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Indian voters' verdict on Modi arrives

After more than a month of voting in India, hopefully, the long-standing political uncertainty is set to end. Exit polls suggest prime minister Narendra Modi's return to power, but given the anti-incumbent sentiment seen in last year's state-level elections in Modi's stronghold states, the potential for surprise still remains



Source: Shutterstock

Putting behind politics

Voting has ended in India and the final results will come through on Thursday. Exit polls suggest Narendra Modi is set to return as the prime minister for a second term.

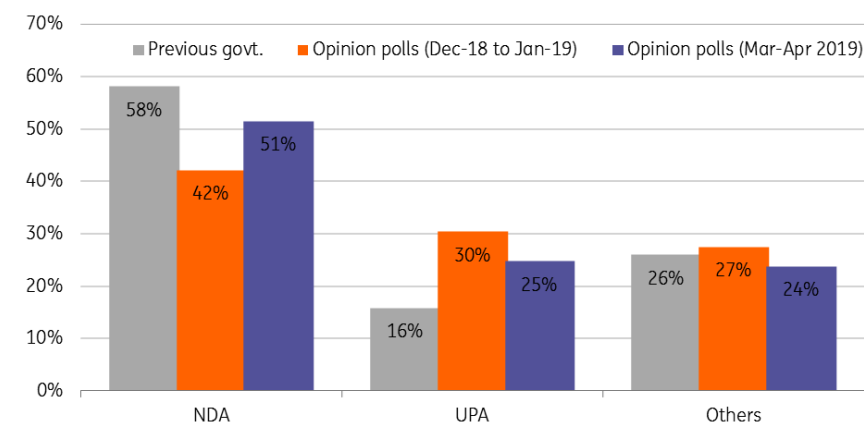
But given the state election surprises in 2018, we think the results of this general election could still be unpredictable - and we're not alone. Recent opinion polls also indicate the main political rivals including the incumbent Bharatiya Janata Party (BJP), the right-wing National Democratic Alliance (NDA), and the Congress-led left-wing United Progressive Alliance (UPA) could come in neck and neck.

Even if Modi's BJP party retains its absolute majority this doesn't quite guarantee the throne

Our base case remains seeing the Modi administration clinging to power for the second term, but given the anti-incumbent sentiment we saw sweeping through last year's state-level elections in Chattisgarh, Madhya Pradesh, and Rajasthan, back when the national level polls showed the NDA losing its grip on power, there remains the potential for an election surprise. A key risk for Modi is a consolidation of opposition under Congress.

Even if Modi's BJP party retains its absolute majority this doesn't quite guarantee the throne. Cast your mind back to a year ago in the legislative assembly elections in the Karnataka state where BJP won the majority of seats but failed to form a government and the Congress-led coalition stayed in the power till the end.

What did pre-election opinion polls suggest?



Note: Average result of five major opinion polls.

Source: Wikipedia, ING

Not everything is great about Modi

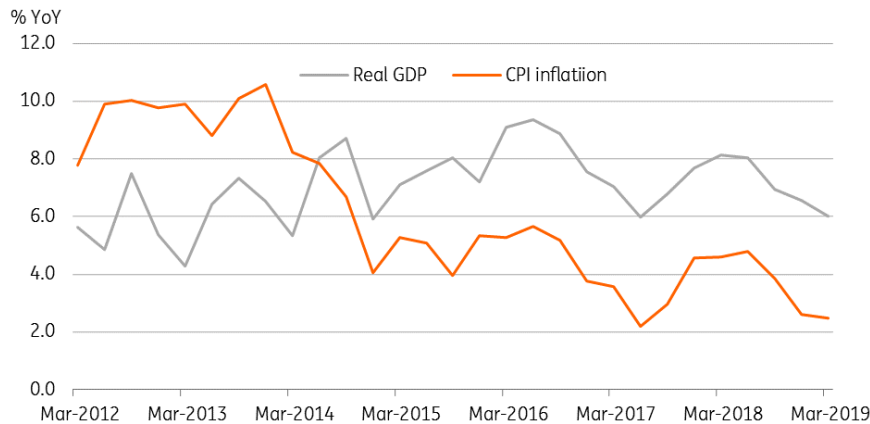
The Indian economy enjoyed solid growth of 7.5% per annum on average, during Modi's five-year term, and low inflation of under 4% at least in the final year of his term. The tax reforms, even the chaotic implementation of the goods and services tax in mid-2017, banking sector reforms, anti-corruption drive, financial inclusion programs, kick-starting a cashless economy, and 'Make in India' initiative were some of the creditable measures by the Modi administration. These deserve some of the credit for the strong run of the Indian stock market relative to its emerging market counterparts, with the main stock indices almost doubling over the past five years.

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But the misery caused by the sudden ban of high-value currency at the end of 2016 remains vivid in voter's minds and this was a big factor in the BJP's loss in its power bastions such as Chattisgarh, Gujarat, Madhya Pradesh, and Rajasthan. Adding to the negatives are continued farm distress, the excessive government intervention in central bank's affairs, bankruptcies of non-bank finance companies, banking sector scams and rising non-performing assets, and most importantly the

elevated unemployment rate of 6.1%, according to the latest government survey making it the highest in 45 years - all undermining Modi's 'Make in India' initiative to transform the country into a global manufacturing base.

Strong growth, low inflation during Modi's first term



Source: Bloomberg, CEIC, ING

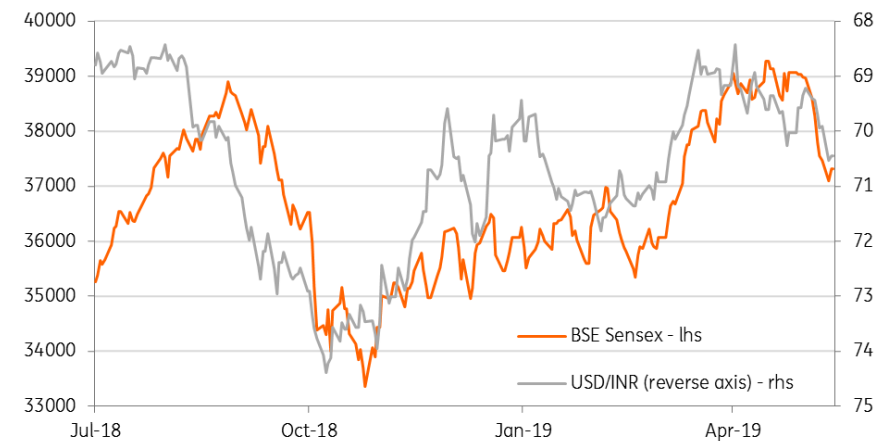
How markets are likely to react to election results?

The outperformance of the Indian markets and the rupee since February 2019 reflects increased investor confidence in prime minister Modi staying in power, but the uncertainty surrounding election results will undoubtedly sustain the negative sentiment in local markets already roiled by contagion from the escalation of the US-China trade war recently.

We believe the markets are priced in for (our) baseline scenario of a BJP-led coalition, retaining power albeit with a thin margin

We believe the markets are priced in for (our) baseline scenario of a BJP-led coalition retaining power albeit with a thin margin. Such an outcome means that the election results should have little impact on markets, and in turn should be left to be driven by non-political factors, domestic and external. Indeed, the currency market has so far vindicated our forecast of the INR weakening past 70 against the USD. We see the pair trading in a tight range around 71 until the election dust settles.

Markets are pricing in a Modi return



Source: Bloomberg, ING

Alternative events risks

As we've mentioned above, the results could go either way and depending on how the swing states - the states where BJP has lost power in state elections over the last two years - perceive the party at the national level. The alternative outcomes and our view of what these would mean for markets are:

1. **NDA remains in power:** The BJP loses its absolute majority but still forms the government with the coalition partners and Modi stays prime minister. Just as the baseline, this is likely to have little impact on markets, with USD/INR continuing to trade in the 70-71 range.
2. **A landslide victory for BJP:** This would come as a big positive for markets, with the USD/INR grinding for re-test of the March low of 68.42 and eventually settling in the 66-68 trading range.
3. **Congress-led UPA government:** Investors are likely to see this as instilling significant political and economic uncertainty for the future, by derailing economic reforms. The resultant market sell-off could see USD/INR pushing higher to a 72-74 trading range.
4. **Third front government:** A government without the BJP or the Congress would mean a significant jump in uncertainty on all fronts and for a prolonged period of time. Although such an outcome is highly unlikely, this could spell disaster for markets, driving the rupee down for a significant depreciation above 75 against the USD.

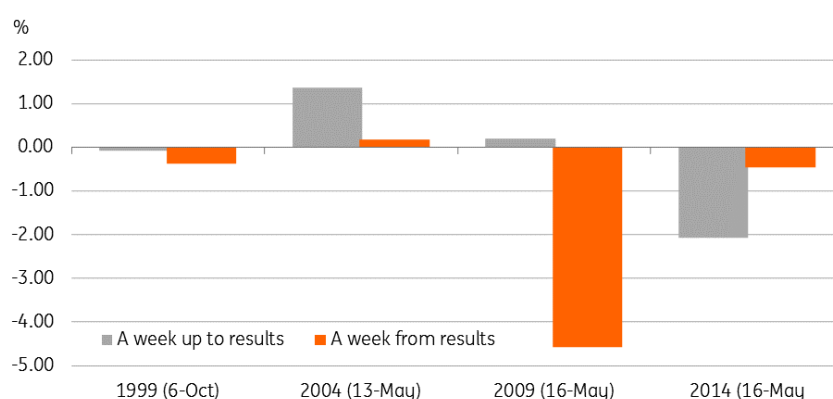
USD/INR performance in the week up to and after results of past elections

1999 result: NDA swept back to power after being ousted with no confidence vote leading to fresh elections.

2004 result: NDA lost power to UPA

2009 result: UPA remained in power

2014 result: NDA returned to power on landslide BJP victory



Note: Election results dates in parenthesis. Negative values means INR appreciation and vice versa.

Source: Bloomberg, ING

As political uncertainty lifts, the economy will be back in focus

Like elsewhere in Asia, recently released Indian economic indicators paint a picture of continued slowdown in growth and benign consumer price inflation – both supporting expectations of greater policy accommodation amid persistently wide fiscal and current account deficits.

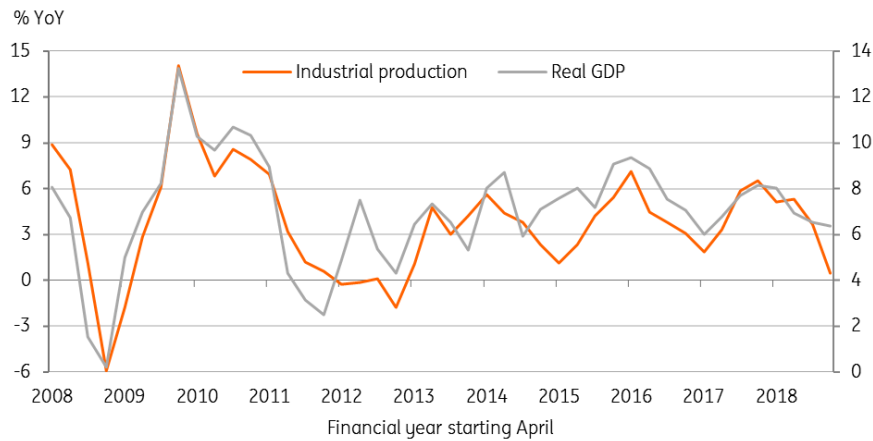
For now, we retain our annual growth forecast of 6.8% for the current financial year

Keeping with the broader global trend, exports and manufacturing posted a slowdown in growth in recent months. As this feeds into the overall economic growth, a downward trend in GDP growth appears to have gained pace between January-March - the last quarter of the financial year 2018-19. On our forecast, GDP growth in that quarter slipped further to 6.0% year-on-year from 6.6% in the previous quarter, making it the slowest growth quarter in two years. This puts FY18-19 growth at 7.0%, only marginally better than 6.7% in the previous year.

We anticipate growth to hover around 6% in the current quarter before the pre-election boost to government spending kick-starts the economy. However, with growing headwinds to growth, especially from weak exports and higher oil prices, sustaining growth at or above 7% will be a challenge. On technical grounds, the low base effect is likely to contribute to some acceleration in

the remaining FY19-20. But for now, we retain our annual growth forecast of 6.8% for the current financial year.

Manufacturing has dragged GDP growth lower



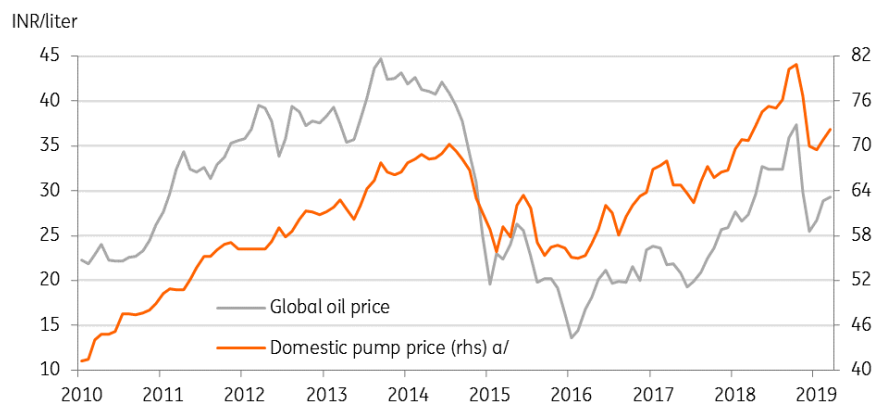
Source: Bloomberg, CEIC, ING

Inflation genie still bottled, but not for too long

Consumer price inflation continues to be defiant to increasingly weak public finances and pass through from higher global oil prices. Annual inflation has been creeping up after it bottomed at 2% in January. It has risen to 2.9% as of April - still well below 4% - the mid-point of the RBI's 2-6% policy target.

State-owned oil companies have been blamed for holding on to the pass-through of higher global oil prices to domestic fuel prices during the election period, even though pump prices in India are adjusted on a daily basis. If so, consumers should be bracing for a significant spike in fuel prices post-election. Adding to their woes will be the lifting of the US waiver of imports from Iran. Among other inflationary drivers are higher import duties on food grains as in late April the government raised duty on wheat imports by 10 percentage points to 40 percent in protection for local farmers.

Be prepared for higher fuel prices after election



a/ Average of petrol and diesel price in four metropolitan cities

Source: Bloomberg, CEIC, ING

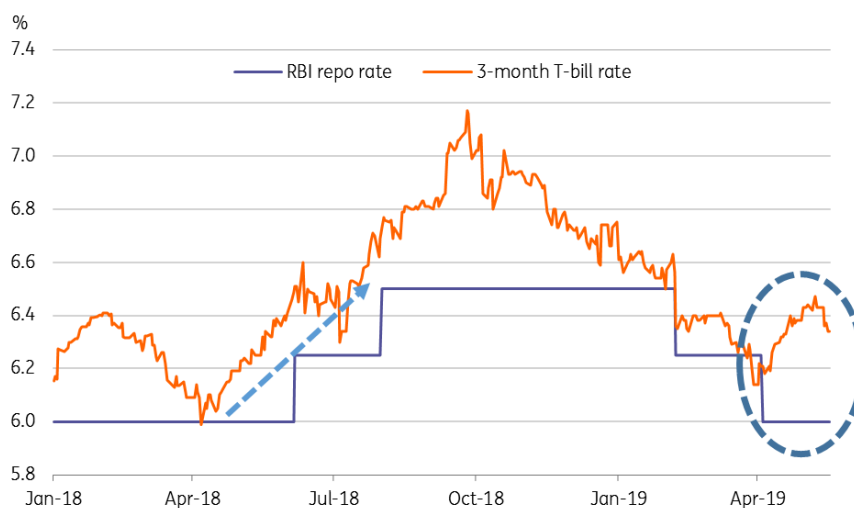
Misplaced hopes of another RBI rate cut

Low inflation has allowed the RBI to cut rates twice in February and April, which apparently were political moves (the government's drive to boost growth before the election) rather than a real need by the economy already stimulated by the surge in election-related spending. We believe the expectation of the third rate cut in June, as some in the markets have been calling for, are misplaced.

We forecast no more RBI policy rate cuts this year

Given a significant policy lag and the potential inflation headwind, we believe the RBI will stay on hold in June and rather allow the hitherto easing to sink in. We think rising short-term rates since April – the rate on 3-month T-bills is up 20 basis points – underscore a stable RBI policy in the next meeting. We forecast no more RBI policy rate cuts this year.

Market rates suggest no more policy rate cut



Source: Bloomberg, ING

US trade war risk shifting to India

The external risks could manifest if the US potentially targets India as its next trade enemy, after China.

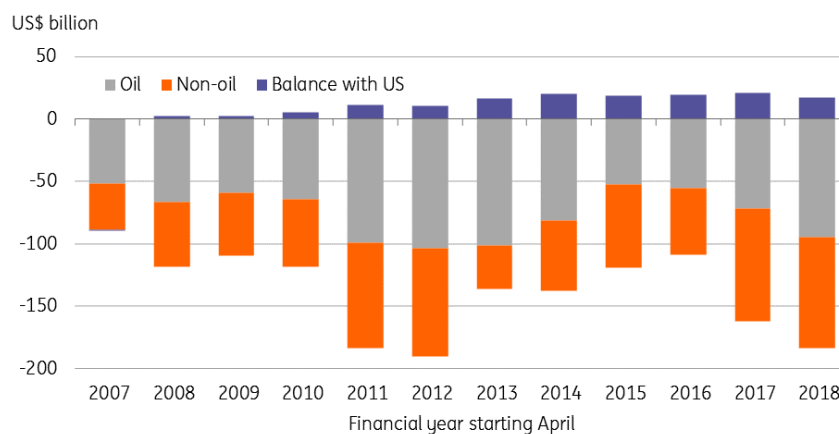
In early March, President Trump issued a notice to end trade benefits to India under the generalised system of preferences (GSP), which allows duty-free exports to the US of about 2000 products from developing countries. This special status has been put under review on the grounds that India, supposedly the largest beneficiary of the GSP, wasn't reciprocating with free access to its market. However, India's commerce ministry downplayed the potential impact from this on the basis that benefits from GSP had been negligible.

India is also among the countries running a wide trade surplus with the US, which has brought it under scrutiny from the US Treasury for currency manipulation along with China, Japan, and Korea

India is also among the countries running a wide trade surplus with the US, which has brought it under scrutiny from the US Treasury for currency manipulation along with China, Japan, and Korea. But the annual surplus with the US in FY18-19 fell 20% below the Treasury's \$20 billion threshold - one of the three criteria for a country to be labelled as a currency manipulator. And India has dodged the bullets on the other two criteria - a wide current account surplus of at least 3% of GDP, and persistent one-sided market intervention with FX purchases of at least 2% of GDP.

It would be interesting to see the US Treasury's assessment in the forthcoming semi-annual manipulator report later this month, which will be based on the more stringent criterion - now less than 2% of GDP current surplus, though India still doesn't meet this, and this is likely to see more countries falling in this category.

Widening total trade deficit, but still large surplus with the US



Source: Bloomberg, CEIC, ING

India - Key economic indicators and ING forecasts

India (FY starting April)	FY2015	FY2016	FY2017	FY2018 f	FY2019 f	FY2020 f
Real GDP (% YoY)	8.2	7.1	6.7	7.0	6.8	7.2
CPI (% YoY)	4.9	4.5	3.6	3.4	4.5	5.0
Fiscal balance (% of GDP)	-3.9	-3.5	-3.5	-3.5	-3.4	-3.3
Public debt (% of GDP)	70.0	69.5	71.2	72.5	72.0	71.0
Current account (% of GDP)	-1.1	-0.6	-1.9	-2.6	-3.1	-2.9
FX reserves (mth of imports)	10.2	10.6	10.2	8.3	7.9	7.8
External debt (% of GDP)	182.1	168.2	171.4	160.0	162.2	175.5
RBI repo rate (% eop)	6.75	6.25	6.00	6.25	6.00	6.25
3M T-bill rate (% eop)	7.27	5.82	6.09	6.14	6.50	6.60
10Y govt. bond yield (% eop)	7.47	6.68	7.40	7.35	7.80	7.80
INR per USD (eop)	66.33	64.84	65.18	69.16	69.50	68.00

Sources: Bloomberg, CEIC, ING forecasts

Source: Bloomberg, CEIC, ING

Author

Alissa Lefebvre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

Ruben Dewitte

Economist

+32495364780

ruben.dewitte@ing.com

Kinga Havasi

Economic research trainee

kinga.havasi@ing.com

Marten van Garderen

Consumer Economist, Netherlands

marten.van.garderen@ing.com

David Havrlant

Chief Economist, Czech Republic

420 770 321 486

david.havrlant@ing.com

Sander Burgers

Senior Economist, Dutch Housing

sander.burgers@ing.com

Lynn Song

Chief Economist, Greater China

lynn.song@asia.ing.com

Michiel Tukker

Senior European Rates Strategist

michiel.tukker@ing.com

Michal Rubaszek

Senior Economist, Poland

michal.rubaszek@ing.pl

This is a test author

Stefan Posea

Economist, Romania

tiberiu-stefan.posea@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Jesse Norcross

Senior Sector Strategist, Real Estate

jesse.norcross@ing.com

Teise Stellema

Research Assistant, Energy Transition

teise.stellema@ing.com

Diederik Stadig

Sector Economist, TMT & Healthcare

diederik.stadig@ing.com

Diogo Gouveia

Sector Economist

diogo.duarte.vieira.de.gouveia@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Ewa Manthey

Commodities Strategist

ewa.manthey@ing.com

ING Analysts

James Wilson

EM Sovereign Strategist

James.wilson@ing.com

Sophie Smith

Digital Editor

sophie.smith@ing.com

Frantisek Taborsky

EMEA FX & FI Strategist

frantisek.taborsky@ing.com

Adam Antoniak

Senior Economist, Poland

adam.antoniak@ing.pl

Min Joo Kang

Senior Economist, South Korea and Japan

min.joo.kang@asia.ing.com

Coco Zhang

ESG Research

coco.zhang@ing.com

Jan Frederik Slijkerman

Senior Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

Katinka Jongkind

Senior Economist, Services and Leisure

Katinka.Jongkind@ing.com

Marina Le Blanc

Sector Strategist, Financials

Marina.Le.Blanc@ing.com

Samuel Abettan

Junior Economist

samuel.abettan@ing.com

Franziska Biehl

Senior Economist, Germany

Franziska.Marie.Biehl@ing.de

Rebecca Byrne

Senior Editor and Supervisory Analyst

rebecca.byrne@ing.com

Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

mirjam.bani@ing.com

Timothy Rahill

Credit Strategist

timothy.rahill@ing.com

Leszek Kasek

Senior Economist, Poland

leszek.kasek@ing.pl

Oleksiy Soroka, CFA

Senior High Yield Credit Strategist

oleksiy.soroka@ing.com

Antoine Bouvet

Head of European Rates Strategy

antoine.bouvet@ing.com

Jeroen van den Broek

Global Head of Sector Research

jeroen.van.den.broek@ing.com

Edse Dantuma

Senior Sector Economist, Industry and Healthcare

edse.dantuma@ing.com

Francesco Pesole

FX Strategist

francesco.pesole@ing.com

Rico Luman

Senior Sector Economist, Transport and Logistics

Rico.Luman@ing.com

Jurjen Witteveen

Sector Economist

jurjen.witteveen@ing.com

Dmitry Dolgin

Chief Economist, CIS

dmitry.dolgin@ing.de

Nicholas Mapa

Senior Economist, Philippines

nicholas.antonio.mapa@asia.ing.com

Egor Fedorov

Senior Credit Analyst

egor.fedorov@ing.com

Sebastian Franke

Consumer Economist

sebastian.franke@ing.de

Gerben Hieminga

Senior Sector Economist, Energy

gerben.hieminga@ing.com

Nadège Tillier

Head of Corporates Sector Strategy

nadege.tillier@ing.com

Charlotte de Montpellier

Senior Economist, France and Switzerland

charlotte.de.montpellier@ing.com

Laura Straeter

Behavioural Scientist

+31(0)611172684

laura.Straeter@ing.com

Valentin Tataru

Chief Economist, Romania

valentin.tataru@ing.com

James Smith

Developed Markets Economist, UK

james.smith@ing.com

Suvi Platerink Kosonen

Senior Sector Strategist, Financials

suvi.platerink-kosonen@ing.com

Thijs Geijer

Senior Sector Economist, Food & Agri

thijs.geijer@ing.com

Maurice van Sante

Senior Economist Construction & Team Lead Sectors

maurice.van.sante@ing.com

Marcel Klok

Senior Economist, Netherlands

marcel.klok@ing.com

Piotr Poplawski

Senior Economist, Poland

piotr.poplawski@ing.pl

Paolo Pizzoli

Senior Economist, Italy, Greece

paolo.pizzoli@ing.com

Marieke Blom

Chief Economist and Global Head of Research

marieke.blom@ing.com

Raoul Leering

Senior Macro Economist

raoul.leering@ing.com

Maarten Leen

Head of Global IFRS9 ME Scenarios

maarten.leen@ing.com

Maureen Schuller

Head of Financials Sector Strategy

Maureen.Schuller@ing.com

Warren Patterson

Head of Commodities Strategy

Warren.Patterson@asia.ing.com

Rafal Benecki

Chief Economist, Poland

rafal.benecki@ing.pl

Philippe Ledent

Senior Economist, Belgium, Luxembourg

philippe.ledent@ing.com

Peter Virovacz

Senior Economist, Hungary

peter.virovacz@ing.com

Inga Fechner

Senior Economist, Germany, Global Trade

inga.fechner@ing.de

Dimitry Fleming

Senior Data Analyst, Netherlands

Dimitry.Fleming@ing.com

Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

Padhraic Garvey, CFA

Regional Head of Research, Americas

padhraic.garvey@ing.com

James Knightley

Chief International Economist, US

james.knightley@ing.com

Tim Condon

Asia Chief Economist

+65 6232-6020

Martin van Vliet

Senior Interest Rate Strategist

+31 20 563 8801

martin.van.vliet@ing.com

Karol Pogorzelski

Senior Economist, Poland

Karol.Pogorzelski@ing.pl

Carsten Brzeski

Global Head of Macro

carsten.brzeski@ing.de

Viraj Patel

Foreign Exchange Strategist

+44 20 7767 6405

viraj.patel@ing.com

Owen Thomas

Global Head of Editorial Content

+44 (0) 207 767 5331

owen.thomas@ing.com

Bert Colijn

Chief Economist, Netherlands

bert.colijn@ing.com

Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone

peter.vandenhoute@ing.com

Benjamin Schroeder

Senior Rates Strategist

benjamin.schroeder@ing.com

Chris Turner

Global Head of Markets and Regional Head of Research for UK & CEE

chris.turner@ing.com

Gustavo Rangel

Chief Economist, LATAM

+1 646 424 6464

gustavo.rangel@ing.com

Carlo Cocuzzo

Economist, Digital Finance

+44 20 7767 5306

carlo.cocuzzo@ing.com

US-China trade war: Who will get hurt the most?

The US decision to impose further tariffs on China has sparked concern that the yuan could weaken past the key 7-mark. But China won't face the burden of higher tariffs alone; the US has as much, if not more, to lose



WATCH: US-China trade war: Who will get hurt the most?

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Author

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Article | 17 May 2019

Asia week ahead: Politics over economics

Australia goes to the polls over the weekend, while an end to long-standing political uncertainty in India, Indonesia, and Thailand finally seems around the corner. GDP, manufacturing, and inflation data dominate the economic space



Source: Shutterstock

➔ Australia goes to the polls

The Federal elections are scheduled on 18 May, with results to be made public in the evening on the same day or early morning the following day.

The pro-incumbent wave seems stronger elsewhere and probably in Australia too. The ruling minority coalition of prime minister Morrison is seen leading in the latest opinion polls. With the current lacklustre economic backdrop, the hopes for the incumbent leader rest on long-term tax reforms, while the opposition Labor Party focuses on issues about education and healthcare.

We expect the lifting of political uncertainty next week to pave the way for the Reserve Bank of Australia's policy rate cut at the June meeting.

➔ Indian voters' verdict on Modi arrives

The seventh and final phase of Indian general elections takes place over the weekend (19 May). The counting of votes of all phases is scheduled on 23 May, and the results are expected to be out on the same day.

We continue to consider this a close-to-call election, though our baseline remains one of the Modi administration clinging on to the power for the second term. Indeed, the recent opinion polls point to the Modi's National Democratic Alliance winning by a thin margin. We believe the markets also are priced in for such an outcome. The outperformance of Indian markets and the currency (INR) since February, after the terror attack in Kashmir and the nationalistic sentiment fuelled by the government's handling of the same, reflects increased investor confidence of the incumbent staying in power.

However, judging from anti-incumbent sentiments that swept through last year's state-level elections (Chattisgarh, Madhya Pradesh, and Rajasthan) there remains a potential for election surprises.

➔ Jokowi is leading in Indonesia

With 86% of votes of the Presidential Election held on 17 April counted, incumbent Joko Widodo (Jokowi) is running ahead of his rival Prabowo Subianto. The counting is due to be complete by Wednesday, 22 May, and Jokowi is widely expected to continue for the second term - the most market-friendly outcome, or one less thing for investors to be worried about amid rising external uncertainty.

➔ Thai parliament may endorse Prayuth

Thailand's newly elected parliament will be convened on Wednesday, 22 May, to elect the new prime minister. Incumbent prime minister Prayuth Chan-Ocha stands a high chance of retaining that post with strong backing from the Senate. This week the King approved the new Senate comprising all 250 appointees from military cadre. As for the 500 members lower house of parliament, for which the election was held on 24 March, the Junta-backed party of incumbent prime minister Prayuth Chan-Ocha emerged as a dominant party and is set to form a coalition government with 256 seats in the lower house.

We think the political uncertainty in Thailand is largely over and the focus will be back on the economy. There is just enough on the calendar next week - GDP report for 1Q19 and car sales and external trade data for April. The high-frequency economic data for 1Q19 supports our forecast of a sharp slowdown in GDP growth to 3.1% from 3.7% in 4Q18. This combined with heightened trade tension will make it increasingly hard for the Bank of Thailand to sustain its hawkish rhetoric going forward. Indeed, we are reviewing our on-hold forecast for the BoT policy this year.

➔ And leftover focus on economics

1Q GDP releases also are due in Japan, Singapore, and Taiwan. As for Japan, the macro story hasn't been any good, which is what backing the consensus view of a GDP contraction in the last

quarter. With inflation nowhere close to the Bank of Japan's policy target, the negative rate policy has a longer life than the central bank's guidance of this state of affair changing for good by Spring of 2020.

Singapore's and Taiwan's GDP data are the revised figures. Instead, the markets will pay attention to their April manufacturing releases to gauge GDP performance in the second quarter. Reeling under the tech downturn and escalation of the US-China trade war, things aren't looking any promising for these heavy export-dependent economies.

Needless to say, the balance of economic risk around the region remains tilted toward growth, not toward inflation as a slew of April consumer price figures are expected to reinforce next week.

Asia Economic Calendar

Country	Time*	Data/event	ING	Survey	Prev.
Monday 20 May					
Taiwan	0900	Apr Export Orders (YoY%)	-12.0	-	-9.0
	0920	1Q Current Account Balance (US\$bn)	18.0	-	18.6
South Korea	2200	Apr PPI (YoY%)	-	-	0.1
Tuesday 21 May					
Singapore	0100	1Q F GDP (QoQ Annualised/YoY%)	3.1/1.6	2.3/1.3	2.0/1.3
Thailand	0330	1Q GDP (QoQ/YoY%)	1.5/3.1	-/3.0	0.8/3.7
Wednesday 22 May					
Thailand	-	Apr Exports (Cust est, YoY%)	-	-	-4.9
	-	Apr Imports (Cust est, YoY%)	-	-	-7.6
	-	Apr Trade Balance (Cust est, US\$m)	-143.0	-	2005.0
Thursday 23 May					
Hong Kong	-	Apr CPI (YoY%)	2.2	-	2.1
Singapore	-	Apr CPI (YoY%)	0.9	-	0.6
	-	Apr Core CPI (YoY%)	1.6	-	1.4
Taiwan	0900	Apr Industrial Production (YoY%)	-7	-	-9.9
Friday 24 May					
Malaysia	0500	Apr CPI (YoY%)	0.2	-	0.2
	0800	May Forex Reserves, Mth-end (US\$bn)	-	-	103.4
Philippines	-	Apr Budget Balance (PHP bn)	-	-	-58.4
Singapore	-	Apr Industrial Production (MoM/YoY%)	-3.0/-6.5	-/-	-2.6/-4.8
Taiwan	0900	1Q F GDP (YoY%)	1.7	-	1.7
	0920	Apr Money Supply (M2) (YoY%)	3.4	-	3.1

Source: ING, Bloomberg, *GMT

Author

Alissa Lefebvre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

Ruben Dewitte

Economist

+32495364780

ruben.dewitte@ing.com

Kinga Havasi

Economic research trainee

kinga.havasi@ing.com

Marten van Garderen

Consumer Economist, Netherlands

marten.van.garderen@ing.com

David Havrlant

Chief Economist, Czech Republic

420 770 321 486

david.havrlant@ing.com

Sander Burgers

Senior Economist, Dutch Housing

sander.burgers@ing.com

Lynn Song

Chief Economist, Greater China

lynn.song@asia.ing.com

Michiel Tukker

Senior European Rates Strategist

michiel.tukker@ing.com

Michal Rubaszek

Senior Economist, Poland

michal.rubaszek@ing.pl

This is a test author

Stefan Posea

Economist, Romania

tiberiu-stefan.posea@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Jesse Norcross

Senior Sector Strategist, Real Estate

jesse.norcross@ing.com

Teise Stellema

Research Assistant, Energy Transition

teise.stellema@ing.com

Diederik Stadig

Sector Economist, TMT & Healthcare

diederik.stadig@ing.com

Diogo Gouveia

Sector Economist

diogo.duarte.vieira.de.gouveia@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Ewa Manthey

Commodities Strategist

ewa.manthey@ing.com

ING Analysts

James Wilson

EM Sovereign Strategist

James.wilson@ing.com

Sophie Smith

Digital Editor

sophie.smith@ing.com

Frantisek Taborsky

EMEA FX & FI Strategist

frantisek.taborsky@ing.com

Adam Antoniak

Senior Economist, Poland

adam.antoniak@ing.pl

Min Joo Kang

Senior Economist, South Korea and Japan

min.joo.kang@asia.ing.com

Coco Zhang

ESG Research

coco.zhang@ing.com

Jan Frederik Slijkerman

Senior Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

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Senior Economist, Services and Leisure

Katinka.Jongkind@ing.com

Marina Le Blanc

Sector Strategist, Financials

Marina.Le.Blanc@ing.com

Samuel Abettan

Junior Economist

samuel.abettan@ing.com

Franziska Biehl

Senior Economist, Germany

Franziska.Marie.Biehl@ing.de

Rebecca Byrne

Senior Editor and Supervisory Analyst

rebecca.byrne@ing.com

Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

mirjam.bani@ing.com

Timothy Rahill

Credit Strategist

timothy.rahill@ing.com

Leszek Kasek

Senior Economist, Poland

leszek.kasek@ing.pl

Oleksiy Soroka, CFA

Senior High Yield Credit Strategist

oleksiy.soroka@ing.com

Antoine Bouvet

Head of European Rates Strategy

antoine.bouvet@ing.com

Jeroen van den Broek

Global Head of Sector Research

jeroen.van.den.broek@ing.com

Edse Dantuma

Senior Sector Economist, Industry and Healthcare

edse.dantuma@ing.com

Francesco Pesole

FX Strategist

francesco.pesole@ing.com

Rico Luman

Senior Sector Economist, Transport and Logistics

Rico.Luman@ing.com

Jurjen Witteveen

Sector Economist

jurjen.witteveen@ing.com

Dmitry Dolgin

Chief Economist, CIS

dmitry.dolgin@ing.de

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Senior Economist, Philippines

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Egor Fedorov

Senior Credit Analyst

egor.fedorov@ing.com

Sebastian Franke

Consumer Economist

sebastian.franke@ing.de

Gerben Hieminga

Senior Sector Economist, Energy

gerben.hieminga@ing.com

Nadège Tillier

Head of Corporates Sector Strategy

nadege.tillier@ing.com

Charlotte de Montpellier

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charlotte.de.montpellier@ing.com

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+31(0)611172684

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Chief Economist, Romania

valentin.tataru@ing.com

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james.smith@ing.com

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Senior Sector Strategist, Financials
suvi.platerink-kosonen@ing.com

Thijs Geijer

Senior Sector Economist, Food & Agri
thijs.geijer@ing.com

Maurice van Sante

Senior Economist Construction & Team Lead Sectors
maurice.van.sante@ing.com

Marcel Klok

Senior Economist, Netherlands
marcel.klok@ing.com

Piotr Poplawski

Senior Economist, Poland
piotr.poplawski@ing.pl

Paolo Pizzoli

Senior Economist, Italy, Greece
paolo.pizzoli@ing.com

Marieke Blom

Chief Economist and Global Head of Research
marieke.blom@ing.com

Raoul Leering

Senior Macro Economist
raoul.leering@ing.com

Maarten Leen

Head of Global IFRS9 ME Scenarios
maarten.leen@ing.com

Maureen Schuller

Head of Financials Sector Strategy
Maureen.Schuller@ing.com

Warren Patterson

Head of Commodities Strategy
Warren.Patterson@asia.ing.com

Rafal Benecki

Chief Economist, Poland

rafal.benecki@ing.pl

Philippe Ledent

Senior Economist, Belgium, Luxembourg

philippe.ledent@ing.com

Peter Virovacz

Senior Economist, Hungary

peter.virovacz@ing.com

Inga Fechner

Senior Economist, Germany, Global Trade

inga.fechner@ing.de

Dimitry Fleming

Senior Data Analyst, Netherlands

Dimitry.Fleming@ing.com

Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

Padhraic Garvey, CFA

Regional Head of Research, Americas

padhraic.garvey@ing.com

James Knightley

Chief International Economist, US

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Asia Chief Economist

+65 6232-6020

Martin van Vliet

Senior Interest Rate Strategist

+31 20 563 8801

martin.van.vliet@ing.com

Karol Pogorzelski

Senior Economist, Poland

Karol.Pogorzelski@ing.pl

Carsten Brzeski

Global Head of Macro

carsten.brzeski@ing.de

Viraj Patel

Foreign Exchange Strategist

+44 20 7767 6405

viraj.patel@ing.com

Owen Thomas

Global Head of Editorial Content

+44 (0) 207 767 5331

owen.thomas@ing.com

Bert Colijn

Chief Economist, Netherlands

bert.colijn@ing.com

Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone

peter.vandenhoute@ing.com

Benjamin Schroeder

Senior Rates Strategist

benjamin.schroeder@ing.com

Chris Turner

Global Head of Markets and Regional Head of Research for UK & CEE

chris.turner@ing.com

Gustavo Rangel

Chief Economist, LATAM

+1 646 424 6464

gustavo.rangel@ing.com

Carlo Cocuzzo

Economist, Digital Finance

+44 20 7767 5306

carlo.cocuzzo@ing.com

Singapore exports maintain double-digit decline in 2Q

Data foreshadows a continued slowdown in manufacturing and GDP growth in the current quarter, making it increasingly difficult for the central bank to maintain its tighter policy stance



A deep water port in Singapore

-10%

NODX decline in April

Year-on-year

Worse than expected

Yet another disappointing export result

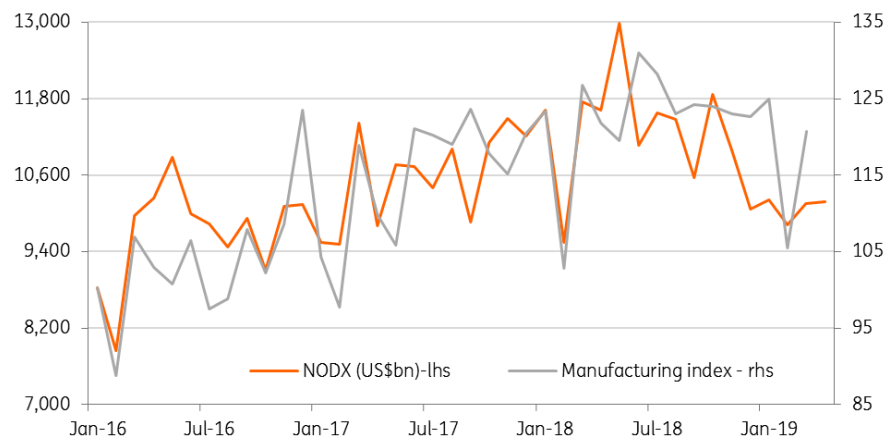
Singapore's non-oil domestic exports (NODX) posted a steeper-than-consensus 10% year-on-year fall in April, though the outcome was pretty close to our more bearish view. The consensus estimate was a 4.6% fall and we were at 12%, on top of an 11.8% fall in March.

Electronics exports remained a weak spot with a 16% fall led by semiconductors (-21%). However, non-electronics shipments also contracted for the second straight month by over 7%, making it a broad-based export weakness.

Data foreshadows a continued slowdown in manufacturing and GDP growth in the current quarter.

Look out for industrial production data next week.

Exports drive manufacturing - the trend remains on downward



Source: Bloomberg, CEIC, ING

Weak activity calls for easier monetary policy

Singapore is among the front-line Asian economies to face the brunt of the recent escalation of trade tensions between the US and China. A steeper manufacturing contraction driving a GDP slowdown in the first quarter of 2019 bore out the adverse impact of the deteriorating external environment. With trade tensions moving to the next level of more and higher tariff barriers things could get even worse from here on.

Such a state of affairs will make it increasingly difficult for the Monetary Authority of Singapore, the central bank, to sustain its tightening monetary policy bias going forward. Indeed, the MAS paused tightening in the last policy review in April. We think the odds of MAS scaling back part of the tightening moves in 2018 are on the rise.

Author

Alissa Lefebvre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

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Economist

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Digital Editor

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charlotte.de.montpellier@ing.com

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Behavioural Scientist

+31(0)611172684

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james.smith@ing.com

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Head of Financials Sector Strategy

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philippe.ledent@ing.com

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Senior Economist, Germany, Global Trade

inga.fechner@ing.de

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Senior Data Analyst, Netherlands

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Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

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Regional Head of Research, Americas

padhraic.garvey@ing.com

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james.knightley@ing.com

Tim Condon

Asia Chief Economist

+65 6232-6020

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+31 20 563 8801

martin.van.vliet@ing.com

Karol Pogorzelski

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Karol.Pogorzelski@ing.pl

Carsten Brzeski

Global Head of Macro

carsten.brzeski@ing.de

Viraj Patel

Foreign Exchange Strategist

+44 20 7767 6405

viraj.patel@ing.com

Owen Thomas

Global Head of Editorial Content

+44 (0) 207 767 5331

owen.thomas@ing.com

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Chief Economist, Netherlands

bert.colijn@ing.com

Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone

peter.vandenhoute@ing.com

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Chris Turner

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chris.turner@ing.com

Gustavo Rangel

Chief Economist, LATAM

+1 646 424 6464

gustavo.rangel@ing.com

Carlo Cocuzzo

Economist, Digital Finance

+44 20 7767 5306

carlo.cocuzzo@ing.com

Article | 16 May 2019

Trade tensions accelerate move of China's factories

China's move up the value chain is re-shaping global trade as we know it and the trade war with the US is speeding up the process



A busy road in Shanghai

Executive summary

- As China's economy matures, its pace of growth is slowing.
- Chinese firms are switching from labour intensive production to production of higher value added products and services.
- Wages are rising and the economic model is shifting towards consumption growth.
- Higher wages mean that labour intensive production is moving out of major Chinese cities towards cheaper rural areas, as well as to other countries like Vietnam.
- Some western production currently outsourced or offshored to Asia may be backshored or near-shored to the west.
- Automation is an opportunity to hold onto activities plagued by rising wages but it won't stop the shift in global trade flows.
- The US-China trade war is accelerating this trend as major companies such as Ikea are relocating production in Vietnam to avoid US tariffs.
- The growing importance of Chinese consumption in its economy implies less import growth since consumption is less import-intensive than exports or investment.
- China is also sourcing ever more inputs from domestic suppliers, thereby further

suppressing the importance of imports.

- Outsourcing and offshoring by Chinese and western companies to other Asian countries is leading to diversification of trade flows in Asia.
- China's declining import share and slowing economic growth rate hollows out the position of China as the locomotive of world trade.

1 Introduction

Forty years after the start of its "reform and opening up" policy, China is reinventing itself once again. Threatened by an ageing workforce and lagging productivity, factories are in transition mode, changing both what they do and where they do it.

This transformation, which has meaningful implications for the overall economy and for global trade, has gained momentum amid escalating trade tensions with the US. But it's also been a long time in the making.

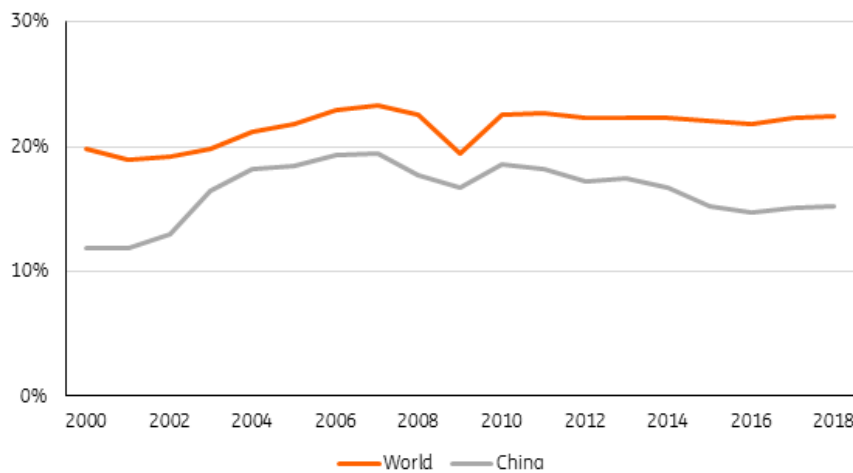
Back in the early 1990s when China first really started to engage in [Global Value Chains \(GVCs\)](#), an abundance of low skilled and low paid workers made Chinese firms perfectly suited to perform low value added activities such as final product assembly. During this period, investments and exports were the primary drivers of Chinese economic growth. The industrialising Chinese economy expanded at a staggering pace, with growth of around 10% a year, peaking at 14% in 2007.

From the early 1990s to 2005, foreign inputs as a share of Chinese gross exports rose from approximately 10% to over 35%, according to TiVA and WIOD^[1] data. This caused the share of imports in the Chinese economy to increase by more than half (Figure 1), helping to fuel spectacular growth in world trade in the 15 years running up to the financial crisis.

Since then, however, things have moved on. Wages have risen, China is rapidly automating production and the US-China trade war is reinforcing the economic incentives for factories to relocate, all of which points to a potential sea change in the balance of international trade.

Figure 1: Imports as share of GDP

Volumes in 2017 prices and exchange rates



Source: Source: World Bank, calculations ING

- [1] TiVA – Trade in Value Added database of the OECD consist of Input-Output based data. The WIOD – (World Input Output Database) are international Input Output Tables published by the University of Groningen.

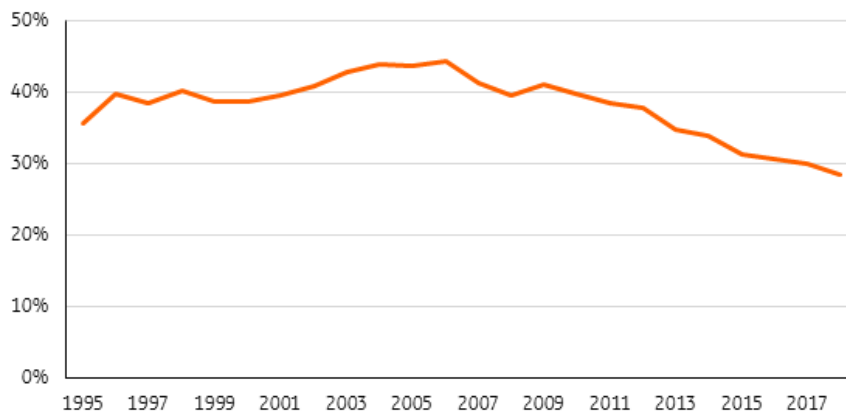
2 Chinese upgrading and trade

In the mid-2000s, China began to upgrade the type of activities it performed in GVCs and also started to produce more of the required inputs domestically. This is clearly visible in the falling share of Chinese re-exports with imported materials (Figure 2). For example, China-based suppliers producing for Apple have doubled the inputs they source from within China, according to the [EI](#).

"Chinese industries are upgrading and increasingly sourcing inputs from the domestic market."

Figure 2: China is importing less inputs for its exports

Re-exports, % of total exports

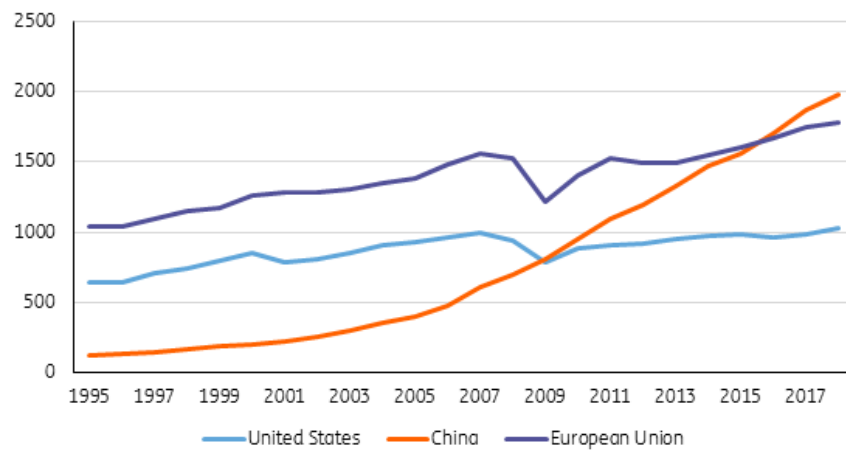


Source: Source: China customs, UN-Comtrade, calculations ING

Another sign that Chinese industries are upgrading is the impressive increase in value added earned by China in medium-high tech industries, overtaking the EU in 2016 (Figure 3). This contributed to the fall in the Chinese import ratio.

Figure 3: China becoming a large player in medium-high tech industries

Sector output medium-tech industries (2010 US\$ bn)



Source: Source: Oxford Economics

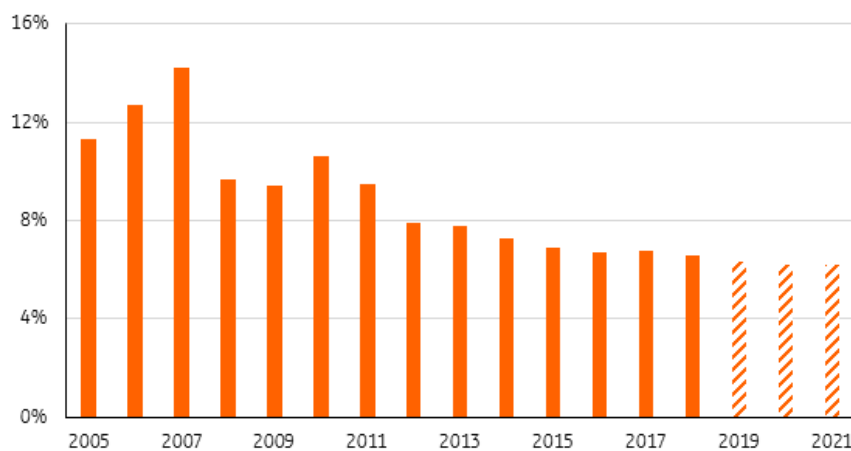
At the same time, rising wages fuelled domestic consumption, which started to play a larger role in Chinese GDP growth. Domestic consumption is less import intensive in comparison to exported goods or investment goods. This also contributed to the fall of imports as a share of Chinese GDP.

In recent years, the fall in the import ratio has been bottoming out. However, given the Chinese policy to source more inputs from domestic suppliers, we see the possibility for a further drop

in the import ratio towards the level of the US at 12% from just above 15%. A continuation of the current trade war with the US, which raises the price of American inputs, could also fuel this trend towards more local sourcing. On the other hand, rising wages could induce more offshoring of Chinese intermediate production leading to a higher import intensity. The outcome of these opposing forces will determine the direction of China's import ratio in the coming years.

The strength of Chinese GDP growth compared to other large economies is the reason that Chinese imports have continued to grow faster than the global average, despite the downward trend in the import ratio. As the economy rebalances towards a more consumption-driven model, growth rates will move closer to those seen in developed economies (Figure 4), which means that world trade will lose its main driving force.

Figure 4: Slowing GDP growth in China



Source: Source: Bloomberg, forecast by ING

"As China's economy is maturing, it is growing at a slowing pace"

3 "Made in China 2025"

Another factor that will put a lid on China's growth potential is ageing. Decades of one child policy have left the country with a population that is rapidly growing out of its working age.

The government's strategic plan for upgrading high-tech industries, often referred to as "Made in China 2025," is in part, a response to this problem. China wants to boost productivity to compensate for its shrinking labour force and it has set ambitious research and development targets. Currently, China spends roughly 2.1% of its GDP on R&D, investing in and significantly subsidising the acquisition of new technologies.

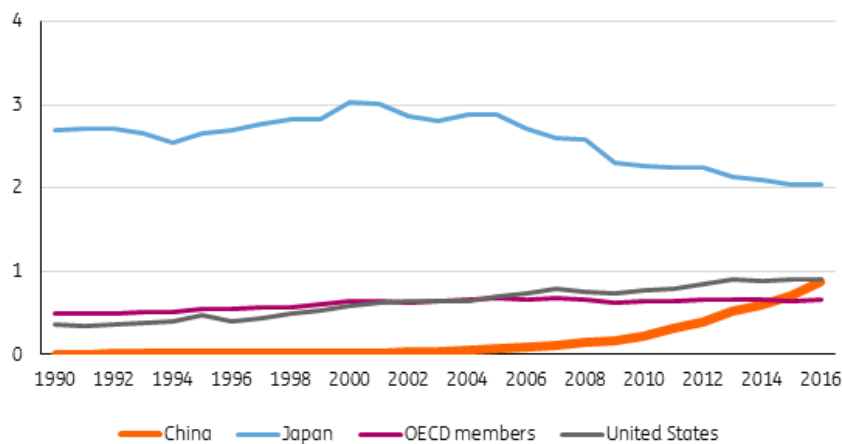
Launched in 2015, the 10-year plan targets 10 industries, including quantum computing, artificial intelligence and chip making. It aims for these sectors to source 40% of all "core" inputs domestically by 2020 and over 70% by 2025. The Chinese government has established over 1000 state guided funds that together manage over US\$5 trillion in assets. These funds are investing in tech start-ups in fields such as robotics, aerospace and advanced battery making.

"Chinese innovation capacity is growing."

One sign of China's maturing position in value chains is the increasing innovation capacity, as measured by patent fillings. Figure 5 shows that the number of patent applications has reached levels comparable to those of advanced economies in recent years.

Figure 5: China registering more patents

Annual number of patent registrations per 1000 residents



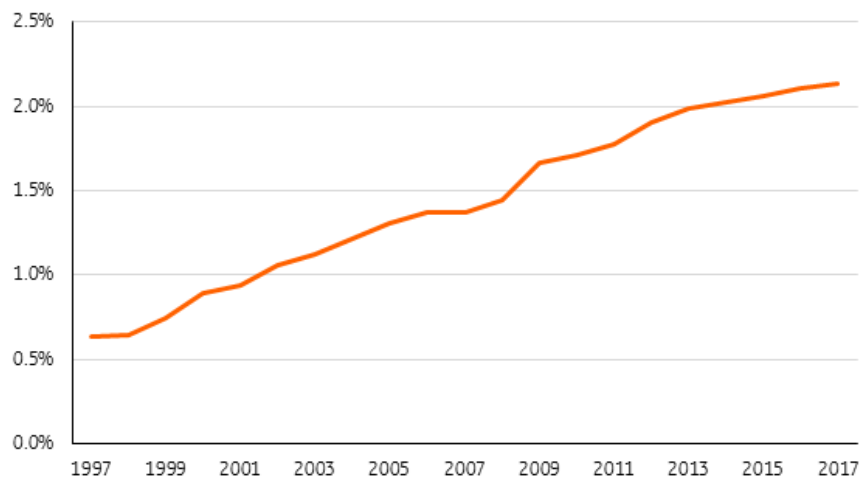
Source: World Bank

However, parts of China's ambitious strategy could prove challenging. Despite the emphasis on high-tech investments in the "Made in China 2025" plan, we have seen no acceleration in R&D spending since the plan was announced in 2015 (Figure 6). Without faster growth, R&D levels will struggle to meet the 2020 target of 2.5% of GDP.

China's ambition to become self-sufficient in the production of advanced computing chips also remains a challenge. About two thirds of the semi-conductors sold and processed in China are still imported. Top tier electronics firms remain dependent on US silicon. For example, ZTE, one of China's flagship tech firms had to halt production because the US temporarily banned the sale of semiconductors to the firm due to sanctions for doing business with Iran and North Korea.

Figure 6: China spending more on R&D

China R&D expenditure % of GDP



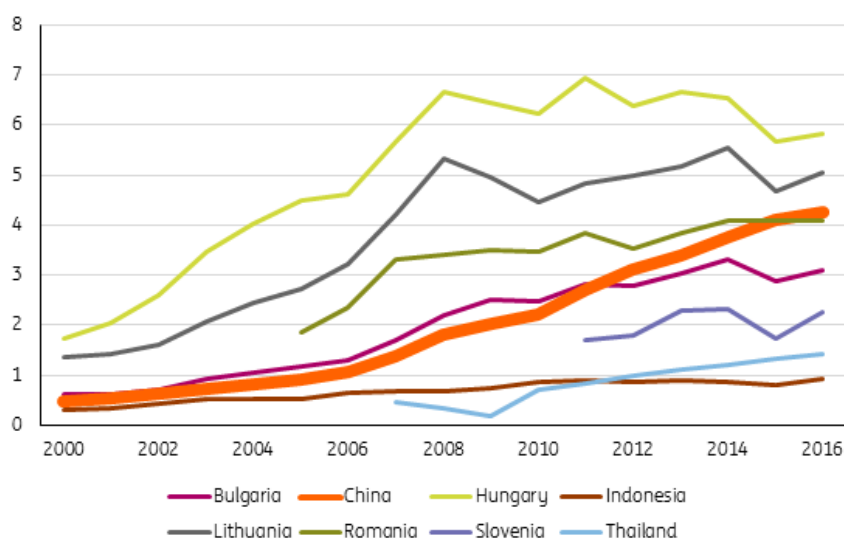
Source: Source: OECD

4 Relocation of Chinese factories

The rise in Chinese wages in recent years has brought the average hourly wage rate to levels seen in emerging Europe. Comparability of average wage data across countries is not without problems, but even when taking into account a significant margin for error, the rise in Chinese wage costs remains impressive (Figure 7).

Figure 7: Chinese wages catching up with other emerging economies

Mean hourly wage in nominal US\$

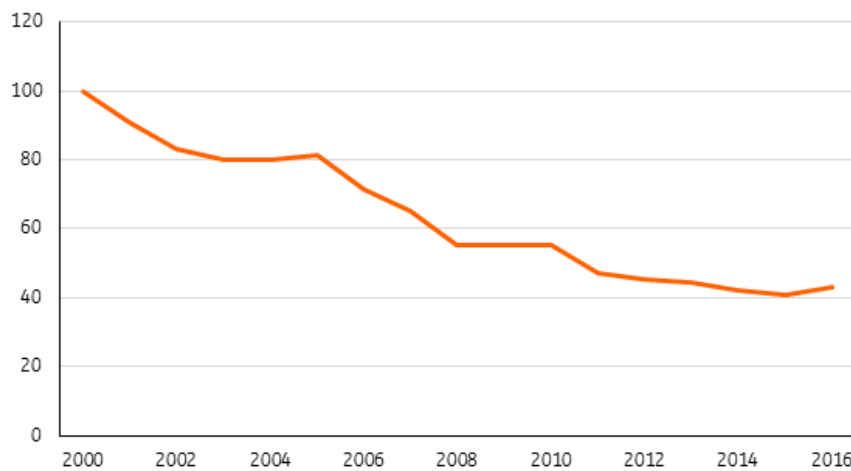


Source: Source: ILO, OECD, calculations ING

While nominal wages in China have been rising, productivity has grown even faster. This is largely due to investments in machinery and robots (automation) resulting in more output per worker. This has resulted in an overall fall in unit labour costs (Figure 8).

Figure 8: Chinese productivity growth causes falling unit labour costs

Mean hourly wage in US\$ per unit of output



Source: Source: ILO, World bank, calculations ING

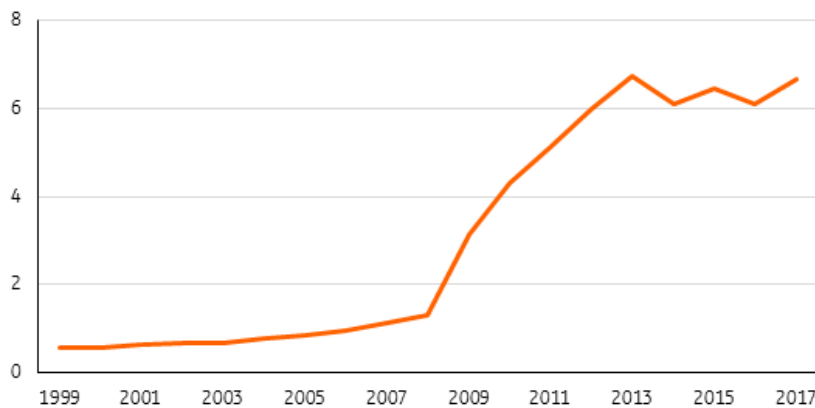
However, this downward trend in unit labour costs does not hold for all industries. Some labour intensive production is difficult to automate and still relies disproportionately on manual labour. Examples include clothing production, household appliances and toy manufacturing. These types of industries haven't experienced steep increases in productivity but are nonetheless facing higher wages. These industries have been relocating to China's countryside where wages are lower. Workers inland and in western China have been earning 75%^[2] of the average wage in the coastal provinces.

"Despite the overall decrease in unit labour costs, labour intensive production has become more expensive in China."

Other advantages of relocating to the countryside are lower factory rents and government subsidises on new factories, as part of the government's strategy to revitalise China's inland provinces. For example, Jintai Garment, a clothing manufacturer based in the coastal province of Zhejiang, has built 17 factories in the inland region of Henan, employing about 2600 workers.

Figure 9: Chinese inland freight traffic rapidly rising

Trillions of tn-km transported by road



Source: Source: National Bureau of Statistics of China

The relocation of factories to inland China has coincided with a vast increase in inland freight traffic (Figure 9), indicating increasing economic activity in the non-coastal regions of China.

In recent years, this relocation towards inland China has slowed as wages in inland regions are also on the rise.^[3] Companies suffering from rising Chinese wage costs have already been relocating to neighbouring countries, with many foreign manufacturers among them. Notably, Japanese automotive companies such as Honda and Yamaha now employ a “China plus one” strategy. This means that, in addition to China, firms have a second production location in a low wage economy within Asia. The most common locations are Vietnam, India, Indonesia, Thailand and the Philippines. Manufacturers are retaining a presence in China to maintain access to China’s large market, but they’re looking elsewhere, too.

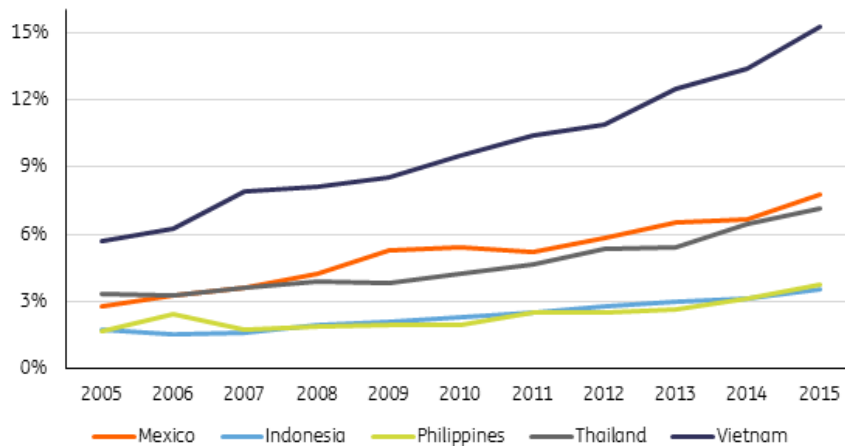
"As wages have been rising in coastal China, industries have been moving to inland regions."

Firms (both Chinese and foreign) are increasingly active in outsourcing lower value added activities to neighbouring Asian countries. Figure 10 shows that Chinese value added in the gross exports of Vietnam, Thailand, and Mexico has increased significantly in recent years, indicating a shift of assembly activities from China towards these countries. Figure 12 shows [Green Field FDI](#) figures indicating the increasing popularity of Vietnam for offshoring among the major East Asian economies.

Western companies, meanwhile, are engaging in near-shoring activities to bring production closer to western consumers. Mexico fulfils this role for companies that service the US market while emerging Europe services demand for Europeans.

Figure 10: China's growing role in the exports of other emerging economies

Chinese value added in gross exports to EU, US and Canada by selected economies. Chinese value added as % of total gross exports by country.



Source: Source, OECD-TIVA

The trade war between China and the US is also a trigger to move (parts of) production from China to other countries, so that American import tariffs can be avoided. The Financial Times reports that [Pegatron moved part of its production from China](#) to a rented factory in Indonesia to circumvent US tariffs. Large furniture companies such as Ikea have also [reportedly switched to a Vietnamese supplier](#), in part because of the trade conflict.

"Industries are increasingly relocating production from China to other countries, and the China-US trade war seems to be accelerating this trend."

Despite the upgrading of activities and higher wage costs, we should stress that China will remain a manufacturing powerhouse for mass production in the foreseeable future. The size of the country and its population, as well as the willingness of the Chinese population to move, allow for economies of scale not achievable anywhere else. While the [reported](#) maximum factory size is about 20,000 workers in most Asian countries, Chinese plants are vastly bigger. Some of Pegatron's Chinese factories host 80,000 workers. The Foxconn factories are even larger, hosting from 100,000 to 300,000 workers. The sheer size of the economy will remain a counterweight to the benefits of lower wages in other countries for some time to come. This is particularly true given the rising trend of automation, raising worker productivity.

- [\[2\]](#) LINCOLN UNIVERSITY, *The shift in manufacturing employment in china (2017)*
- [\[3\]](#) *China Statistical Year Book 2018*

5 The role of automation

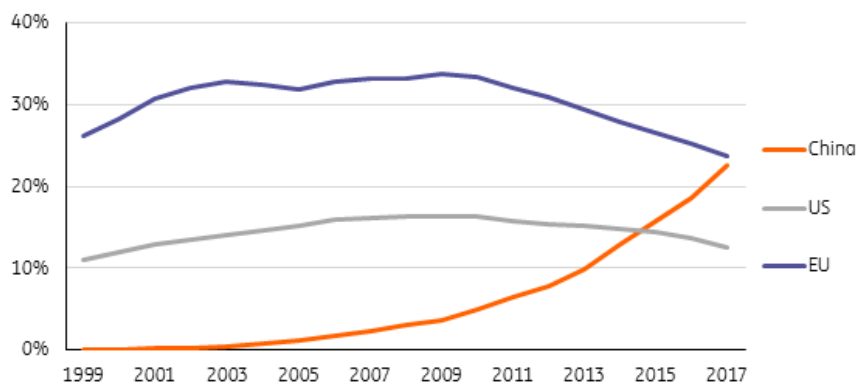
China is rapidly automating production. In 2014, President Xi Jinping called for a “robot revolution” in the manufacturing industry. Since 2015, the Chinese working population (age 15 to 64) has been decreasing. This decline will continue for the foreseeable future, while the total Chinese population keeps on growing. In order to maintain strong economic growth and support the elderly in China, productivity growth is needed to compensate for the declining working population.

If there were no further productivity growth in China, GDP per capita would be 5% smaller by 2030. To attain the current target of 6 to 6.5% economic growth, productivity needs to grow by 6.3% to 6.8% per year.

Automation is an important driver of productivity growth. According to statistics by the International Federation of Robotics, the average number of robots per 10,000 employees increased from 25 to 68 from 2013 to 2016. Over the last decade, the share of Chinese robots in total robots worldwide more than doubled (see Figure 11).

Figure 11: China's is robotising production rapidly

The US, EU and China's operational manufacturing robots as % of world total.



Source: Source: by IFR, calculations by ING

The China Development Research Foundation showed that manufacturing companies have cut 30% to 40% of their labour force because of automation between 2015 and 2017.

Automation first took off in the automotive industry but has spread rapidly to other Chinese sectors such as electronics manufacturing and metals. In less productive industries, such as textiles or toy manufacturing, automation is less prevalent and some companies have been relocating to China's low wage neighbours. Industries that can be automated to a larger extent are more likely to stay in China, particularly because of its large and growing domestic market for consumption. At the same time, automation makes it viable for some foreign companies to move production for the European or American markets back to the home market.

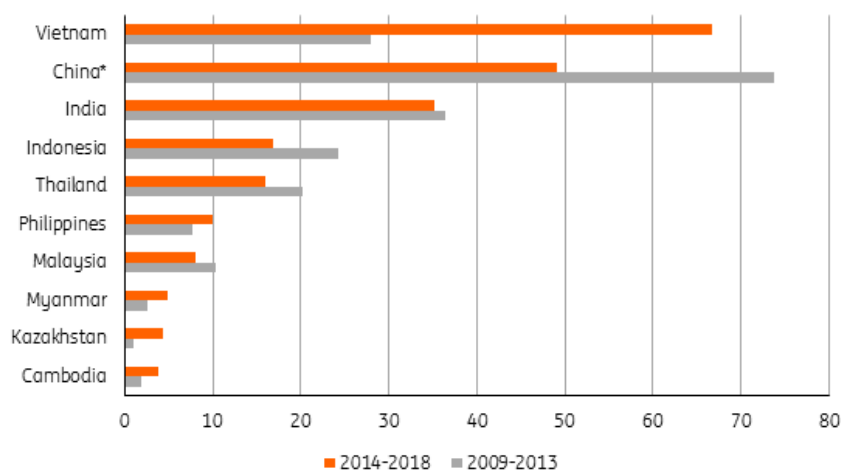
6 New Asian production El Dorados

As mentioned, some firms are relocating labour intensive production, such as garment manufacturing or toys, to other Asian countries.

Figure 12 shows the 10 Asian countries in which Chinese (greater China), Japanese and South Korean firms invest the most. These investment flows show the jobs added in countries and sectors by foreign investment. A lot of manufacturing activities that are being relocated also take the shape of cross border outsourcing, which is not captured by international investment flows. Hence outsourcing is not shown in Figure 12. Still, Green Field FDI flows are part of the story of relocating industries and indicate which countries and sectors are most attractive to firms seeking the most efficient production location.

Figure 12: top 10 Asian investment destinations for manufacturing

Green Field investments in manufacturing industries by Greater China, South Korea, and Japan, Data in thousands of jobs (Cumulative figures for period)



Source: Source: FDI intelligence, calculations ING

*Domestic investments are not included. Investments into China are investments by firms from other Greater China (Hongkong, Macau, Taiwan) Japan, and South Korea.

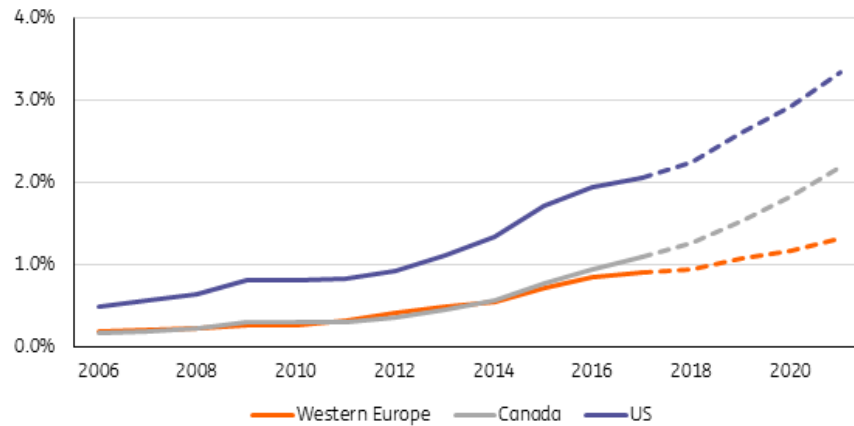
"Vietnam attracts most investments in the production of textiles, basic electronics, and consumer products. Investments in India and Indonesia are more popular among producers in the automotive and metal sectors."

FDI intelligence data

Vietnam is the most favoured destination for offshoring or outsourcing production. In 2014 and 2015, the government passed a number of reforms (labour, land, competition, and taxes) with the intention of attracting more (foreign) investment. The development of Vietnam as a manufacturing location is also visible in the rising share of Vietnamese goods in the import baskets of advanced economies (Figure 13).

Figure 13: Vietnam's growing importance as an exporting economy

Share of imports from Vietnam in the total imports of western Europe, Canada and the US

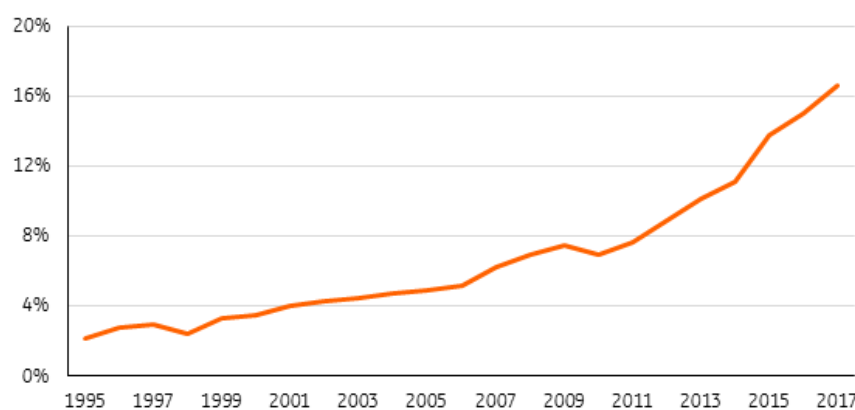


Source: Source: UNCTAD, calculations ING

The rise of Vietnam as a manufacturing power within Asia is also visible in its share within intra-Asian imports, which has more than doubled since 2011 (Figure 14).

Figure 14: Vietnam becoming more important in intra-Asian trade

Share of Intra Asian Imports involving Vietnam



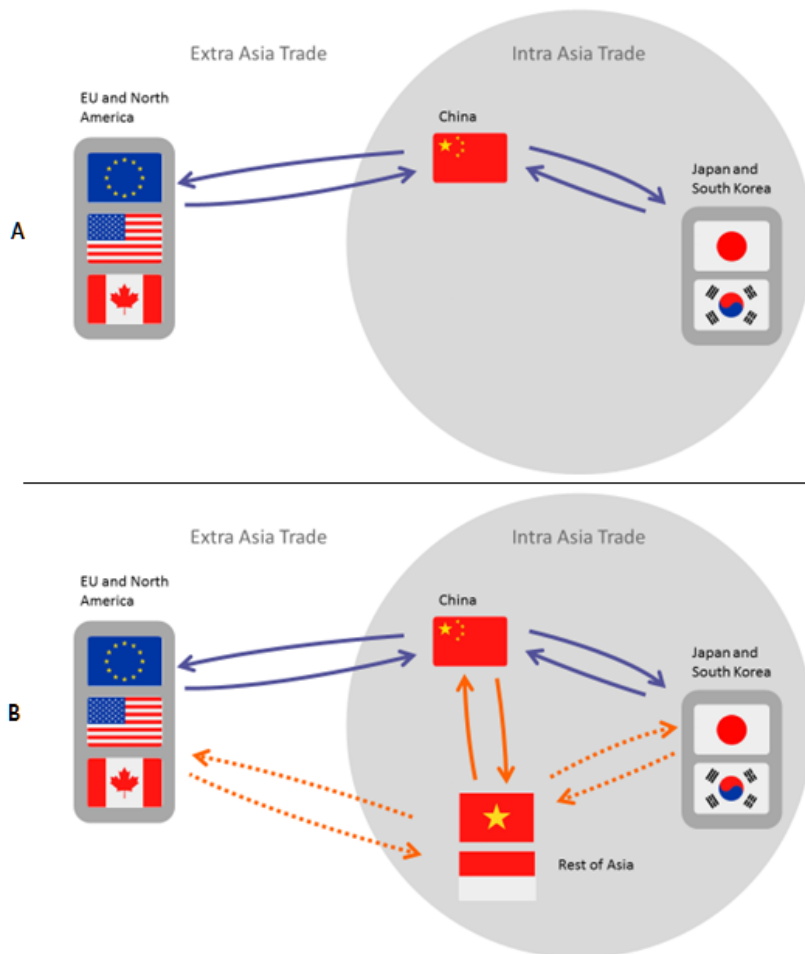
Source: Source: UNCTAD, calculations ING

The growth of Vietnam's share is mostly driven by bilateral trade between Vietnam and Korea, Japan and China. Both Vietnamese imports and Vietnamese exports from and to these countries have shown strong growth. This is likely a result of Vietnam integrating into regional value chains.

7 Diversification of Asian trade flows

The transition of China will lead to a shift in the balance of Asian trade. Panel A in Figure 15 shows a sterilised picture of trade flows involving China over the past decades. Where China has been an offshoring and outsourcing destination, China imports a lot of durable intermediates from the advanced economies to be processed in final goods. China exports these final goods to the world's main consumption markets.

Figure 15: Trade flows will diversify towards new emerging Asian economies



Source: ING

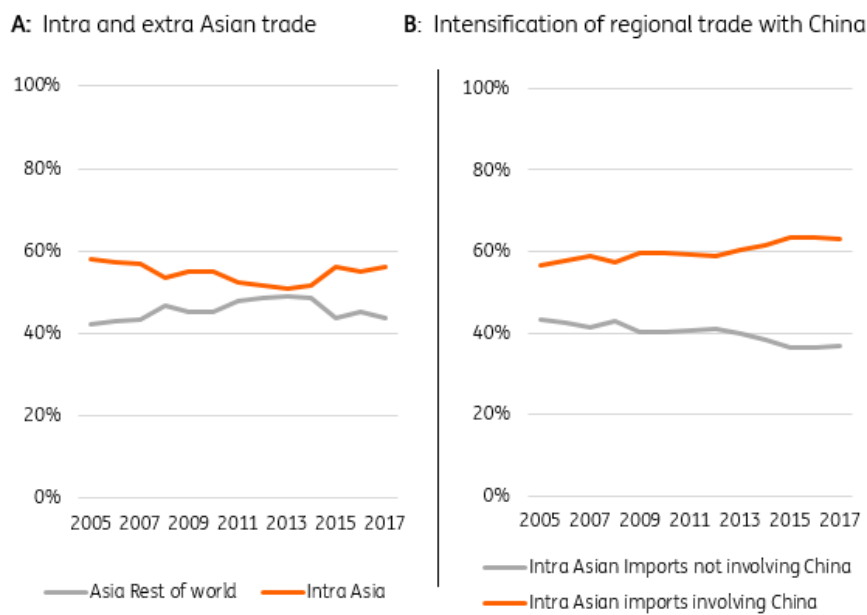
Now that foreign and Chinese firms are relocating manufacturing of some lower value added industries from China to other Asian countries, China and the advanced economies will be exporting more intermediates to the rest of Asia. The final goods produced in the rest of Asia will then be shipped to the advanced economies and China for consumption. Trade flows between the rest of Asia and advanced economies, (dashed arrows) will therefore grow at the expense of trade between the advanced economies and China. Additionally, since China's market for final goods consumption is maturing, China will also import more final goods from advanced economies.

China is upgrading its industries fast and is increasingly sourcing high value added intermediates

domestically. This will likely result in China importing fewer intermediates from advanced economies and growing exports of intermediates to the rest of Asia. In addition, as a result of recent developments in automation and robotisation, labour costs are becoming less relevant for some industries, which means some production currently outsourced or offshored to Asia may be back-shored or near-shored to the west. This may lead to the decreasing importance of extra Asia trade.

Figure 16: Developments in in Asian regional trade

% of total trade

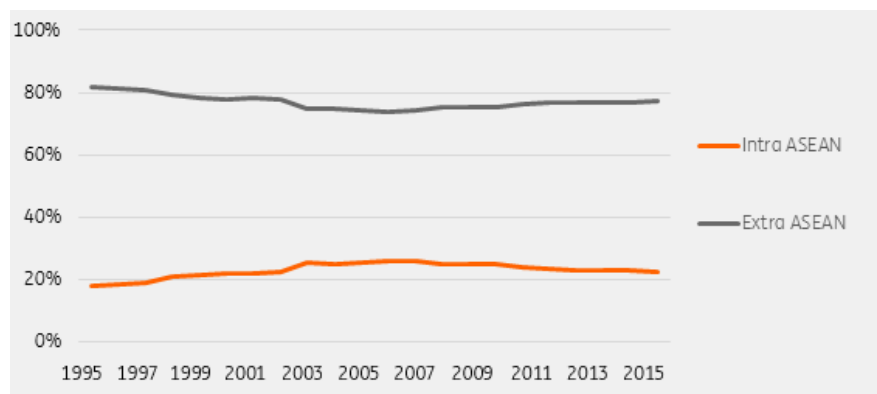


Source: Source: UNCTAD

These trends are clearly visible in Asian trade flows. Intra-Asian imports have been growing stronger than Asian imports from the rest of the world since 2013 (Figure 16A). This intensification of regional trade is primarily centred around China. The share of intra-Asian trade involving China increased by four percentage points between 2012 and 2015.

In 2016 and 2017, the trend of China's increasing dominance in Asian trade seemed to come to a standstill and even reverse a bit. Due to opposing forces at work, it is very difficult to determine whether this trend will continue in the years to come. However, we expect that China's trade flows within Asia will be more diversified towards new emerging Asian countries such as Vietnam, Indonesia and the Philippines.

THE ASEAN GROUP



Source: Source: UNCTAD, calculations ING

The ASEAN group is a regional grouping among South Asian countries[4]. The combined GDP of the ASEAN group is about US\$2.8 trillion. Although the ASEAN group promotes regional economic integration, it has shown a slight trend towards de-regionalisation with regards to trade in recent years. This is mostly due to a deepening of the trading relationships between the ASEAN countries and China.

- [4] *The ASEAN is a free trade agreement between Indonesia, the Philippines, Vietnam, Thailand, Myanmar, Malaysia, Cambodia, Laos, Singapore, and Brunei.*

Conclusion

China's transition is far from over.

In the coming years, wages are expected to keep rising while Chinese and foreign companies, which don't experience high productivity growth, will continue to outsource or offshore part of their production to neighbouring countries. The US-China trade war is speeding up the relocation of these industries.

China's grand plan to upgrade its industries from mass production to production of high value added products and services is aimed at boosting productivity to maintain high levels of growth. If successful, the relocation of production activities away from China may be modest, limiting the growth of intra-Asian trade. It is not clear if intra-Asian trade will grow significantly stronger than extra Asian trade.

But a diversification of China's trade flows towards new emerging Asian economies such as Vietnam, Indonesia and the Philippines is a trend that's here to stay. Further change is coming.

Author

Alissa Lefebre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

Ruben Dewitte

Economist

+32495364780

ruben.dewitte@ing.com

Kinga Havasi

Economic research trainee

kinga.havasi@ing.com

Marten van Garderen

Consumer Economist, Netherlands

marten.van.garderen@ing.com

David Havrlant

Chief Economist, Czech Republic

420 770 321 486

david.havrlant@ing.com

Sander Burgers

Senior Economist, Dutch Housing

sander.burgers@ing.com

Lynn Song

Chief Economist, Greater China

lynn.song@asia.ing.com

Michiel Tukker

Senior European Rates Strategist

michiel.tukker@ing.com

Michal Rubaszek

Senior Economist, Poland

michal.rubaszek@ing.pl

This is a test author

Stefan Posea

Economist, Romania

tiberiu-stefan.posea@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Jesse Norcross

Senior Sector Strategist, Real Estate

jesse.norcross@ing.com

Teise Stellema

Research Assistant, Energy Transition

teise.stellema@ing.com

Diederik Stadig

Sector Economist, TMT & Healthcare

diederik.stadig@ing.com

Diogo Gouveia

Sector Economist

diogo.duarte.vieira.de.gouveia@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Ewa Manthey

Commodities Strategist

ewa.manthey@ing.com

ING Analysts

James Wilson

EM Sovereign Strategist

James.wilson@ing.com

Sophie Smith

Digital Editor

sophie.smith@ing.com

Frantisek Taborsky

EMEA FX & FI Strategist

frantisek.taborsky@ing.com

Adam Antoniak

Senior Economist, Poland

adam.antoniak@ing.pl

Min Joo Kang

Senior Economist, South Korea and Japan

min.joo.kang@asia.ing.com

Coco Zhang

ESG Research

coco.zhang@ing.com

Jan Frederik Slijkerman

Senior Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

Katinka Jongkind

Senior Economist, Services and Leisure

Katinka.Jongkind@ing.com

Marina Le Blanc

Sector Strategist, Financials

Marina.Le.Blanc@ing.com

Samuel Abettan

Junior Economist

samuel.abettan@ing.com

Franziska Biehl

Senior Economist, Germany

Franziska.Marie.Biehl@ing.de

Rebecca Byrne

Senior Editor and Supervisory Analyst

rebecca.byrne@ing.com

Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

mirjam.bani@ing.com

Timothy Rahill

Credit Strategist

timothy.rahill@ing.com

Leszek Kasek

Senior Economist, Poland

leszek.kasek@ing.pl

Oleksiy Soroka, CFA

Senior High Yield Credit Strategist

oleksiy.soroka@ing.com

Antoine Bouvet

Head of European Rates Strategy

antoine.bouvet@ing.com

Jeroen van den Broek

Global Head of Sector Research

jeroen.van.den.broek@ing.com

Edse Dantuma

Senior Sector Economist, Industry and Healthcare

edse.dantuma@ing.com

Francesco Pesole

FX Strategist

francesco.pesole@ing.com

Rico Luman

Senior Sector Economist, Transport and Logistics

Rico.Luman@ing.com

Jurjen Witteveen

Sector Economist

jurjen.witteveen@ing.com

Dmitry Dolgin

Chief Economist, CIS

dmitry.dolgin@ing.de

Nicholas Mapa

Senior Economist, Philippines

nicholas.antonio.mapa@asia.ing.com

Egor Fedorov

Senior Credit Analyst

egor.fedorov@ing.com

Sebastian Franke

Consumer Economist

sebastian.franke@ing.de

Gerben Hieminga

Senior Sector Economist, Energy

gerben.hieminga@ing.com

Nadège Tillier

Head of Corporates Sector Strategy

nadege.tillier@ing.com

Charlotte de Montpellier

Senior Economist, France and Switzerland

charlotte.de.montpellier@ing.com

Laura Straeter

Behavioural Scientist
+31(0)611172684
laura.Straeter@ing.com

Valentin Tataru
Chief Economist, Romania
valentin.tataru@ing.com

James Smith
Developed Markets Economist, UK
james.smith@ing.com

Suvi Platerink Kosonen
Senior Sector Strategist, Financials
suvi.platerink-kosonen@ing.com

Thijs Geijer
Senior Sector Economist, Food & Agri
thijs.geijer@ing.com

Maurice van Sante
Senior Economist Construction & Team Lead Sectors
maurice.van.sante@ing.com

Marcel Klok
Senior Economist, Netherlands
marcel.klok@ing.com

Piotr Poplawski
Senior Economist, Poland
piotr.poplawski@ing.pl

Paolo Pizzoli
Senior Economist, Italy, Greece
paolo.pizzoli@ing.com

Marieke Blom
Chief Economist and Global Head of Research
marieke.blom@ing.com

Raoul Leering
Senior Macro Economist
raoul.leering@ing.com

Maarten Leen
Head of Global IFRS9 ME Scenarios
maarten.leen@ing.com

Maureen Schuller

Head of Financials Sector Strategy

Maureen.Schuller@ing.com

Warren Patterson

Head of Commodities Strategy

Warren.Patterson@asia.ing.com

Rafal Benecki

Chief Economist, Poland

rafal.benecki@ing.pl

Philippe Ledent

Senior Economist, Belgium, Luxembourg

philippe.ledent@ing.com

Peter Virovacz

Senior Economist, Hungary

peter.virovacz@ing.com

Inga Fechner

Senior Economist, Germany, Global Trade

inga.fechner@ing.de

Dimitry Fleming

Senior Data Analyst, Netherlands

Dimitry.Fleming@ing.com

Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

Padhraic Garvey, CFA

Regional Head of Research, Americas

padhraic.garvey@ing.com

James Knightley

Chief International Economist, US

james.knightley@ing.com

Tim Condon

Asia Chief Economist

+65 6232-6020

Martin van Vliet

Senior Interest Rate Strategist

+31 20 563 8801

martin.van.vliet@ing.com

Karol Pogorzelski

Senior Economist, Poland

Karol.Pogorzelski@ing.pl

Carsten Brzeski

Global Head of Macro

carsten.brzeski@ing.de

Viraj Patel

Foreign Exchange Strategist

+44 20 7767 6405

viraj.patel@ing.com

Owen Thomas

Global Head of Editorial Content

+44 (0) 207 767 5331

owen.thomas@ing.com

Bert Colijn

Chief Economist, Netherlands

bert.colijn@ing.com

Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone

peter.vandenhoute@ing.com

Benjamin Schroeder

Senior Rates Strategist

benjamin.schroeder@ing.com

Chris Turner

Global Head of Markets and Regional Head of Research for UK & CEE

chris.turner@ing.com

Gustavo Rangel

Chief Economist, LATAM

+1 646 424 6464

gustavo.rangel@ing.com

Carlo Cocuzzo

Economist, Digital Finance

+44 20 7767 5306

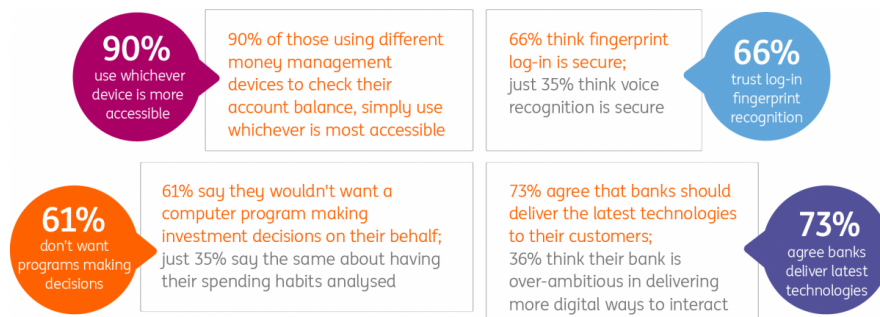
carlo.cocuzzo@ing.com

Mobile banking 2019: Tech in banking in strong demand but adopted with care

Our 7th annual ING international Survey on attitudes towards financial technologies is a story of the steady adoption of mobile banking, albeit with some natural hesitation, and continued consumer interest in tech. Download the full report below:



Some findings at a glance



Author

Alissa Lefebvre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

Ruben Dewitte

Economist

+32495364780

ruben.dewitte@ing.com

Kinga Havasi

Economic research trainee

kinga.havasi@ing.com

Marten van Garderen

Consumer Economist, Netherlands

marten.van.garderen@ing.com

David Havrlant

Chief Economist, Czech Republic

420 770 321 486

david.havrlant@ing.com

Sander Burgers

Senior Economist, Dutch Housing

sander.burgers@ing.com

Lynn Song

Chief Economist, Greater China

lynn.song@asia.ing.com

Michiel Tukker

Senior European Rates Strategist

michiel.tukker@ing.com

Michal Rubaszek

Senior Economist, Poland

michal.rubaszek@ing.pl

This is a test author

Stefan Posea

Economist, Romania

tiberiu-stefan.posea@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Jesse Norcross

Senior Sector Strategist, Real Estate

jesse.norcross@ing.com

Teise Stellema

Research Assistant, Energy Transition

teise.stellema@ing.com

Diederik Stadig

Sector Economist, TMT & Healthcare

diederik.stadig@ing.com

Diogo Gouveia

Sector Economist

diogo.duarte.vieira.de.gouveia@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Ewa Manthey

Commodities Strategist

ewa.manthey@ing.com

ING Analysts

James Wilson

EM Sovereign Strategist

James.wilson@ing.com

Sophie Smith

Digital Editor

sophie.smith@ing.com

Frantisek Taborsky

EMEA FX & FI Strategist

frantisek.taborsky@ing.com

Adam Antoniak

Senior Economist, Poland

adam.antoniak@ing.pl

Min Joo Kang

Senior Economist, South Korea and Japan

min.joo.kang@asia.ing.com

Coco Zhang

ESG Research

coco.zhang@ing.com

Jan Frederik Slijkerman

Senior Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

Katinka Jongkind

Senior Economist, Services and Leisure

Katinka.Jongkind@ing.com

Marina Le Blanc

Sector Strategist, Financials

Marina.Le.Blanc@ing.com

Samuel Abettan

Junior Economist

samuel.abettan@ing.com

Franziska Biehl

Senior Economist, Germany

Franziska.Marie.Biehl@ing.de

Rebecca Byrne

Senior Editor and Supervisory Analyst

rebecca.byrne@ing.com

Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

mirjam.bani@ing.com

Timothy Rahill

Credit Strategist

timothy.rahill@ing.com

Leszek Kasek

Senior Economist, Poland

leszek.kasek@ing.pl

Oleksiy Soroka, CFA

Senior High Yield Credit Strategist

oleksiy.soroka@ing.com

Antoine Bouvet

Head of European Rates Strategy

antoine.bouvet@ing.com

Jeroen van den Broek

Global Head of Sector Research

jeroen.van.den.broek@ing.com

Edse Dantuma

Senior Sector Economist, Industry and Healthcare

edse.dantuma@ing.com

Francesco Pesole

FX Strategist

francesco.pesole@ing.com

Rico Luman

Senior Sector Economist, Transport and Logistics

Rico.Luman@ing.com

Jurjen Witteveen

Sector Economist

jurjen.witteveen@ing.com

Dmitry Dolgin

Chief Economist, CIS

dmitry.dolgin@ing.de

Nicholas Mapa

Senior Economist, Philippines

nicholas.antonio.mapa@asia.ing.com

Egor Fedorov

Senior Credit Analyst

egor.fedorov@ing.com

Sebastian Franke

Consumer Economist

sebastian.franke@ing.de

Gerben Hieminga

Senior Sector Economist, Energy

gerben.hieminga@ing.com

Nadège Tillier

Head of Corporates Sector Strategy

nadege.tillier@ing.com

Charlotte de Montpellier

Senior Economist, France and Switzerland
charlotte.de.montpellier@ing.com

Laura Straeter
Behavioural Scientist
+31(0)611172684
laura.Straeter@ing.com

Valentin Tataru
Chief Economist, Romania
valentin.tataru@ing.com

James Smith
Developed Markets Economist, UK
james.smith@ing.com

Suvi Platerink Kosonen
Senior Sector Strategist, Financials
suvi.platerink-kosonen@ing.com

Thijs Geijer
Senior Sector Economist, Food & Agri
thijs.geijer@ing.com

Maurice van Sante
Senior Economist Construction & Team Lead Sectors
maurice.van.sante@ing.com

Marcel Klok
Senior Economist, Netherlands
marcel.klok@ing.com

Piotr Poplawski
Senior Economist, Poland
piotr.poplawski@ing.pl

Paolo Pizzoli
Senior Economist, Italy, Greece
paolo.pizzoli@ing.com

Marieke Blom
Chief Economist and Global Head of Research
marieke.blom@ing.com

Raoul Leering
Senior Macro Economist
raoul.leering@ing.com

Maarten Leen

Head of Global IFRS9 ME Scenarios

maarten.leen@ing.com

Maureen Schuller

Head of Financials Sector Strategy

Maureen.Schuller@ing.com

Warren Patterson

Head of Commodities Strategy

Warren.Patterson@asia.ing.com

Rafal Benecki

Chief Economist, Poland

rafal.benecki@ing.pl

Philippe Ledent

Senior Economist, Belgium, Luxembourg

philippe.ledent@ing.com

Peter Virovacz

Senior Economist, Hungary

peter.virovacz@ing.com

Inga Fechner

Senior Economist, Germany, Global Trade

inga.fechner@ing.de

Dimitry Fleming

Senior Data Analyst, Netherlands

Dimitry.Fleming@ing.com

Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

Padhraic Garvey, CFA

Regional Head of Research, Americas

padhraic.garvey@ing.com

James Knightley

Chief International Economist, US

james.knightley@ing.com

Tim Condon

Asia Chief Economist

+65 6232-6020

Martin van Vliet

Senior Interest Rate Strategist

+31 20 563 8801

martin.van.vliet@ing.com

Karol Pogorzelski

Senior Economist, Poland

Karol.Pogorzelski@ing.pl

Carsten Brzeski

Global Head of Macro

carsten.brzeski@ing.de

Viraj Patel

Foreign Exchange Strategist

+44 20 7767 6405

viraj.patel@ing.com

Owen Thomas

Global Head of Editorial Content

+44 (0) 207 767 5331

owen.thomas@ing.com

Bert Colijn

Chief Economist, Netherlands

bert.colijn@ing.com

Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone

peter.vandenhoute@ing.com

Benjamin Schroeder

Senior Rates Strategist

benjamin.schroeder@ing.com

Chris Turner

Global Head of Markets and Regional Head of Research for UK & CEE

chris.turner@ing.com

Gustavo Rangel

Chief Economist, LATAM

+1 646 424 6464

gustavo.rangel@ing.com

Carlo Cocuzzo

Economist, Digital Finance

+44 20 7767 5306

carlo.cocuzzo@ing.com

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