

INSIGHT

A clear gain

Frederic Neumann and Wai-Shin Chan say a carbon tax would not only be good for China's environment, but would bring the economy the benefits of efficiency and extra revenue

That China needs to give its growth engine a tune-up is hardly in doubt. With the economy slowing for the past several years, all eyes are on the third plenum of the Communist Party. Hopes are that the leadership will unveil structural reforms aimed at putting the economy on a sustainable trajectory. Interest rate liberalisation, privatisation and deregulation are high on the wish list of investors and reformers alike.

But there is an equally important, if less talked about, potential initiative: a carbon tax. With China recently topping the US as the world's biggest contributor to greenhouse gases, and its cities periodically gripped by crippling smog, a levy on carbon emissions would be among the most consequential reforms officials could adopt. The Ministry of Finance has already proposed its introduction. It now needs the explicit backing of the leadership to see the light of day.

China has made vast strides in environmental protection in recent years. But a lot more needs to be done to curb harmful emissions. Various schemes are being tried. A cap-and-trade system is already up and running in Shenzhen and is slated to start in six other pilot regions.

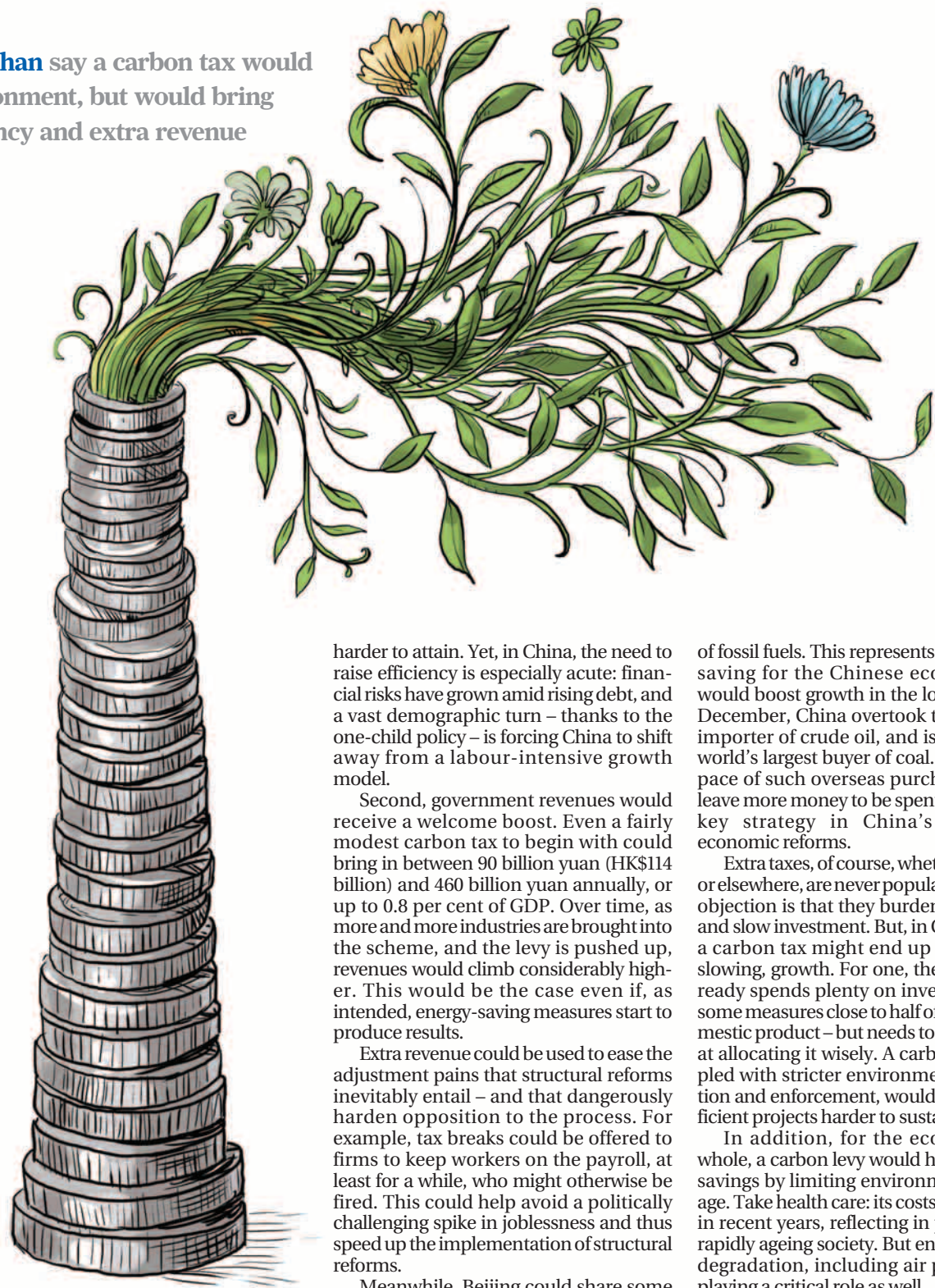
But arguably easier to implement in China, and thus among the most promising, is a fixed charge per tonne of carbon emitted by industrial polluters. This would rise over time, progressively strengthening incentives for the adoption of cleaner technology.

With production becoming less carbon-intensive, the environmental benefits are obvious. Cao Jing, an economist at Tsinghua University in Beijing, estimates that even a gradual introduction of a carbon tax would cut emissions by a whopping 19 per cent by 2020. This would go a long way towards meeting China's pledge of reducing the carbon emitted per unit of gross domestic product – though not the absolute level of emissions – by 40-45 per cent from 2005 levels by the end of the decade.

Less well understood, but of equal importance, are the economic benefits.

First, a carbon tax would encourage gains in overall efficiency by spurring the adoption of more advanced technology. With productivity growth slowing, raising the cost of energy would force broader rationalisation in many pockets of Chinese industry, including steel and cement where highly inefficient producers continue to operate.

Boosting productivity growth is key to sustaining China's growth. Naturally, as the economy matures, such gains will be



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harder to attain. Yet, in China, the need to raise efficiency is especially acute: financial risks have grown amid rising debt, and a vast demographic turn – thanks to the one-child policy – is forcing China to shift away from a labour-intensive growth model.

Second, government revenues would receive a welcome boost. Even a fairly modest carbon tax to begin with could bring in between 90 billion yuan (HK\$114 billion) and 460 billion yuan annually, or up to 0.8 per cent of GDP. Over time, as more and more industries are brought into the scheme, and the levy is pushed up, revenues would climb considerably higher. This would be the case even if, as intended, energy-saving measures start to produce results.

Extra revenue could be used to ease the adjustment pains that structural reforms inevitably entail – and that dangerously harden opposition to the process. For example, tax breaks could be offered to firms to keep workers on the payroll, at least for a while, who might otherwise be fired. This could help avoid a politically challenging spike in joblessness and thus speed up the implementation of structural reforms.

Meanwhile, Beijing could share some of the extra income with local governments, reducing their reliance on land sales at inflated prices to plug budget gaps. The Ministry of Finance has already budgeted 5 billion yuan to reward local authorities if they meet pollution reduction targets. Such revenue sharing from a carbon tax would also reduce the need to add more debt to pay for infrastructure investment, something that has fuelled the precarious growth of the shadow banking system in recent years.

Third, a carbon tax would slow imports

of fossil fuels. This represents a direct cost saving for the Chinese economy that would boost growth in the long run. Last December, China overtook the US as an importer of crude oil, and is already the world's largest buyer of coal. Slowing the pace of such overseas purchases would leave more money to be spent at home – a key strategy in China's structural economic reforms.

Extra taxes, of course, whether in China or elsewhere, are never popular. One ready objection is that they burden businesses and slow investment. But, in China's case, a carbon tax might end up raising, not slowing, growth. For one, the country already spends plenty on investment – by some measures close to half of its gross domestic product – but needs to work harder at allocating it wisely. A carbon tax, coupled with stricter environmental regulation and enforcement, would render inefficient projects harder to sustain.

In addition, for the economy as a whole, a carbon levy would help generate savings by limiting environmental damage. Take health care: its costs have soared in recent years, reflecting in part China's rapidly ageing society. But environmental degradation, including air pollution, is playing a critical role as well.

A recent statistical study estimates that life expectancy in northern China was cut short by five years thanks to a rise in pollution-related illnesses. Clearly, a carbon tax alone would not remedy this. But it would offer an important first step in curbing the hidden costs of pollution, and, in the process, help China's economy evolve along a more sustainable path.

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Real dialogue

Peter Kammerer says public consultation needs to be more transparent, and reserved for only the most important community issues



Those of us who pay taxes, vote and obey laws should have already fulfilled our civic duties. Not so, says the government. We also need to participate in public consultations: lots of them. With the recent closing of one on intangible cultural heritage, there are 10 to make views known on.

Participation is not compulsory in our society of part-democracy. Nor would many of us have an interest in much of what gets put forward. Elsewhere, they would be capably handled by lawmakers and civil servants. But Hong Kong is awash with public funds and governed by people unwilling to make the decisions they are paid so handsomely to carry out.

I long believed authorities thought the consultations were necessary to compensate for the lack of full universal suffrage. But when the narrowly focused topics of some of the consultations are considered, this can hardly be the reason. One at the moment, for renewal of PCCW's domestic pay television programme service licence, can be of interest only to subscribers and other TV providers. Deepening the mystery is why the substantially more important matter of which companies should be awarded free-to-air TV licences was left entirely in the hands of the Executive Council.

Questions about whether viewers are satisfied with the programming of TVB and ATV would have not only been informative for authorities, but also made for entertaining reading. I am not so sure that this is what will be obtained from responses to the current opinion-gathering exercises on the "2014 Digital 21 Strategy", the findings of the task force on external lighting, a monorail network for Kowloon East or review of the patent system.

This is not to belittle the public consultation process. The majority of the issues presently open for views are important to Hong Kong and the community. We are also being asked for opinions on a harbourfront authority, population policy, municipal solid waste charging, a long-term housing strategy and testing of people suspected of taking drugs and their referral for treatment. They are all arguably matters worthy of opinion-taking before being considered by policymakers and legislators.

Where it all falls down, though, is that the process lacks transparency. Rarely are we given a detailed breakdown of the responses and how many and who participated. Sometimes, decisions we should have been consulted on are made without public input.

Public consultation could be a worthwhile practice even were we to have universal suffrage – but it should not by any means be a necessity. Rather, it should be reserved for the most important community matters. With lawmakers earning HK\$80,000 a month plus expenses and government ministers and civil servants among the highest paid in the world, we should be making people in public office earn what we pay them to do.

If they are unable to deliver, we can let them know what we think of them through the media and other channels of objection; when we get to elect them, they can be thrown out of office. Stumping up even more than we already do through holding unnecessary consultations wastes valuable time and resources.

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Trilingual Hong Kong must plant seeds of language learning at the right time

William Wang says education chiefs have to recognise children need exposure to English early on

Last week, Education First published the results of its English Proficiency Index – a comprehensive ranking of English ability. In addition to ranking 60 countries and territories by their English skills, it includes, for the first time, an analysis of English proficiency trends over a six-year period.

Proficiency in a language means many different skills: speaking and listening, reading and writing, formal and informal use, etc. Different tasks require different skills, and individuals vary significantly in their abilities in acquiring these skills. Without probing these complex issues in depth here, it is nonetheless interesting to scan their ranking.

Topping the list of 60 is Sweden, followed by Norway, which holds no surprise. After all, these two languages are both Germanic, as English is; they are about as close to each other as Cantonese and Putonghua. However, I did not expect Estonia (4) and Finland (7) to rank so high. These two languages are quite distant from Germanic languages in terms of their linguistic lineage.

As for the BRIC countries, India (21) is the only one in Tier 3, which Education First categorises as "moderate proficiency". As a former British colony, India is a multilingual country where English is an official language.

In the Tier 4 group of "low proficiency", China (34) has been rising fast in the ranking. In 2011, China was the world's top source of overseas students, more than half of them going to the US, Britain and Australia.

This continues to be an important force driving up English proficiency, assuming the economy keeps booming.

Hong Kong (22) is in Tier 3, just below India; like India, it was a British colony and has retained English as an official language. When Hong Kong was reunified with China, the policy was for biliteracy (Chinese and English) and trilingualism (Cantonese, Putonghua and English). Comparison is frequently made here with Singapore (12), which together with Malaysia (11) are the only two Asian nations

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ranked in Tier 2, described as "high proficiency". However, the comparison is not totally apt, given the fundamental overhaul that has taken place since 1997, and the inevitable rise in the importance of Putonghua.

Obviously, much work needs to be done if Hong Kong is to retain its English advantage as a "world city" in Asia. South Korea (24), Japan (26) and Vietnam (28) are not far behind in Tier 3. The answer to the language challenge is not sacrificing Cantonese and Putonghua to make room for more English.

Trilingualism is clearly what Hong Kong needs – a world language, a national language, and a community language. All three must be nurtured to grow to their full potential; Cantonese remains important as a community language.

Neither can the language challenge be met by just throwing more and more money into the pot; more mediocrity is still mediocrity. The critical question here is, how to invest for the best results?

From the perspective of what we now know about how the brain learns, the answer is in the timing.

Learning a language consists of acquiring many types of skills. These include at least the following: moving your tongue and other organs to form a variety of sounds, memorising thousands of words and phrases and knowing how they are used, mastering the grammar so that the sounds, words and phrases can be strung together for saying what you want and for understanding what others say, all in real time.

For learning Chinese, there is the added challenge of the written language.

Neuroscience research over recent decades has shown convincingly that the brain begins to attend to language almost as soon as the auditory system is in place, even while in the womb. The infant is an incredible learning machine, and can sort out the important features of speech sounds of several languages before it is a year old, months before it can produce them.

During early childhood, the phonetic systems of three languages can be soaked up by the brain as easily as one. Such timing is paralleled by learning other sensory motor skills, such as a sport or a musical instrument.

Unfortunately, the difficulty for this kind of learning increases very steeply after puberty. Yet, ironically, that is when they start classes in foreign languages in most education systems in the world.

English proficiency, or proficiency in any language, depends on presenting the child early on with exposure to the language at the right time in the right setting. There are other relevant factors as well, of course, such as the quality of the teacher and the teaching methods used. But by far the most important, to my mind, is to present the language when the brain is most ready for it.

The seed will grow if, and only if, it is planted during the right season. We can only hope policies in language education will catch up soon with this wisdom.

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Can China fulfil its untapped economic growth potential?

Zhang Jun says studies highlight the importance of raising productivity

China's economic slowdown has fuelled widespread speculation about the economy's growth potential. While it is impossible to predict China's growth trajectory, understanding the economy's underlying trends is the best way to derive a meaningful estimate.

Some economists compare China to Japan in the early 1970s. After more than two decades of sustained rapid growth, Japan's economy slackened in 1971, leading to four decades of annual growth rates averaging less than 4 per cent.

This correlation is reinforced by the convergence hypothesis, which states that a rapidly growing developing economy's real growth rate will slow when it reaches a certain share of the per capita capital stock and income of an advanced economy. According to economists Barry Eichengreen, Donghyun Park and Kwanho Shin, that share is about 60 per cent of America's per capita income (at 2005 international prices).

At first glance, the experiences of Asia's most advanced economies – Japan and the four "Asian tigers" (Hong Kong, Singapore, South Korea and Taiwan) – seem to be consistent with this theory.

But Eichengreen, Park and Shin also found that once this income level is reached, annual growth rates tend to fall by no more than two percentage points. Yet GDP in Japan plummeted by more than 50 per cent. Likewise, the Asian Tigers suffered a substantial slowdown. These inconsistencies can be

explained by external shocks. During Japan's boom, its total factor productivity, or the efficiency with which inputs are used, contributed about 40 per cent to GDP growth. When growth plummeted, this productivity fell even faster – a dramatic change clearly linked to the 1971 yen appreciation and the 1973 oil crisis.

External shocks also explain China's slowdown in gross domestic product since 2007. The renminbi's gradual appreciation against the US

Structural reform should be aimed at creating conditions for economic transformation

dollar is the cost shock's main driver, but the demand shock that followed the 2008 global financial crisis aggravated the situation. It is likely that total factor productivity has declined substantially.

Followers of the Austrian economist Joseph Schumpeter view cost shocks as important potential catalysts for structural reform and industrial upgrading.

The problem is that many factors, such as political concerns, can impede this process. If China's government fails to implement the necessary structural reforms, its potential

growth rate will never rebound fully.

Given that improving overall productivity is the best way to defend against cost shocks, the new round of structural reform should be aimed at creating conditions for economic transformation and upgrading.

Considering China's per capita income amounts to only about 10-20 per cent of that of the US, its growth potential, as dictated by the convergence hypothesis, is far from tapped. But the degree to which it can fulfil it will depend on its total factor productivity prospects.

In 2007, economists Dwight Perkins and Thomas Rawski estimated that, for China's economy to maintain 9 per cent growth and a 25-35 per cent investment ratio until 2025, it would need to maintain an annual total factor productivity growth rate of 4.3 per cent to 4.8 per cent. This is improbable.

Maintaining 6 per cent annual growth with the same investment ratio would require annual total factor productivity growth of only 2.2-2.7 per cent. With China's productivity still well below that of developed countries, 3 per cent growth in total factor productivity is feasible. Aided by structural reforms, China's economy could expand even faster, achieving 7-8 per cent annual growth over the next 10 years. Either way, convergence will remain swift.

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