

# Chesapeake to buy oil producer WildHorse in \$4bn deal



Chesapeake Energy Corp is buying oil producer WildHorse Resource Development Corp in a nearly \$4bn deal, it said yesterday, as it looks to increase oil production capacity during a period of rising crude prices. The Oklahoma-based oil and natural gas producer said each WildHorse shareholder will get either 5.989 shares of Chesapeake common stock, or a combination of 5.336 shares of Chesapeake stock and \$3 in cash, for each share they hold. WildHorse's shares surged 13.5% to \$20.50 in premarket trading, while Chesapeake shares slumped 8% to \$3.42. The acquisition is expected to give Chesapeake about 420,000 high-margin net acres in the Eagle Ford shale and Austin Chalk formations in Southeast Texas, and help it save between \$200mn and \$280mn in annual costs. Chesapeake has been directing its capital toward oil production and shifting away from natural gas amid a rise in crude prices and a slump in natural gas prices. "We plan to focus the vast majority of our projected 2019 activity on our high-margin, higher-return oil opportunities in the PRB and Eagle Ford Shale, while decreasing capital and activity directed toward our natural gas portfolio," Chesapeake Chief Executive Officer Doug Lawler said in a statement. Chesapeake also reported third-quarter results yesterday, which showed a

net profit of \$60mn for the three months ended September 30, compared with a loss of \$41mn a year earlier. Excluding one-time items, the company earned 19 cents per share. Wall Street analysts on average had expected 15 cents, according to Refinitiv data. It was not immediately clear if the figures were comparable. Revenue jumped to \$2.42bn from \$1.94bn.

---

## **High oil prices hurt consumers, dent fuel demand: IEA chief**



SINGAPORE (Reuters) – High oil prices are hurting consumers and could also have adverse implications for producers, the executive director of the International Energy Agency (IEA)

said on Tuesday.

Major emerging Asian economies such as India and Indonesia have been hit hard this year by rising crude oil prices, which despite declining this month are still up by about 15 percent since the start of 2018.

Fuel import costs have been pushed up further by a slide in emerging market currencies against the dollar, denting growth and even triggering protests and government fuel price controls in India.

“Many countries’ current account deficits have been affected by high oil prices,” IEA chief Fatih Birol said at an energy conference in Singapore.

“There are two downward pressures on global oil demand growth. One is high oil prices, and in many countries they’re directly related to consumer prices. The second one is global economic growth momentum slowing down.”

The effect of high oil prices will be compounded in Southeast Asia as demand is rising fast but production is falling, resulting in the region becoming a net importer of oil, gas and coal, Birol said.

Despite the possibility of a slowdown, Birol said the general outlook for fuel consumption was for continued growth.

While the rise of electric vehicles is expected to result in peak demand for products like diesel and gasoline within coming years, a consumption boom in products such as plastic as well as fuel demand growth from aviation have triggered large-scale refinery investment into petrochemical products and high quality products like jet fuel.

“Global oil demand will continue to grow even amid the rise of electric vehicles as they are governed by petrochemicals, aviation, among others,” he said.

BHP Billiton, the world's biggest miner, which has oil and gas assets but also hopes to benefit from the demand for raw materials coming from batteries for electric vehicles (EV), also said oil demand would still grow despite the rise of EVs.

BHP's Chief Commercial Officer, Arnoud Balhuizen, said on Tuesday during a conference in Melbourne that oil demand will increase by 1 percent a year on average over the next 10 to 15 years.

"There will be substitution coming... on the back of an increased pickup of electric vehicles. But even if we plug in the most ambitious electric vehicle trends... in our forecasting, we continue to see oil demand on the back of other sectors," he said.

To meet the 1 percent per year consumption growth, Balhuizen said "quite a bit of new capital needs to be allocated to the oil industry in the next five to ten years to be able to meet that demand."

More so than oil, Birol said demand for liquefied natural gas (LNG) would boom.

He said that global LNG trade could pass 500 billion cubic meters per day (bcm) by 2023, growing by a third in the coming five years.

BHP's Balhuizen echoed this in Melbourne, saying "LNG is a commodity with very strong demand outlook."

Birol said just three countries, Qatar, Australia and the United States, would supply 60 percent of global LNG by 2023.

LNG demand is primarily driven by growth in China, where an anti-pollution program is driving a massive shift from coal to natural gas.

Manufacturing PMI: Japan rebounds, but trade hits China while UK slumps

But demand is also expected to grow fast in Southeast Asia, where Birol said the power sector needed \$50 billion of investment by 2040, more than twice the current level, to keep up with consumption.

Despite this growth potential, the LNG sector faces increasing competition from renewables and storage technology, which are cleaner than fossil fuels and becoming much cheaper.

In many countries, Birol said solar power was on track to become the cheapest source of new electricity.

---

**Opec and allies may need to  
change course as oil  
inventories rise: Panel**



LONDON/RIYADH (Reuters) – OPEC signaled on Thursday it may have to return to oil production cuts as global inventories rise, in a statement that may further sour relations with U.S. President Donald Trump.

The president has repeatedly lashed out at the Organization of the Petroleum Exporting Countries, saying it is not supplying enough oil. OPEC, plus Russia and other allied non-OPEC producers agreed to pump more in June.

An OPEC and non-OPEC ministerial panel concluded that supply is “very comfortable” compared to demand and warned producers may need a change of tack because of rising inventories and economic uncertainties.

“The committee, however, expressed concerns about rising inventories in recent weeks and also noted looming macroeconomic uncertainties which may require changing course,” a statement issued by OPEC said.

Brent crude oil, the global benchmark, has lost about \$10 a barrel since hitting a four-year high of \$86.74 on Oct. 3, on

signs of ample supply even as U.S. sanctions on Iran aimed at cutting the OPEC member's oil exports loom.

For now, producers are making progress in increasing production in line with the June agreement.

OPEC and its partners agreed in June to lift oil supplies so that compliance with output curbs in place since January 2017 falls to 100 percent, from closer to 150 percent because of declining production in some countries.

Countries complied with 111 percent of pledged supply curbs in September, the statement said, meaning production increased from August when adherence was 129 percent.

The panel, called the Joint Ministerial Monitoring Committee, can make recommendations but does not set policy. OPEC and its allies hold their next policy meeting in December.

Forecasters, including the International Energy Agency, expect slower growth in global oil demand next year and rising supplies from outside OPEC, which could further increase inventories if OPEC keeps output at the same level.

The ministerial panel asked its technical group, called the Joint Technical Committee, to "continue to study the 2019 outlook and present options on 2019 production levels to prevent re-emergence of a market imbalance."

Earlier on Thursday, top exporter Saudi Arabia said the oil market could be oversupplied in the fourth quarter of the year as stocks rise and demand slows. It said it will "mirror" such changes in its production.

"We are of the view that the market in the fourth quarter could be shifting towards an oversupply situation as evidenced by rising inventories over the past few weeks," Saudi OPEC governor Adeb Al-Aama told Reuters.

The OPEC governor is typically one of the most senior posts in

a country's OPEC delegation after the energy minister.

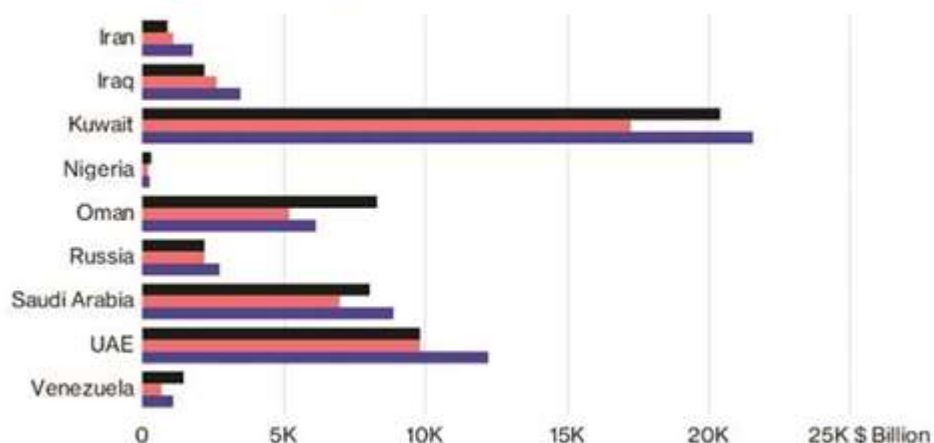
---

## Petro-states have got a problem with their economies, says IEA

### Boom and Bust

The outlook for producer countries' income from oil and gas varies widely

■ 2010-2017 ■ 2018-2015 ■ 2026-2040



Estimates from New Policies Scenario  
International Energy Agency

**Bloomberg**

Bloomberg/London

Countries heavily reliant on oil and gas for revenue must diversify their economies or face worsening finances, the International Energy Agency warns in a new report.

While revenue for petro-states has always fluctuated in boom-and-bust price cycles, this time is different. Surging US shale production, the expansion of renewables and increases in energy efficiency pose a more fundamental challenge.

“Now, more than at any other point in recent history, fundamental changes to the development model look unavoidable,” IEA executive director Fatih Birol said in an



interview. "Countries cannot afford to base their economies on oil and gas revenue only. It's high time to diversify their economies."

The most obvious answer to the diversification question, particularly for Middle Eastern producers, is to ramp up solar power capacity, the IEA says.

Around 2mn bpd of oil is used for electricity generation in the Arabian Gulf, according to Birol. "This is very inefficient. It's like using Chanel perfume to fuel your car," he said.

Prices will come under pressure over the long term, the IEA says, because of rising US shale oil production, increased energy efficiency and policies to curb climate change and local air pollution.

"A big amount of shale oil is coming onto the market," Birol said. "We expect between now and 2030 more than 50% of global oil production growth will come from shale oil."

Since the price crash in 2014, net income from oil and gas has plunged for producer countries. For Iraq the drop was around 40%; for Venezuela it was as much as 70%.

The risk of failing to diversify away from oil and gas is outlined in the IEA's Low Oil Price Case scenario, where it assumes crude settles in a range between \$60 to \$70 a barrel.

In the Middle East, this would equate to a \$1,500 drop, compared to the IEA's base case New Policies Scenario, in average annual disposable income per person, the IEA said. In countries with rising, young populations in need of jobs this would be critical.

If crude prices average around \$60-70 a barrel between now and 2040, net oil and gas income across the industry will never recover to 2010 to 2015 levels, the IEA said. This would lead to a cumulative \$7tn loss in revenue, through to 2040.

"Without far-reaching reforms, this would translate into large current account deficits, downward pressure on currencies and lower government spending," the report said.

Saudi Arabia's Vision 2030, a plan to wean its economy off oil, was unveiled in 2016 to much fanfare but concrete reforms

have been lacklustre. While the IEA stops short of singling out the world's largest oil exporter as being especially at risk, it highlights how the kingdom remains "heavily dependent on hydrocarbon revenues today" despite having first expressed a desire to diversify its economy back in 1970.

The IEA says that how these producer countries adapt is crucial, not just for the survival of their own economies but also for global energy security and environmental sustainability. Maintaining investment in low-cost and low-carbon energy resources is vital.

The disadvantages of being heavily dependent on oil and gas revenues are evident in the recent history of the global economy, the IEA said.

"Producer economies have not performed significantly better in economic terms than non-producers in recent years, despite having access to vast revenue streams from oil and gas," the report said. "More than at any other point in recent history, fundamental changes to the development model in resource-rich countries look unavoidable."

---

**Opec and allies may 'need to change course' as oil inventories rise**



Reuters/London/Riyadh

Opec signalled yesterday it may have to return to oil production cuts as global inventories rise, in a statement that may further sour relations with US President Donald Trump.

The president has repeatedly lashed out at the Organization of the Petroleum Exporting Countries, saying it is not supplying enough oil.

Opec, plus Russia and other allied non-Opec producers agreed to pump more in June.

An Opec and non-Opec ministerial panel concluded that supply is "very comfortable" compared to demand and warned producers may need a change of tack because of rising inventories and economic uncertainties.

"The committee, however, expressed concerns about rising inventories in recent weeks and also noted looming macroeconomic uncertainties which may require changing course," a statement issued by Opec said.

Brent crude oil, the global benchmark, has lost about \$10 a barrel since hitting a four-year high of \$86.74 on October 3, on signs of ample supply even as US sanctions on Iran aimed at cutting the Opec member's oil exports loom.

For now, producers are making progress in increasing production in line with the June agreement.

Opec and its partners agreed in June to lift oil supplies so that compliance with output curbs in place since January 2017 falls to 100%, from closer to 150% because of declining production in some countries.

Countries complied with 111% of pledged supply curbs in September, the statement said, meaning production increased from August when adherence was 129%.

The panel, called the Joint Ministerial Monitoring Committee, can make recommendations but does not set policy.

Opec and its allies hold their next policy meeting in December.

Forecasters, including the International Energy Agency, expect slower growth in global oil demand next year and rising supplies from outside Opec, which could further increase inventories if Opec keeps output at the same level.

The ministerial panel asked its technical group, called the Joint Technical Committee, to “continue to study the 2019 outlook and present options on 2019 production levels to prevent reemergence of a market imbalance.”

Earlier yesterday, top exporter Saudi Arabia said the oil market could be oversupplied in the fourth quarter of the year as stocks rise and demand slows.

It said it will “mirror” such changes in its production.

---

## **ECB sticks to stimulus exit, downplaying uncertainties**



**EUROPEAN CENTRAL BANK**

**EUROSYSTEM**

Reuters/Frankfurt

The European Central Bank stuck to plans yesterday to claw back unprecedented stimulus, even as the growth outlook continues to darken and political turmoil in Italy looms large over the currency bloc.

Having exhausted much of its firepower with years of support, the ECB reaffirmed that its €2.6tn (\$3tn) asset purchase scheme will end this year and interest rates could rise after next summer, sticking to guidance first unveiled in June and repeated at every meeting since.

While he acknowledged a loss of growth momentum and a “bunch of uncertainties” from trade protectionism and market volatility, ECB President Mario Draghi played down concerns, arguing that the eurozone was merely returning to a normal or natural pace of expansion after an exceptional 2017.

“We’re talking about weaker momentum, not a downturn,” Draghi told a news conference after policymakers decided to maintain a long-standing assessment that growth risks were “broadly balanced”.

“Is this enough of a change to make us change the baseline scenario? The answer is ‘No’,” he said, adding that the ECB did not even contemplate extending its bond purchase

programme, which has depressed borrowing costs and revived growth.

The comments appeared to confirm already solid expectations that the ECB will not go back on its pledge to end bond purchases by the close of the year, even if the growth outlook continues to weaken.

“The ECB remains highly determined to bring net asset purchases to an end,” ING economist Carsten Brzeski said.”

It would require a severe downturn of the economy, not only weaker momentum, in the coming six weeks for the ECB to alter its course.”

Focusing on inflation, the bank’s primary mandate, Draghi struck a positive tone, arguing that wage growth was a “very comforting” sign and that policymakers remained confident that price growth will rise.

But despite the hawkish message – which included an upbeat assessment of firmer wage pressures – the euro slipped on his comment that Europe’s monetary union remained “fragile” as long as measures to shore up existing structures were not complete.

“And when I say completed, I mean the banking union, I mean the capital market union,” he added of measures initiated as a result of the sovereign debt crisis of almost a decade ago but which have foundered on a lack of consensus among member states.

The single currency slipped 0.1% on the day to \$1.138 after having earlier reached a session-high of \$1.143.

With the EU having taken the unprecedented step of rejecting Italy’s budget this week, Draghi was quizzed at length about the escalating political fight between Rome and Brussels.

He made it abundantly clear that the ECB would not come to Italy’s aid.

Himself an Italian, Draghi said he was confident compromise would be reached between Brussels and Rome and noted how much the stand-off was already costing Italy because of the rising yield on its government debt.

“Our mandate... is a mandate towards price stability, not

towards financing governments' deficits," Draghi said. He said rising bond yields were already eating into Italy's fiscal capacity, suggesting that attempts to raise spending would be counterproductive as investors will punish Rome for spending too much.

With a debt to GDP ratio of 130%, Italy is the eurozone's second most indebted country after Greece, and under its rejected budget proposal, this debt level is unlikely to fall. "I'm still confident an agreement will be found," Draghi added.

Asked about the risk that a fall in the value of Italian government bonds could erode the capital positions of some banks that hold them, he said: "I don't have a crystal ball.. These bonds are in the banks' portfolios.

They are denting into the capital position of the banks.

Economists said the message to Rome was clear: that the ECB will not come to its aid and it should prepare for life after years of central bank support.

"The ECB is not about to run to Italy's rescue, even if market conditions deteriorated further," Nordea economist Jan von Gerich said.

---

## **Global natural gas rally seen wavering as buyers expand horizons**





The upside to global natural gas prices is seen limited as competition with other energy intensifies. Benchmarks in Asia and Europe have soared since mid-2016, leaving buyers in those regions paying triple the rate in the US, where prices kept in a much narrower range. While that's been good for the profits of big producers, it left users hesitant to boost use of the cleanest fossil fuel. "In the power sector, there are many competitors for natural gas, renewables being one of them and coal on the other side," Fatih Birol, executive director of Paris-based energy policy adviser the International Energy Agency, said in an interview earlier this month. "If the price of natural gas goes up, there may be a question for demand growth." An expected liquefied natural gas boom, with record supply growth next year and as much as \$200bn earmarked for new projects in the next three years, may help pare prices outside North America. With the world transiting away from dirtier coal, strong demand seems pretty certain, but high prices aren't, said Tatiana Mitrova, director of the energy sector at the Moscow School of Management. Customers are too clever, she said, citing Germany's promotion of LNG import



projects in a bid to win lower prices from Gazprom, the world's biggest gas producer. The Russian company may also face lower prices in Asia, said Mitrova, who sits on the board of oil-services company Schlumberger Ltd. Gazprom knows the drill. It already suffered thin margins for some hub-market sales in Europe in 2015 and 2016, she said. "Gazprom was supplying gas at break-even prices," Mitrova said in an interview at the Oil & Money conference in London. "I'm afraid supplies to China might see the same development." With Russia, the Middle East, the US, Canada, Australia and Africa all competing to supply, prices will probably come under pressure, said Nick Campbell, director of energy intensive clients at Inspired Energy. Then there are other key areas of demand – gas users beyond power generators. The manufacturing sector is a "main driver" for demand growth during the coming years, and renewables probably aren't a viable alternative for many factories, the IEA's Birol said. So gas sellers will probably continue to enjoy premium prices until the new infrastructure forces them down, said John Baguley, chief operating officer of LNG Ltd, which plans to export North American gas to Europe and Asia. "If Gazprom is serious about putting the cheapest gas into Europe, Gazprom can do that cheaper than we can liquefy it out of the US," he said in an interview

---

## **The global economy's three games**



By Jean Pisani-Ferry/Paris

Chess masters are able to play simultaneously on several boards with several partners. And the more time passes, the more US President Donald Trump's international economic strategy looks like such a match.

There are three major players: the United States, China, and a loose coalition formed by the other members of the G7. And there are three games, each of which involves all three players. Unlike chess, however, these games are interdependent. And no one – perhaps not even Trump – knows which game will take precedence.

On Trump's first board is the break the rules of trade game. Many in his administration regard the World Trade Organisation's principles and procedures as an obstacle to bilateral negotiations. They would prefer to clinch deals with partners one by one, without being bound by the obligation to apply liberalisation measures across the board and without being forced to abide by the rulings of the WTO's dispute settlement mechanism. Their aim is to restructure the trade relationships along a hub-and-spoke model, with the US at the centre.

The underlying reasoning is fairly simple: multilateral rules

always protect the weakest players. Why should the US refrain from using its overwhelming bargaining power? The recent United States-Mexico-Canada agreement (USMCA) shows the way, by imposing US-determined national content obligations on the other two countries and restraining their own trade policy options. More such deals should follow.

Europe, Japan, and China have all criticised the US stance and portray themselves as champions of multilateralism. This is only half true: Europe has built its own web of trade agreements, and China, itself a fairly transactional power, regards global rules as an embodiment of yesterday's Western dominance. But on this issue (as on climate change), there is currently more commonality among non-US partners than there is between them and the US.

On the second board is the discipline China game. For a decade or so, many in the US have claimed that China's categorisation as a developing country, and the resulting favourable treatment it enjoys at the WTO, do not reflect the true strength of an economy whose goods exports amount to \$2tn, or 11% of world trade. As Susan Schwab, President George W Bush's Trade Representative, put it back in 2011, in trade discussions elephants were hiding behind mice. The Trump administration now wants to trap the Chinese elephant.

The internal heterogeneity of China's economy is indeed exceptionally high for a developing country. Parts of China are poor, and parts wealthy. Some industries are unsophisticated, while others are at the cutting edge of innovation. The latter shouldn't hide behind the former.

America's grievances regarding China's behaviour, from its treatment of intellectual property to its implicit and explicit subsidies and policy-motivated takeovers of foreign industrial jewels, are essentially shared by its G7 partners. Many Chinese experts also agree that ending the wholesale subsidisation of industrial behemoths and letting market signals play a stronger role in investment choices is in their country's best interest.

More generally, China's partners argue that trade rules

conceived for market economies are not adequate when dealing with a centrally-directed economy. This claim is more contentious, because leaders in Beijing regard state ownership of enterprises as a matter of sovereign choice, and do not want to renounce big industrial policy endeavours. But there is room for discussion. All in all, the discipline China game is one in which the US, Europe, Japan, and Canada are largely aligned. All look forward to a robust negotiation with the Chinese.

This makes the discipline China game very different from the third contest, the roll back China game. This game is not about the enforcement of trade rules, or their design, but about the sheer geopolitical rivalry between the incumbent superpower and a rising challenger. As Kevin Rudd, the former Australian prime minister, noted in a remarkable speech a few weeks ago, the US security establishment has become convinced that strategic engagement with China has not paid off and should give way to strategic competition – a stance that would encompass all dimensions of the bilateral relationship. In early October, a particularly harsh speech by US Vice President Mike Pence illustrated Rudd's point.

Europe, Japan, and Canada are not part of this rivalry – they simply do not matter in the same way that the US and China do. But they are inevitably part of its diplomatic, economic, and, for Japan at least, security components. If the tension between the two powers dominates global politics in the decades to come, they won't be able to avoid taking a stance. And, for all their reluctance, they may well end up aligned with the US, for two reasons: a hardening of the rivalry with the US would drive the Chinese leadership further from Western values, and they ultimately depend on the US for their own security.

The problem, however, is that it is still not clear in which game President Trump intends to score a victory. Does he intend to play a long game? And, if so, what are his aims? Nobody really knows.

For the non-US G7 countries, this uncertainty creates a

dilemma. Should they engage with China on WTO reform and the strengthening of the associated disciplines? This is a topic on which they could help pave the way for an eventual global compromise. The risk, however, is that if China fears that the US really aims at winning the rollback game, and expects the rest of the West to fall in line eventually, it will refuse to make meaningful concessions.

Alternatively, the rest of the G7 could align with the US, at the risk of antagonising China and eventually being strategically demoted if Trump ultimately settles on a bilateral deal with Chinese President Xi Jinping. If that game prevails, the non-US G7 will end up being the losers.

Absent a no-risk strategy, Europe, Japan, and Canada might well choose to wait and see. This would be the surest way to be sidelined in all possible circumstances and provide a demonstration that only the US-Chinese “G2” matters. What these countries are facing is a test of leadership, which they may pass or fail. There is no third possibility. – Project Syndicate

l Jean Pisani-Ferry, a professor at the Hertie School of Governance (Berlin) and Sciences Po (Paris), holds the Tommaso Padoa-Schioppa chair at the European University Institute and is a senior fellow at Bruegel, a Brussels-based think-tank.

---

## **U.S. gas a no-go for Chinese buyers despite weaker tariff**



TOKYO and SINGAPORE (Bloomberg) – Even with China’s smaller-than-threatened tariff on U.S. natural gas, American cargoes may still be kryptonite for Chinese traders trying to navigate the ongoing trade war.

Chinese buyers will seek to avoid purchasing U.S. liquefied natural gas as long as any tariffs are in place because of the risk that duties may rise further and possibly without warning, according to officials from four importers. While they said they would prioritize cargoes from other suppliers, they couldn’t entirely rule out buying U.S. shipments. The officials asked not to be identified discussing procurement strategy.

China announced Tuesday a 10% tariff on American goods, including LNG, starting Sept. 24 in retaliation for a similar-sized levy imposed by the U.S. That China struck below the 25% duty it threatened last month was met with relief, with gas futures in New York jumping more than 4% while companies that develop U.S. export projects, such as Tellurian Inc. and Cheniere Energy, saw their share’s rally.

But the ongoing trade tensions are seen turning off buyers in China, the world’s biggest and fastest-growing natural gas

market. That could go for both taking individual, or so-called spot, cargoes, as well as tying themselves to projects with long-term spending and supply commitments in the U.S., where more than a dozen projects are seeking about \$139 billion in investments.

“For a Chinese buyer, the overall risk profile for procuring U.S. LNG remains heightened,” Saul Kavonic, Credit Suisse Group’s director of Asia energy research, said by email. “Even with a smaller tariff, there has likely been some longstanding damage done to the perception of reliability of U.S. LNG supply in the eyes of Chinese buyers who will shape the next wave of global LNG projects.”

U.S. LNG sales are linked to the nation’s benchmark Henry Hub gas price, which is down about 1% this year, while supply from most other exporters is tied to oil, which has gained 18% over that period. That’s made American fuel cheaper than other sources, an advantage that’s being eroded by tariffs.

China may shift its buying from the U.S. to other exporters, including Australia, Qatar and Papua New Guinea, according to Bloomberg Intelligence analyst’s Lu Wang and Kunal Agrawal.

PetroChina Co. signed a deal earlier this month with Qatargas Operating to purchase 3.4 MM tons of LNG annually, the Chinese company’s biggest supply deal, while inking a mid-term contract with the PNG LNG project earlier this year. PetroChina’s parent, China National Petroleum, signed a deal to buy U.S. LNG from Cheniere in February. CNPC didn’t respond to requests for comment.

---



# The global economy in 2018



By Michael Spence/Hong Kong

Economists like me are asked a set of recurring questions that might inform the choices of firms, individuals, and institutions in areas like investment, education, and jobs, as well as their policy expectations. In most cases, there is no definitive answer. But, with sufficient information, one can discern trends, in terms of economies, markets, and technology, and make reasonable guesses.

In the developed world, 2017 will likely be recalled as a period of stark contrast, with many economies experiencing growth acceleration, alongside political fragmentation, polarisation, and tension, both domestically and internationally. In the long run, it is unlikely that economic performance will be immune to centrifugal political and social forces. Yet, so far, markets and economies have shrugged off political disorder, and the risk of a substantial short-term setback seems relatively small.

The one exception is the United Kingdom, which now faces a messy and divisive Brexit process. Elsewhere in Europe, Germany's severely weakened chancellor, Angela Merkel, is



struggling to forge a coalition government. None of this is good for the UK or the rest of Europe, which desperately needs France and Germany to work together to reform the European Union.

One potential shock that has received much attention relates to monetary tightening. In view of improving economic performance in the developed world, a gradual reversal of aggressively accommodative monetary policy does not appear likely to be a major drag or shock to asset values. Perhaps the long-awaited upward convergence of economic fundamentals to validate market valuations is within reach.

In Asia, Chinese President Xi Jinping is in a stronger position than ever, suggesting that effective management of imbalances and more consumption- and innovation-driven growth can be expected. India also appears set to sustain its growth and reform momentum. As these economies grow, so will others throughout the region and beyond.

When it comes to technology, especially digital technology, China and the United States seem set to dominate for years to come, as they continue to fund basic research, reaping major benefits when innovations are commercialised. These two countries are also home to the major platforms for economic and social interaction, which benefit from network effects, closure of informational gaps, and, perhaps most important, artificial-intelligence capabilities and applications that use and generate massive sets of valuable data.

Such platforms are not just lucrative on their own; they also produce a host of related opportunities for new business models operating in and around them, in, say, advertising, logistics, and finance. Given this, economies that lack such platforms, such as the EU, are at a disadvantage. Even Latin America has a major innovative domestic e-commerce player (Mercado Libre) and a digital payments system (Mercado Pago).

In mobile online payments systems, China is in the lead. With much of the country's population having shifted directly from cash to mobile online payments – skipping checks and credit

cards – China's payments systems are robust.

Earlier last month on Singles' Day, an annual festival of youth-oriented consumption that has become the single largest shopping event in the world, China's leading online payment platform, Alipay, processed up to 256,000 payments per second, using a robust cloud computing architecture. There is also impressive scope for expanding financial services – from credit assessments to asset management and insurance – on the Alipay platform, and its expansion into other Asian countries via partnerships is well underway.

In the coming years, developed and developing economies will also have to work hard to shift toward more inclusive growth patterns. Here, I anticipate that national governments may take a back seat to businesses, subnational governments, labour unions, and educational and non-profit institutions in driving progress, especially in places hit by political fragmentation and a backlash against the political establishment.

Such fragmentation is likely to intensify. Automation is set to sustain, and even accelerate, change on the demand side of labour markets, in areas ranging from manufacturing and logistics to medicine and law, while supply-side responses will be much slower. As a result, even if workers gain stronger support during structural transitions (in the form of income support and retraining options), labour-market mismatches are likely to grow, sharpening inequality and contributing to further political and social polarisation.

Nonetheless, there are reasons to be cautiously optimistic. For starters, there remains a broad consensus across the developed and emerging economies on the desirability of maintaining a relatively open global economy.

The notable exception is the US, though it is unclear at this point whether President Donald Trump's administration actually intends to retreat from international co-operation, or is merely positioning itself to renegotiate terms that are more favourable to the US. What does seem clear, at least for now, is that the US cannot be counted on to serve as a principal

sponsor and architect of the evolving rules-based global system for fairly managing interdependence.

The situation is similar with regard to mitigating climate change. The US is now the only country that is not committed to the Paris climate agreement, which has held despite the Trump administration's withdrawal. Even within the US, cities, states, and businesses, as well as a host of civil-society organisations, have signalled a credible commitment to fulfilling America's climate obligations, with or without the federal government.

Still, the world has a long way to go, as its dependence on coal remains high. The Financial Times reports that peak demand for coal in India will come in about ten years, with modest growth between now and then. While there is upside potential in this scenario, depending on more rapid cost reductions in green energy, the world is still years away from negative growth in carbon dioxide emissions.

All of this suggests that the global economy will confront serious challenges in the months and years ahead. And looming in the background is a mountain of debt that makes markets nervous and increases the system's vulnerability to destabilising shocks. Yet the baseline scenario in the short run seems to be one of continuity. Economic power and influence will continue to shift from west to east, without any sudden change in the pattern of job, income, political, and social polarisation, primarily in the developed countries, and with no obvious convulsions on the horizon. – Project Syndicate

\* Michael Spence, a Nobel laureate in economics, is professor of Economics at New York University's Stern School of Business and Senior Fellow at the Hoover Institution.