a million (or 10⁶, ten to the power of six)

1,000,000,000 a billion (or 10⁹)

One difference between British and American English is that Americans do not use an **and** between the hundreds and tens.

For the British, 123,456 is:

a hundred and twenty-three thousand, four hundred and fifty-six

For Americans it is:

a hundred twenty-three thousand, four hundred fifty-six

In the singular, the words hundred, thousand, or million are preceded by **a** or **one:**

We hired a hundred new workers.

There are over one million potential customers.

In imprecise numbers, hundreds, thousands or millions take a plural:

We're selling thousands a month.

We're earning millions of pounds.

In precise numbers, or after **several** and **a few**, hundred, thousand or million do **not** take a plural:

To be precise, we have sold eight thousand four hundred and twenty.

Several thousand people have bought the new model.

We expect to sell a few hundred a week from now on.

6. Years

The number 2,015 is: two thousand and fifteen

The year 2015 is: twenty fifteen

7. Square, cube and root

10² ten squared 10³ ten cubed

 $\sqrt{5}$ the square root of 5

8. Fractions

Apart from $\frac{1}{2}$ (a half), $\frac{1}{4}$ (a quarter) and $\frac{3}{4}$ (three-quarters, sometimes three-fourths in the US), fractions are mostly like ordinal numbers (fifth, sixth, seventh, twenty-first, thirty-second, etc.):

 $\frac{1}{3}$, $\frac{1}{5}$, $\frac{1}{6}$, etc. a third, a fifth, a sixth three and a half $2\frac{3}{4}$ two and three-quarters

9. Calculating

10+6=16 ten plus six is sixteen

ten and six equals sixteen

10-4=6 ten minus four is six

ten take away four equals six

 $10\times6=60$ ten times six is (or equals) sixty

ten multiplied by six is/equals sixty

10÷6=1.666 ten divided by six is one point six recurring

The verbs are to **add**, **subtract** (or **deduct**, but not deduce), **multiply** and **divide**.

Other ways of saying divide are per:

Fr/\$ francs per dollar

8% p.a. eight percent per annum

and over:

(x-y)/z x-minus-y, over z x-y/z x minus y-over-z

10. Numbers as adjectives

When a number is used before a noun, like an adjective, it is always singular:

a fifty-minute lesson

a twelve-week term

a twenty-minute walk

a ten thousand pound car

a ninety-five dollar price cut a six-month waiting list a one and a half litre bottle a twenty degree fall in temperature

How do you say the numbers and symbols in **bold** in these sentences?

- 1. 2006 was the company's most profitable year since 1994.
- 2. The advantage of Internet banking is that you can check your account 24/7.
- 3. Despite a rigorous advertising campaign, demand has only risen by **8.4%** in the last two months.
 - 4. We're meeting in his office at **3.45** this afternoon.
 - 5. Your flight for Zurich leaves at 1800 from Gatwick South Terminal.
 - 6. I expect to be back in the country on **30 June**.
 - 7. Our next range of products will be released on 10/3/07.
 - 8. She completed the test in a record 27½ minutes.
 - 9. ¾ of all our employees think the canteen food could be improved.
 - 10. The new desk measures exactly 2m x 1m x 1m.
 - 11. Is this printer really only £10.99?
 - 12. Oh, sorry sir, that's a mistake. The sticker should say £100.99.
 - 13. And that computer doesn't cost £120.75. It actually costs £1120.75.
 - 14. Please quote reference ACB81 25/B.
 - 15. Our new telephone number is **020 7921 3567**.
 - 16. For more information, call **0845 601 5884**.
 - 17. Alternatively, ring **0800 231415**.
- 18. The emergency telephone number in the UK is **999**. In the USA it's **911**.
- 19. To access the information you require, press the # key, followed by the $\bf 0$ key, and finally the * key.
- 20. He earns a salary of over £200K a year! In fact, he's making so much money that he plans to retire in his mid-50's.
 - 21. We have invested over **\$6M** in new technology.
- 22. To get here from Croydon, take the **M25** northbound, then take the **M4** westbound, leave at junction 9 and take the **A329** towards Wokingham.
- 23. The Union held a ballot to see if the workers wanted to strike. The result was **2:1** in favour.
 - 24. My email address is markbarrington@snailmail.co.uk.

- 25. Hi Todd. **GR8** news on the promotion. I'm really :-) for you! **CUL8R** for a celebratory drink?
 - 26. He drives to work in a big, fuel-guzzling **4x4**.
- 27. Liverpool won the match against Arsenal by **2:0**. In the match against Manchester United the following week, they drew **3:3**.
 - 28. At the last census, the population of the country was **37,762,418**.
 - 29. This book is © Rawdon Wyatt, **2007**.
 - 30. The 'Ultimafone®' has just won a 'Product of the Year' award.
- 31. In my first job, in **1976**, I earned **£38** a week, which was exactly **£1,976** a year.
 - 32. Today they're buying yen at **119.92** and selling them at **120.01**.
 - 33. It's either **0.431** or **4.031**, I can't remember.
 - 34. **\$1,000,000**? But that's over **€1,090,000**!
 - 35. No, it's 12,231 not 12.231!
 - 36. You can fax them on **066-22 27 47**.
 - 37. For further information, call **0171-359 0131**.
 - 38. He's **2m11** tall, like a basketball player.
 - 39. It only cost **€13.95**.
 - 40. It's somewhere between $2\frac{2}{3}$ and $2\frac{3}{4}$.
- 41. **27**×**365** is **9,855**, plus **7** for leap years, plus **2**×**31**, and **2**×**30**, plus **16** days I'm **10,000** days old today!
 - 42. The equation is $x^2 y^3 = z$.
 - 43. Why don't you fax her? The number is **001 212 487 1123**.
 - 44. His first CD sold 90,010 copies.
 - 45. But the second one has only sold **19,110** so far.
 - 46. The bond was issued at $7\frac{3}{8}$ %.
 - 47. The dollar lost **0.0072** against the euro yesterday.
 - 48. I think the three-month inter-bank sterling rate is $5\frac{11}{16}\%$.
 - 49. Can you ask him to phone me back next week, on **0161-745 9916**?
 - 50. To eight decimal places, pi is **3.14159265**.
 - 51. Did you say (x-y)/z?
 - 52. No, I said x-y/z.
 - 53. Have you got a calculator? I need to work out $\sqrt{196}$.
 - 54. The ISBN, printed on the imprints page, is 0 521 75285X.

Inversion

1. What is inversion?

When you begin a sentence with negative adverb or adverbial phrase, we sometimes have to change the usual word order of subject and verb (often using an auxiliary verb as do):

I had never seen so many people in one room. (=normal word order) *Never had I seen so many people in one room.* (=inversion)

2. When we use inversion

We use inversion when we move a negative adverb (*never*, *nowhere*, *not only*, etc.) to the beginning of a sentence. We do this because we want to emphasise the meaning of the adverb.

Time relationships

•We use inversion after 'negative' adverbs which emphasise a time relationship at the beginning of a sentence:

No **sooner had I** put the phone down **than** it rang again.

Hardly / Scarcely / Barely had I got my breath back when it was time to go again.

•We use inversion after phrases that use *not*:

Not until he apologises will I speak to him again.

Not since I was little have I had so much fun.

Not for one minute do I imagine they'll come back.

•We use inversion after some time phrases that use *only*:

Only after several weeks did she begin to recover.

Only later did she realise what had happened.

Only then did he remember he hadn't got his keys.

Only when I've finished this will I be able to think about anything else.

Only in the last few days has the truth started to emerge.

Frequency

We also use inversion after 'negative' adverbs which emphasise frequency at the beginning of a sentence:

Never have I been so taken aback.

Rarely do they fail to get away for a holiday.

Seldom is that pop group out of the news.

Hardly ever did he wear a suit.

•We can also use inversion after 'negative' adverbs at the beginning of a sentence to emphasise how infrequently things happen:

Little did she realise what was about to happen.

Nowhere was a replacement to be found.

General emphasis

We often use inversion for general emphasis with phrases that use only: Only by patience and hard work will we find a solution.

Only in this way do we stand any chance of success.

•we can also use it with phrases that use *no*:

In no way should this be regarded as an end of the matter.

On no account are you to repeat this to anyone.

Under no circumstances can we accept the offer.

3. Not using inversion

We use inversion when the adverb modifies the verb, and not when it modifies the noun:

Rarely seen during the day, the badger is a famously shy animal. (= inversion)

Hardly anyone knows about it. (= no inversion)

1. Complete the text by using the words and phrases from the box

little	such	not o	nly under n	o circum	stances	had
sei	ldom	along	no sooner	as	scarcely	

Well, ladies and gentlemen, we've done it again – another election victory. The last four years of office has been a wonderful time for the party, a tale of adversity overcome. (1) No sooner had we come to office than the Stock Market crashed. But we survived that scare, and we came out of it stronger for the experience. The opposition claimed we were faltering. (2) have I heard such hypocrisy from a party which continued to squabble internally for the next four years. Then (3) came a fellow called David Rew, with his new breakaway Democratic party - but he didn't have much success in the opinion polls! (4) did he claim he'd become Prime Minister within three years, he also

reckoned that this party was now unpopular with younger voters. (5) did he realise that it would be the young voters who gave us an overwhelming vote of confidence in yesterday's election. (6) had the first votes rolled in when it was obvious that we would be re-elected with a huge majority. (7) was the extent of our victory that the New Democrats obtained a meagre five seats. (8) they known they would perform so poorly, I don't think they would have been quite so scathing in their criticism of our economic policy. But rest assured, ladies and gentlemen, (9) will we rest on our laurels. There is no room for complacency in this government. And I am confident, (10) I'm sure are most of you, that the next four years will be a resounding success. Thank you.

2. Match the first (1-10) and second (a-j) parts

Examples: 1 + j 2 + i

Inconsistent advice about a new husband!

- (1. On no account should)
- (2. Not only should he be allowed to give his opinions,)
- 3. Under no circumstances is he to
- 4. Only by constantly nagging will he be
- 5. Only after weeks of rigorous training will he
- 6. Rarely will a man respond to a request the first time unless
- 7. No way should his laundry be done for him unless
- 8. Only very rarely should a garment be ironed for him
- 9. In exceptional circumstances
- 10. But, only if he seems really desperate
- a) learn how to switch on the vacuum cleaner.
- b) should you try to solve his problems for him.
- c) without the assurance that next time he will do it himself.
- d) you may take what he says seriously.
- e) it is in his own interests to do so.
- f) he is prepared to lend a hand with the washing up.
- g) be disturbed while watching a football match on television.
- h) persuaded to pick his clothes up off the floor.
- (i) he should also be deluded into thinking you agree with him.)
- (j) you let him realise he isn't the boss.)

Linking words and phrases

There are many features of texts which help the reader understand how the information in the text is organised. This term covers a wide range of words and phrases which make text easier to understand.

A selection is given here.

my opinion/view, To my mind, To my way of
nking, I am convinced that, It strikes me that, It
my first belief that, It seems to me that, As far
I am concerned, I think that
stly, First of all, Secondly, Thirdly, Finally, To
rt/begin with
hat is more, Furthermore, Apart from this, In
dition to, Moreover, Besides, Not only
talso,bothand
ith reference to, According to
cause, due to, on the grounds that, since, as, In
ew of, Because of, for the reason
deed, Naturally, Clearly, Obviously, Of course,
edless to say
to a point, To a certain degree/extent, To some
gree/extent, In a way, In a sense
owever, yet, Nevertheless, But, Even so, still,
onetheless, Although, Even though, Regardless
the fact that, In spite of the fact that, Despite
nt, While
other words, That is to say, To put it another
y
milarly, likewise, in the same way
nally, Lastly, All in all, On the whole, In
nclusion, On balance, To sum up, All things
nsidered

1. Underline the correct word or phrase in each sentence

- a) A: Did you ring the hospital for me?
- B: I forgot as a result/to be honest/to make matters worse. I'll do it now.
- b) A lot of adults are very wary of learning in a school situation. For that reason/On the other hand/To tell the truth they don't sign up for our courses.
- c) By and large/Despite the fact that/Owing to I'm very pleased with their work on our home. At any rate/'Accordingly'/Having said that, I think they could have made a better job of the painting.
- d) I missed two weeks' training because of flu last month. *To put it another way/As a result/To tell the truth,* I'm not expecting to run very well in today's race.
- e) They've had a very difficult time. *On top of that/At any rate/To start with*, their home was burgled.
- f) What a terrible experience! *Anyway/In contrast/By the way*, you're safe now that's the main thing!
- g) She's a sociable girl with lots of friends. Even so/Furthermore/To some extent, she can get lonely, like anyone else.
- h) He comes across as being very full of himself, *in contrast/broadly speaking/whereas* he's actually a very nice guy.
- i) *Nonetheless/On the whole/Hence* I agree with what you're saying, but I'm not sure about your last point.
- j) I seem to be giving the impression that I didn't enjoy my time in Norway. After all/Having said that/On the contrary, I had a wonderful time.

2. Read the text and decide which answer $(A,B\ or\ C)$ best fits each space

put forward and they agreed that it would be a highly profitable business.' Sure enough, within five years the Leggats were exporting trout and salmon products to hotels all over Europe, and (5) they took on over fifty staff. (6) , with the advent of the recession, they began to lose ground as orders dried up. '(7) , said Brenda Leggat, 'the business has now been valued by the bank at a fraction of its true worth. If they had left us to work our way out of our difficulties, (8) virtually bankrupting us, I am sure that we could have gone back into profit. As it is, we have been left without a livelihood, and the bank has not recovered what it lent us.' The Leggats both felt that their banks had not treated them fairly. '(9) , they were falling over themselves to lend us the money initially, (10) now they are doing very little to keep the business going, and fifty local people in work.' A spokesman for the bank concerned refused to comment.

1	A Moreover	B On the other hand	C As well as
2	A At least	B However	C To make matters worse
3	A Incidentally	B At any rate	C As a result
4	A To put it another way	B Nevertheless	C In contrast
5	A what's more	B on the other hand	C to tell the truth
6	A Hence	B Consequently	C However
7	A In contrast	B Whereas	C To make matters worse
8	A as opposed to	B as well as	C in addition to
9	A However	B To tell the truth	C As a result
10	A as well as	B whereas	C on the other hand

Phrasal verbs

There are a lot of phrasal verbs in English. Here some of them are presented.

A 11 (1	77
Add up (make sense)	His evidence just doesn't add up.
Ask after (inquire about)	Jim was asking after you.
Back down (yield in an	Sheila was right, so Paul had to back down.
argument)	
Bargain for (take into	We hadn't bargained for there being so much
account)	traffic, and we missed the plane.
Bear out (confirm the	Helen's alibi was borne out by her sister.
truth)	
Break down (lose control	David broke down and wept when he heard
of the emotions)	the news.
Break off (stop talking)	He broke off to answer the phone.
Break up (come to an end)	The party finally broke up at 3.00 am.
Bring about (cause to	The crisis was brought about by Brenda's
happen)	resignation.
Bring off (succeed in	The team tried for years to win the
doing something)	competition and they finally brought it off .
Bring on (cause the onset	Sitting in the damp brought on his
of an illness)	rheumatism.
(cause trouble to happen	You have brought this on/upon yourself.
to oneself)	
Bring round (influence	After much discussion, I brought the
someone to your point of	committee round to my point of view.
view)	
Bring up (mention)	I feel I ought to bring up another small
	matter.
Call up (mobilise for	Mark was called up when the war broke out.
military service)	<u>-</u>
Carry off (complete	Jane had a difficult role to play, but she
successfully - perhaps	carried it off.
despite a problem)	

Carry out (complete a	The attack was successfully carried out.
plan)	
Catch on (become popular	This new hair style is beginning to catch on.
- colloquial)	
Come about (happen)	Let me explain how the situation came about.
Come down to (be in the	It all comes down to whether you are
end a matter of)	prepared to accept less money.
Come in for (receive -	The government has come in for a lot of
especially criticism,	criticism over the decision.
blame)	
Come off (take place	I'm afraid that deal didn't come off after all.
successfully)	
Come out (appear)	All the flowers have come out.
	My photos didn't come out very well.
Come up (occur - usually	Look, something has come up , and I can't
a problem - colloquial)	meet you.
Come up against (meet a	We've come up against a bit of a problem.
difficulty)	
Come up to (equal -	The play didn't come up to expectations.
especially expectations,	
standard)	
Come up with (think of -	We still haven't come up with a solution to
especially an answer, a	the problem.
plan, a solution)	
Count on (rely on)	Don't worry, you can count on me.
Crop up (happen	I can't come to your party, something has
unexpectedly - colloquial)	cropped up.
Do away with (abolish -	Dog licences have been done away with.
colloquial)	
(murder - colloquial)	What if they do away with the old man?
Do up (decorate -	We are having our living room done up.
colloquial)	
Draw up (come to a stop)	A white sports car drew up outside the door.
Draw up (organise -	The contract is being drawn up at the
especially a document)	moment.
Drop in (pay a visit -	Drop in any time you're passing.
colloquial)	

D 66 (6.11 1	
Drop off (fall asleep -	The baby has just dropped off.
colloquial)	
End up (finish in a certain	We ended up staying there for lunch.
way, or place)	The car ended up in a ditch.
Face up to (have courage	You have to face up to your responsibilities.
to deal with - especially	
responsibilities)	
Fall about (show	Everyone fell about when Jane told her joke.
amusement - especially	
laughing - colloquial)	
Fall back on (use as a last	If the worst comes to the worst, we've got our
resort)	savings to fall back on.
Fall for (be deceived by -	It was an unlikely story but he fell for it.
colloquial)	
(fall in love with -	I fell for you the moment I saw you.
colloquial)	
Fall out with (quarrel	Peter has fallen out with his boss.
with)	
Fall through (fail to come	The plan fell through at the last minute.
to completion)	
Feel up to (feel capable of	Old Mr Smith didn't feel up to walking all
doing)	that way.
Follow up (act upon a	Thanks for the information about that book.
suggestion)	I'll follow it up.
(take more action)	We'll follow up this lesson next week.
Get across (be understood	I had the feeling I wasn't getting the meaning
- especially get an idea	across.
across)	
Get at (imply - about	What are you getting at exactly?
personal matters -	
colloquial)	
Get down to (begin to	It's time we got down to some real work.
seriously deal with)	
Get off with (avoid	They were lucky to get off with such light
punishment)	sentences.
Get on for (approach a	He must be getting on for seventy.
certain age/time/number)	

Get on (make progress -	Sue is getting on very well in her new job.
especially in life)	sue is getting on very well in her new job.
Get over (be surprised)	I couldn't get over how well she looked.
Get over with (come to the	I'll be glad to get this awful business over
end of something, usually	with.
unpleasant)	
Get round to (find time to	Sorry, but I haven't got round to fixing the
do - also around)	tap yet.
Get up to (do something -	The children are getting up to something in
usually bad when about	the garden.
children - colloquial)	What have you been getting up to lately?
Give away (betray)	His false identity papers gave him away.
Give off (send off a smell	The cheese had begun to give off a strange
- liquid or gas)	smell.
Give out (be exhausted)	When our money gave out we had to borrow
	some.
Give over (abandon,	The rest of the time was given over to playing
devote)	cards.
(stop - colloquial)	Why don't you give over! You're getting on
	my nerves.
Give up (surrender)	The escaped prisoner gave herself up .
(believed to be dead or	After ten days the ship was given up for lost.
lost)	
Go back on (break a	The management has gone back on its
promise)	promise.
Go in for (make a habit of)	I don't go in for that kind of thing.
(enter competition)	Are you thinking of going in for the race?
Go off (become bad -	This milk has gone off .
food)	gene egg.
Go on (happen - usually	Something funny is going on .
negative)	20
Go round (be enough)	There weren't enough life-jackets to go
Co Touria (oc chough)	round.
Go through with	When it came to actually stealing the money,
(complete a promise or	Nora couldn't go through
plan - usually unwillingly)	with it.
pian - usuany unwiningly)	will it.

Grow on (become more	This new record is growing on me.
liked - colloquial)	
Hang onto (keep -	I think we should hang onto the car until next
colloquial)	year.
Have it in for (be	My teacher has (got) it in for me.
deliberately unkind to	
someone - also as have	
got)	
Have it out with (express	I put up with the problem for a while but in
feelings so as to settle a	the end I had it out with her.
problem)	
Have someone on	I don't believe you. You're having me on.
(deceive - colloquial)	
Hit it off (get on well with	Mark and Sarah really hit it off at the party.
- colloquial)	
Hit upon/on (discover by	They hit upon the solution quite by chance.
chance - often an idea)	
Hold out (offer -	We don't hold out much hope that the price
especially with <i>hope</i>)	will fall.
Hold up (delay)	Sorry I'm late, I was held up in the traffic.
(use as an example - i.e. a	Jack was always held up as an example to
model of good behaviour)	me.
Hold with (agree with - an	I don't hold with the idea of using force.
idea)	
Keep up (continue)	Well done! Keep up the good work!
Lay down (state a rule -	The company has laid down strict
especially lay down the	procedures for this kind of situation.
law)	
Let down (disappoint,	Sony to let you down , but I can't give you a
break a promise)	lift today.
Let in on (allow to be part	We haven't let Tina in on the plans yet.
of a secret)	
Let off (excuse from	As Dave was young, the judge let him off
punishment)	with a fine.
Let on (inform about a	We're planning a surprise for Helen, but
secret - colloquial)	don't let on.

Live down (suffer a loss	If City lose, they'll never live it down.
of reputation)	
Live up to (reach an	The play quite lived up to my expectations.
expected standard)	
Look into (investigate)	The police have promised to look into the problem.
Look on (consider)	We look on this town as our real home.
Look someone up (visit	If you're passing through Athens, look me
when in the area)	up.
Make for (result in)	The power steering makes for easier parking.
Make off with (run away	The thief made off with a valuable necklace.
with) Make out (pretend)	Tim made out that he hadn't seen the No
Make out (pretend)	Smoking sign.
(manage to see or	I couldn't quite make out what the notice
understand)	said.
Make someone out	Janet is really odd. I can't make her out .
(understand someone's	
behaviour)	
Make up (invent)	I think you made up the whole story!
Make up for (compensate for)	Our success makes up for all the hard times.
Miss out (fail to include)	You have missed out a word here.
(lose a chance -	Five people got promoted, but I missed out
colloquial)	again.
Own up (confess -	None of the children would own up to
colloquial)	breaking the window.
Pack in (stop an activity -	John has packed in his job.
colloquial)	
Pay back (take revenge -	She paid him back for all his insults.
colloquial)	
Pick up (improve -	The weather seems to be picking up.
colloquial)	
Pin someone down (force	I asked Jim to name a suitable day, but I
to give a clear statement)	couldn't pin him down .

Play up (behave or work	The car is playing up again. It won't start.
badly)	The car is paying up again. It won't start.
Point out (draw attention	I pointed out that 1 would be on holiday
to a fact)	anyway.
Pull off (manage to	It was a tricky plan, but we pulled it off .
succeed)	The was a trickly plant, our we pulled it off.
Push on (continue with	Let's push on and try to reach the coast by
some effort - colloquial)	tonight.
Put across (communicate	Harry is clever but he can't put his ideas
ideas)	across.
Put down to (explain the	Diane's poor performance was put down to
cause of)	nerves.
Put in for (apply for a job)	Sue has put in for a teaching job.
Put oneself out (take	Please don't put yourself out making a meal.
trouble - to help someone)	A sandwich will do.
Put off (discourage, upset)	The crowd put the gymnast off , and he fell.
Put up (offer	We can put you up for a few days.
accommodation)	
Put up with (tolerate,	I can't put up with all this noise!
bear)	
Rip off (charge too much	You paid £50? They really ripped you off !
- colloquial)	
Run down (criticise)	She's always running down her husband.
(lose power, allow to	I think the batteries are running down.
decline)	
Run into (meet)	Guess who I ran into at the supermarket!
Run to (have enough	I don't think we can run to a holiday abroad
money)	this year.
Run over (check - also run	Let's run over the plan once more.
through)	
Run up (a bill - let a bill	I ran up a huge telephone bill at the hotel.
get longer without paying)	
Run up against (encounter	We've run up against a slight problem.
- usually <i>a problem)</i>	
See someone off (go to	I went to the station to see them off.
station, airport, etc. to say	
goodbye to someone)	

See through (realise the	I saw through his intentions at once.
truth about)	1 saw infough his intentions at once.
Send up (make fun of by	Jean is always sending up the French
imitating)	teacher.
Set about (start working)	We must set about re-organising the office.
Set in (establish itself -	I think this rain has set in for the day.
especially weather)	Timink into rain has set in for the day.
Set out (give in detail in	This document sets out all the Union
writing)	demands.
(arrange)	I've set out the refreshments in the hall.
(start an action)	Sue set out to write a biography but it
	became a novel.
Set up (establish)	An inquiry into the accident has been set up.
Set (up) on (attack)	We were set upon by a gang of hooligans.
Sink in (realise slowly -	Slowly the realisation that I had won began
colloquial, intransitive)	to sink in.
Slip up (make a mistake -	Someone slipped up and my application was
colloquial)	lost.
Sort out (find a solution -	Don't worry, Mary will sort out your
colloquial)	problems.
Stand by (keep to an	The company agreed to stand by its original
agreement)	commitment.
Stand for (represent -	E.g. stands for exempli gratia, it's Latin.
initials)	
(tolerate)	I will not stand for this kind of behaviour in my house!
Stand in for (take the	7
Stand in for (take the place of)	Carol has kindly agreed to stand in for Graham at the monthly meeting.
Stand up to (resist, bear	The engine won't stand up to the strain.
stress)	The engine won't stand up to the strain.
Step down (resign -	The Chairman has stepped down after
colloquial)	criticism from shareholders.
Step up (increase)	Production at the Leeds plant has been
	stepped up.
Stick up for (defend -	You must learn to stick up for yourself.
especially yourself, your	
rights - colloquial)	

Take in (deceive)	Don't be taken in by her apparent shyness.
Take (it) out on (make	I know you are unhappy, but don't take it out
someone else suffer	on me!
because of one's own	
sufferings)	
Take off (imitate -	Dave takes off the Prime Minister really
colloquial)	well.
Take on (acquire a new	My grandmother has taken on a new lease of
characteristic)	life since her operation.
(do something extra)	She has taken on too much with a full-time
	job as well.
Take out (insurance - sign	Ann has taken out life insurance.
an insurance agreement)	
Take over (gain control	The army tried to take over the country.
of)	
Take to someone (develop	You'll soon take to your new boss, I'm sure.
a liking for)	
Take up (time - occupy	The meeting took up a whole morning.
time)	
Talk out of or into	Paul talked me into going skiing, against my
(dissuade from, persuade	better judgement.
into)	
Tell off (scold -	Our teacher told us off for being late.
colloquial)	
Tie in with (be in	I'm afraid your party doesn't quite tie in with
agreement with)	our arrangements.
Track down (trace the	The police tracked down the killer and
whereabouts of)	arrested him.
Try out (test - a machine)	Let's try out the new washing machine.
Turn down (reject an	Another company offered me a job but I
offer)	turned them down.
Turn out (happen to be in	He turned out to be an old friend of Helen's.
the end)	
(come to a meeting or to	Thousands of fans turned out to welcome the
form a crowd)	team.
Turn up (be discovered by	Don't worry about that missing book, it's
chance)	bound to turn up sooner or later.

(arrive - often	Not many people turned up for the lesson.	
unexpectedly)		
Wear off (lose effect -	These painkillers wear off after about two	
especially a drug)	hours.	
Work out (calculate - also	The hotel bill worked out at over £500.	
work out at for specific		
amounts)		

1. Put one suitable word in each space

- 1) When I give an order I expect it to be <u>carried</u> out.
- 2) Getting up so early really gets me
- 3) It was a good idea, but I'm afraid it didn't quite off.
- 4) I'm afraid that your story doesn't really up.
- 5) I was so surprised when Harry got the job, I couldn't over it.
- 6) Terry's new book out next week.
- 7) Someone was after you in the club yesterday.
- 8) I tried to get an early night, but just as I was off, the phone rang.
- 9) Neil was too embarrassed to up the question of who would pay.
- 10) The police didn't up Bill's complaint about his neighbours.
- 11) We can't watch that programme if the television is.....up again.
- 12) This novel is beginning to on me.
- 13) It is quite clearly down that only amateurs can take part.
- 14) Sales were slow to start with, but now they're..... up.
- 15) I don't want to you off, but this type of plane has crashed quite often.
- 16) Two members of the gang eventually themselves up.
- 17) We out that we had forgotten Jane's birthday, though it wasn't true.
- 18) There should be enough plates to round.
- 19) What does that notice say? I can't it out.
- 20) Hilary told me to her up the next time I was in London.
- 21) The government has allowed the coal industry to run
- 22) Robert was set by two masked men and robbed.
- 23) Why didn't you stick for me instead of saying nothing?
- 24) Let's run the details of the arrangements just once more.
- 25) Most of my time is taken with answering the phone.
- 26) I've run against a number of difficulties in this area.

- 27) The buffet was set on a number of low tables. 28) The next day, teams of local people set clearing up the damage. 29) No one expected the government to stand...... the agreement. 30) Hundreds of people turned in the rain to see the prince. 2. Complete the following extracts with a word or phrase that is a more formal version of the informal words in brackets. Then say where each extract comes from a) The three publishers who (1) rejected (turned down) this fantastic first novel must be kicking themselves. John Carter's Capital City is a wonderful read and all the more amazing when one considers the author is just 23. What Carter may lack in experience he more than (2).....(makes up for) in sheer enthusiasm. Read it and I promise you won't feel (3)..... (let down). b) I (1)..... (set up) my own business, 'Sarah Castle Photography Ltd,' two years ago, after (2)..... my post (stepping down) as a TV camera person. I now (3)..... (do mostly) native pictures. c) Dear Mr and Mrs Sinclair, I do apologise, but I am unable to come to your daughter's wedding on 21 May. Unfortunately, it (1) (happens at the same time as) a holiday I've already booked. When I booked it, I was (2)..... (thought) that the wedding was to (3)(happen) in July. d) Dear Mr Smith, This is to remind all employers that Tax Rule 13d has been (1)(done away with), so you are now (2)...... (don't have to) declare any earnings for your company relating to 'ancient debts'. This term shall be deemed to refer to money owed to you from seven years ago or more. We would also (3)..... to (point out to you) the fact that column 3 on page 6 of your tax declaration can now be left blank. 3. Complete each group of three sentences with one particle Example: a. I really don't know what you're goingabout. b. Let's push: we're starting to fall behind. c. Everyone was cheering him on
- 1. a Some of the runners started to fall as the pace quickened.

b Can you phone me this morning?
c Cast your minds to this morning.
2. a I'm a bit tied at the moment. Can I call you later?
b They split after ten years of marriage.
c A car pulled outside the building.
3. a The business has to branch into new areas.
b He kept trotting the same old excuses.
c The minister was voted at the election.
4. a He was due to appear but cried at the last minute.
b The protesters were aiming for the town centre but police managed to
head them
c The match was rained
5. a We've been waiting for ages with nothing to do.
b How do you go persuading someone as obstinate as her?
c Stop standing and get on with it.
6. a This constant noise really wears you after a while.
b It seems that the choices boil to just two possibilities
c It's time the police started to crack on this sort of behaviour.
7. a They pored the map, trying to find the best route.
b I'm just going to nip to Jan's to see how he is.
c Isn't it time we swapped?
8. a Let's move to the next item on the agenda.
b It's hard work but we'll soldier
c I wouldn't wish that my worst enemy.

4. Many phrasal verbs of similar meaning use the same particle. Find the group of two verbs (b-k) that could replace the verb in italics in the sentences 1-10 without changing the particle. You will need to put the verbs in a suitable form.

Example:

I don't understand what you're going on about.

- a. rabbiting / droning
- (a rabbit drone)
- b. match measure
- c. cough stump
- d. level fall
- e. fade ebb
- f. howl hoot

- g. lounge stand
- h. shovel wolf
- i. chew mull
- j. hold fight
- к. beaver slog
- 1. Sales have *eased* off slightly in the last few months.
- 2. Any attempt at reasoned explanation was simply *shouted* down by the mob.
- 3. The cup final certainly *lived* up to expectations.
- 4. It was a huge plateful but William ate it all up.
- 5. He'll complain, but he usually *pays* up in the end.
- 6. The sound of the party *died* away as we drove off.
- 7. She *choked* back her tears as she waved goodbye.
- 8. I'm fed up *hanging* around here with nothing to do.
- 9. She spent ages *pondering* over her next step.
- 10. He kept working away at the problem all evening.

5. Read the text below and decide which word (a, b, c or d) best fits each gap

One doesn't have to (1)....... back too far to a time when anyone who wanted to get (2)...... from it all could disappear into the wilderness to seek their fortune. These days, jet travel has shrunk the world, the remaining wildernesses are fast (3)...... away, and anyone searching for a fortune sets (4)...... to enter Business School. But sometimes you can feel it all (5)........ down on you and you know you have to escape and see the world. You wake up in the morning, you get up and have breakfast if you can afford it, and head (6)for who knows where. And the only thing you know for sure is that you don't know where you'll be that night.

1. a drop	b think	c get	d stick
2. a out	b off	c away	d down
3.a slipping	b stripping	c stowing	d sweeping
4.a about	b down	c up	d out
5.a bearing	b boiling	c batten	d break
6. a up	b towards	c back	d off

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