COMMENTARY

What the Paris climate deal could mean for Singapore in 2030

By Gautam Jindal, Melissa Low and Ho Juay Choy

IN PARIS last month, countries adopted a global agreement that commits both developed and developing countries to contribute towards collective global action till 2030 on reducing emissions of greenhouse gases, and helping poor countries manage climate change impact. But the successful conclusion of the negotiations marks only the beginning of a journey in which each country will share the responsibility to save our planet from catastrophe.

Singapore played a key role in Paris, with its ministers and officials acting as facilitators to help countries reach agreement on thorny issues. Now, Singapore will also play its part as part of the global effort and thus will need to respond to the Paris Agreement's provisions over the next 15 years.

In 2009, as part of its Copenhagen pledge, Singapore committed that, by 2020, it would implement measures that will reduce its annual greenhouse gas emissions by 7-11 per cent below the business-as-usual (BAU) scenario. The BAU scenario emissions were projected to reach 77.2 million tonnes by 2020; thus the 7-11 per cent reduction target would require annual emissions to be brought down to 68.7-71.8 tonnes instead.

The pledge also contained a further commitment that Singapore will achieve a reduction of 16 per cent below BAU levels, if a legally binding global agreement is reached. Singapore has reiterated this commitment numerous times, such as in its Intended Nationally Determined Contribution (INDC), which is the 2030 target that Singapore submitted before the Paris negotiations.

Now that the Paris conference has resulted in a legally binding agreement, Singapore will have to further bring down its annual emissions to some 65 million tonnes by 2020. While the Singapore Sustainable Blueprint clearly shows the planned reductions to be achieved by sectors such as power generation, industry, transport, etc, to meet the 7-11 per cent target, Singapore must now relook how each of these sectors can dig deeper and contribute towards the stricter target with only four years to go.

REVIEW MECHANISM

The Paris Agreement has also established a review mechanism with a five-year cycle, wherein countries are required to submit a revised, more ambitious target every five years after 2020. The rationale is that as time progresses, new technological and economic advancements will allow countries to reduce more emissions cost-effectively and provide greater financial or technology transfer to countries that require such assistance.

In its current pledge submitted before the Paris Agreement, Singapore communicated that it intends to reduce its emissions intensity – that is, emissions per S$GDP – by 36 per cent as compared to 2005 levels by 2030. Thus, by 2025, Singapore should be prepared to submit an even more ambitious target for 2030 and thereafter. This may prove challenging.

As a small island state with limited land and limited access to renewable energy, and having already converted most of the power generation to the cleanest fossil fuel possible, Singapore does not have any other alternatives to achieve the required reductions. At the same time, petrochemical companies can be expected to continue adding refining capacity to their operations here. Thus, it is no surprise that achieving the 36 per cent emissions intensity reduction is by itself a "stretch goal".

Towards this effort, Singapore has been actively promoting solar photovoltaic (PV) systems. However, there are concerns that irregular output of PV due to cloud formations can cause damage to electrical equipment if PV is deployed on a large scale. Thus, for the time being, the Energy Market Authority (EMA) has placed a cap of 600 megawatts of PV installation for Singapore. However, as and when there are improvements in technologies – such as accurate solar forecasting, demand management and battery storage – Singapore should be able to accommodate higher amounts of PV capacity.

Energy efficiency will also have to play a significant role in this effort. The Energy Conservation Act, currently in its formative years, mandates corporations to meet certain criteria in appointing energy managers, monitoring and reporting energy consumption, and developing energy efficiency improvement plans.

IMPROVING ENERGY EFFICIENCY

This is a logical first step, as it allows the government to collect necessary data and develop a baseline, while giving companies the time to develop their long-term energy management strategies. In time, the Act should ideally graduate towards mandating companies to achieve certain levels of energy efficiency improvement by adopting the best possible technology and efficient practices.

Other initiatives – such as promoting the adoption of electric vehicles, the use of more energy-efficient appliances, and mandating stricter green building codes – could provide areas for achieving the required additional reductions.

The Paris Agreement recognises that, for some countries, achieving emissions reduction internally may not be feasible due to technology or economic factors. Thus, they may have to apply innovative techniques to achieve their objectives. To overcome this limitation, the Agreement has approved a mechanism whereby countries can bilaterally cooperate among themselves to achieve emissions reduction in a host country, and allow the achieved reduction to be counted towards the target of the other country.

To ensure that such a mechanism does not result in any form of double counting of efforts, transfer of credits will be possible only between two countries, both of which will have emissions reduction pledges under the Agreement. The credits will be allowed to be counted only towards the efforts of either the host country or the country that purchases the credits.

Japan has already started practising a similar mechanism called the Joint Crediting Mechanism, under which it intends to facilitate transfer of low-carbon technology to 15 countries and count the credits generated towards achieving its climate change objectives. While Singapore has clearly stated its intent to achieve the objectives outlined in its INDC through domestic action, its 2030 pledge does state that it will continue to study the potential of international market mechanisms. It would be useful for Singapore to keep a close eye on further developments in this space.

Gautam Jindal and Melissa Low are research associates at the Energy Studies Institute (ESI) of the National University of Singapore. Ho Juay Choy is an adjunct research associate professor at ESI

The Greek tragedy of being rescued by a flawed system

By Athanasios Orphanides

THE mismanagement of the euro crisis has its roots in the currency area's flawed political structure. A study of the European Union and International Monetary Fund (IMF) programme imposed on Greece in May 2010 highlights both the nature of the problem and the difficulty in resolving it.

Governments of some member states – particularly Germany – were able to exploit problems in others to support their own interests. The May 2010 programme was the original sin of the euro area crisis. Rather than help Greece, it was designed to protect specific political and financial interests in other member states, above all France and Germany.

By applying its established lending framework, the IMF could have helped contain the crisis and resolve it effectively. However, its role was counterproductive. Using a legitimate concern – the risk of contagion – as a pretext, it underwrote a programme that shifted crisis losses to Greece that other euro members could have borne.

At the end of 2009, Greece faced questions about the sustainability of its government debt, along with macroeconomic problems commonly encountered in countries turning to the IMF. Greece's euro membership created additional challenges – the government had relinquished control of its own monetary and exchange rate policy, tools that it could have used to defuse the crisis.

An IMF programme for Greece required coordination with other euro area governments and institutions. The Greek programme effectively became subject to the approval of each of the other euro governments, making decision-making dependent on other states' competing financial and political interests.

Proper crisis management should minimise the total economic cost and manage a fair distribution of losses. However, in the euro area, political survival of elected governments demands that leaders focus on public opinion in their own state – regardless of whether this leads to harmful decisions for other states and the euro area as a whole. Using the US as a benchmark, the data suggest that crisis mismanagement has generated a sustained annual loss in the euro area of about 10 per cent of gross domestic product per person. Among euro area member states, Germany has been by far the biggest and perhaps the only winner.

In Greece, the intra-euro area nominal exchange rate had to remain fixed. As a result, more of the adjustment burden had to occur via internal devaluation – a relative decline in domestic prices and wages. This is a slower process than an adjustment through nominal devaluation, suggesting that a successful IMF programme might have required a more gradual fiscal adjustment to avoid an austerity-induced economic collapse.

Euro area politicians have tried to shape public opinion in a manner favourable to their own interests. Politicians in different member states have attempted to avoid blame and – if possible – shift it to others, generating animosity and mistrust.

Available information suggests that IMF management was fully aware that the Greek programme that its board approved on May 9, 2010 was doomed to fail; it was already planning subsequent modifications, including a restructuring of the debt for a later time.

There is no denying that Greek government policies started the problem in Greece. However, had key governments not interfered with the process, and had the IMF designed a programme that respected its own rules, the Greek crisis would almost certainly have been resolved long ago without the destruction of the past five years.

The May 2010 programme protected German and French financial institutions from financial losses, and the Berlin government from political costs. But it also led to a catastrophe in Greece and set a precedent for crisis mismanagement. The euro's political and economic framework has encouraged conflict over cooperation. This has proven disastrous for the euro area as a whole and ultimately for Europe. OMFIF

This is an abridged version of an article in the Official Monetary and Financial Institutions Forum January Bulletin

The writer is a professor in the Sloan School of Management at the Massachusetts Institute of Technology. Between May 2007 and May 2012, he served as governor of the Central Bank of Cyprus and was a member of the ECB Governing Council.

Rather than help Greece, the IMF's May 2010 programme was designed to protect specific political and financial interests in other member states, above all France and Germany. PHOTO: REUTERS

The largest uncertainty comes from a perception of financial hypertrophy leading to unsustainable asset valuations and repricing of critical asset markets. PHOTO: REUTERS

Fasten your seat belts, but there is no need to panic

A quantitative modelling scenario points to a better year in 2016 for firms and investors, both in terms of currency stabilisation and overall economic activity. BY THIERRY APOTEKER

CHRISTMAS and New Year celebrations seem already very far away. With world luminaries competing on pessimism in Davos, markets on a roller-coaster and the feeling of acute uncertainty about political and economic developments in the air, cataclysmic scenarios are becoming fashionable. But they tend to over-feed themselves and ultimately make objective assessment even more difficult.

This is exactly when quantitative modelling of the sort practised at TAC Economics is of best help. Not that our models don't make mistakes, but they certainly ignore the herd and excessive psychological swings.

So, what do the models tell us for 2016? Four key messages emerge, all of them more positive than what most observers contemplate today:

■ First, economic activity in mature economies will continue to accelerate, modestly but at a reasonable cruising speed between 2.0 per cent and 2.5 per cent on average this year. This reflects a plateau in the US, where a supportive labour market and initial signs of pick-up in wages are partly compensated by the problems of the energy sector and a weaker momentum in manufacturing.

In the eurozone, domestic-driven demand is being fuelled by a competitive euro, low oil prices, some improvements in parts of labour markets and lax monetary policies.

■ Second, we do not so far see signs of an imminent collapse in China's economic activity. Here again, and despite recent softness in job creation, unemployment remains very low and wages are growing fast, while inflation is stuck near zero (in part because of falling commodity prices), implying very substantial gains in purchasing power and ultimately, strong resilience through consumption.

Problems abound, but the macro-resilience of the country remains very strong and its ability to control any critical cyclical reversal seems quite convincing. Overall, our quantitative tools suggest a year-on-year GDP growth rate for China at, or slightly lower than, 6 per cent by the end of this year or early 2017.

■ Third, the persistent imbalance in the oil market and the extraordinarily high level of inventories now suggest that prices will remain stuck at low levels at least during the first half of 2016.

But remember that below US$40 per barrel, probably 40 per cent to 50 per cent of the world oil supply is produced at a loss! Simultaneously (and this has not been widely reported), 2015 saw the fastest increase in oil demand since 2010, despite emerging markets' problems, reflecting mainly the growing demand in mature economies. The bottom line therefore is that oil prices will go up.

The timing is entirely dependent on Saudi, Iranian and Russian strategies and geopolitical moves. Further declines are plausible in the first half of the year, but our analysis suggests that an Opec agreement to cut production, combined with more rapidly declining supply elsewhere, would bring the price of Brent crude back to US$60 a barrel at the end of the year.

■ Fourth, risk materialisation in emerging markets (EM) is expected to be *lower* this year than in 2015, especially for the large EMs and for currencies. Crisis-like situations are likely to progressively dissipate (particularly in Russia and Brazil later in the year) and the positive impact of past adjustments as well as benefits from low oil prices for importers will also be drivers of improvement. Smaller EMs may however be more at risk and face stronger turbulence in 2016, notably with respect to exchange rates and constraints on their monetary and reserve policies.

This is our central scenario. But it comes with four key areas of risks, which need to be incorporated in corporate and financial strategies. These are the very risks that have become the core focus of markets and analysts in recent days.

■ The largest uncertainty comes from our perception of another round of "financial hypertrophy" – akin to the developments seen in 2007-08, leading to unsustainable asset valuations and imposing a sharp repricing of critical asset markets. This risk can be directly related to the recent years of excessively lax monetary policies that were maintained and implemented for much too long, leading to (a) excessive valuations in most asset markets as the zero-cost liquidity flowed to markets and not to real demand or credit, and (b) to less efficient and less profitable investments as the cost of capital was kept artificially low.

The major reason for not fully incorporating this risk in our central scenario is that central banks have become more flexible and certainly keenly aware of financial market gyrations and their implications. Coupled with this is a reasonably balanced outlook for corporate profits and flexibility and, indeed, a real economic outlook that remains broadly favourable.

■ The second uncertainty relates to the implications of lower oil prices on politics and geopolitics in the Middle East. The overall situation there has clearly deteriorated massively since the Arab Spring of 2011 and is facing even more intense challenges today. The Middle East has become a battleground for regional powers and their international backers. In such circumstances, there has to be huge uncertainty surrounding the plausible movements of oil prices over the next year, from persistently low levels (with implications on the currency regimes of Gulf Cooperation Council countries, obliged to devalue massively) to sharp spikes if Opec can agree on production cuts, ie if Iran and Saudi Arabia can agree to a sort of "Yalta Agreement" on their respective areas of influence.

■ The third key uncertainty in our scenario goes back to China. Indeed, large excess capacities in a slowing growth environment and higher wages are putting huge pressure on many industries and large Chinese corporates. We cannot therefore rule out a more precipitous decline in capital expenditures translating into a financial or banking panic. But again our models suggest that we are still far away from such risks materialising – although corporate defaults and domestic financial restructuring will increase rapidly.

■ Last but not least, we see growing risks related to excessive levels of corporate debt in a couple of large EMs, which could create intense "micro" problems and possibly lead to more systemic problems in these countries. The sudden turnaround of exchange rates since 2013, added to the incipient increase in dollar funding costs and much less attractive growth prospects, has put a worrying light on the ability of such corporates to refinance their debt and avoid painful industrial and financial restructuring.

None of these risks are considered highly probable, but none can be ruled out. Our central scenario and associated risks should lead companies and investors to position themselves for a better year in 2016, both in terms of currency stabilisation and in terms of overall economic activity, and for both mature economies and part of the developing world. But simultaneously there is a need to design strategies that can adapt rapidly to the key risks that continue to cloud the outlook and have potentially systemic consequences.

Thierry Apoteker is chairman of TAC Economics, a Paris-based economic consulting firm