Quarterly Credit Report

Q1/2018

Volume 7, No 4





Introduction

The Quarterly Credit Report (QCR) is an analysis of credit outlooks across regions, economies and sectors. This analysis incorporates probabilities of default (PD) generated by the Risk Management Institute - Credit Research Initiative's (RMI-CRI) default forecast model, a part of the RMI Credit Research Initiative at the National University of Singapore (NUS). The QCR provides insights on trends in credit outlooks to credit professionals, investors and researchers.

QCR Volume 7, Issue 4 covers the first quarter of 2018. We discuss the general credit outlook for a selection of economies from around the world, based on relevant indicators, and relate this discussion to forecasts provided by RMI-CRI's PD model.

The appendices in this volume include a comprehensive overview of various outputs that are produced by the operational PD system of RMI-CRI. While the PD system output default forecasts at horizons ranging from one month to five years, the QCR reports only 1-year PDs in order to allow the reader to make consistent comparisons. In addition to the PD produced by the RMI-CRI system, the appendices provide important macroeconomic, corporate credit and sovereign risk indicators. These summarize the credit situation, as well as make detailed data available for reference purposes.

The commentary in the QCR is based on median PD of *exchange-listed firms* within economies and industry sectors. Classification into economies is based on each firm's country of domicile, and classification into industry sectors is based on each firm's Level I Bloomberg Industry Classification. Exceptions are the banking and real estate sectors, where firms are included based on the Level II Bloomberg Industry Classifications. The daily frequency PD graphs in the written commentary are aggregates of firms that have a PD in both the first ten days and last ten days of the quarter. This prevents, for example, drops in the aggregate PD when high PD firms default and leave the sample.

The economies that are considered in each region are based on a selection of 87 economies covered by RMI's default forecast model.

The developed economies of Asia-Pacific include: Australia, Hong Kong, Japan, New Zealand, Singapore, South Korea and Taiwan.

The emerging economies of Asia-Pacific include: Bangladesh, China, India, Indonesia, Kazakhstan, Malaysia, Pakistan, the Philippines, Sri Lanka, Thailand and Vietnam.

Latin America includes: Argentina, Brazil, Chile, Colombia, Jamaica, Mexico, Peru and Venezuela.

North America includes: Canada and the US.

Eastern Europe includes: Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tunisia, Turkey and Ukraine.

Western Europe includes: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Ireland, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK.

Africa & the Middle East includes: Bahrain, Botswana, Egypt, Ghana, Israel, Kenya, Kuwait, Jordan, Malawi, Mauritius, Namibia, Morocco, Oman, Nigeria, Rwanda, Saudi Arabia, South Africa, Tunisia, Uganda, United Arab Emirates and the United Republic of Tanzania.

Credit Research Initiative

The QCR is a companion publication to the Weekly Credit Brief and Credit Brief on Singapore SMEs, with all three publications produced as part of the Credit Research Initiative undertaken by RMI.

These publications supplement RMI-CRI's operational Probability of Default (PD) model. The model takes financial statements and market data from a database of more than 66,000 listed firms and estimates a PD for each firm, effectively transforming big data into smart data. The outputs from the RMI-CRI PD model are available free for all users at:

www.rmicri.org

As of March 2018, the PD system covers 127 economies in Africa, Asia-Pacific, Latin America, North America, the Middle East and Europe. The probabilities of default include historical data for firms that are now delisted from exchanges or firms that have defaulted. PDs aggregated at the region, economy and sector level are also available. The full list of firms is freely available to users who can give evidence of their professional qualifications to ensure that they will not misuse the data. General users who do not request global access are restricted to a list of 5,000 firms. The PD system operates in a transparent manner, and a detailed description of our model is provided in a Technical Report available on our website.

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Acronyms

ADR Average Default Rates
BI Bank of Indonesia
BOE The Bank of England
CAD Current Account Deficit
CDS Credit Default Swap

CLI Composite Leading Indicator
CRI Credit Research Initiative
ECB European Central Bank

ELA Emergency Liquidity Assistance
ESI Economic Sentiment Indicator

ESMA European Securities and Markets Authority

EU The European Union FTV Financing-to-value

FDI Foreign Direct Investment

FX Foreign Exchange

GFC 2008-2009 Global Financial Crisis

INR Indian Rupee

ISTAT Italian National Institute of Statistics

LATDB Liquid assets to deposits and short-term borrowings ratio

LHS Left-hand side of graph

LTV Loan-to-value

MAS Monetary Authority of Singapore

MIDF Malaysian Industrial Development Finance Berhad

MLF Medium term Lending Facility
MPC Monetary Policy Committee

MOM Ministry of Manpower MoM Month on Month

NIM Net Interest margin

NODX Non-oil domestic exports
NPA Non-performing assets
NPL Non-performing loan

OECD Organisation for Economic Co-operation and Development

OJK Otoritas Jasa Keuangan (Financial Services Authority of Indonesia)

OPR Overnight Policy Rate
PBOC The People's Bank of China
PCA Prompt Corrective Action
PD Probability of Default

PMI Purchasing Managers Index

PCI Performance of Construction Index
PSI Performance of Services Index

PSL Pledged Supplementary Lending facility

QCR Quarterly Credit Report QoQ Quarter on Quarter

REITS Real Estate Investment Trusts
RBA Reserve Bank of Australia
RBI Reserve Bank of India
RMI Risk Management Institute

RMI-CRI Risk Management Institute Credit Research Initiative

RHS Right-hand side of graph RRR Reserve requirement ratio

Sebi Securities and Exchange Board of India

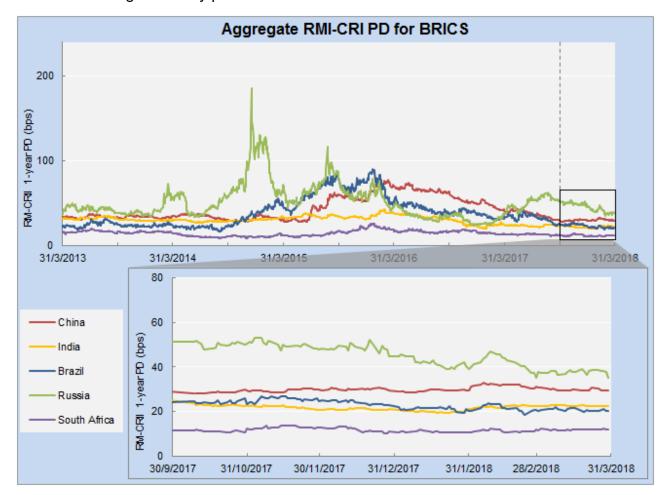
SDF Standing Deposit Facility
SLF Standing Lending Facility

WAIR Weighted average interest rate WMP Wealth Management Product

YoY Year On Year

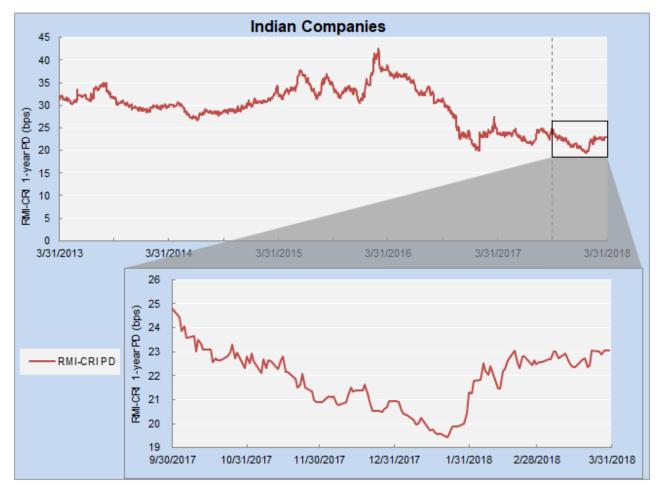
BRICS

In the first quarter of 2018, listed companies in BRICS delivered a mixed result. The RMI-CRI aggregate PDs for Russia and Brazil improved while China and South Africa stay almost at the same level as last quarter. The improvement in credit profile for China is in line with its steady 6.8% Q1 2018 GDP growth as consumption remains strong. For Russia, its GDP growth grew faster than the previous quarter with a 1.3% expansion. It was the sixth straight quarter of growth after two years of contraction due to the slump in commodity prices. However, new US sanctions against Russia's economy may weigh down its growth in the following quarters which may help explain the weakening credit outlook. India managed to lodge its fastest growth at 7.2% for the December quarter as industrial and agricultural activities expanded. However, its banking sector is dealing with record high non-performing assets and frauds. One of its state-run banks is facing the biggest ever loss due to the largest fraud in Indian banking history. The potential negative impact of the banking sector frauds on credit growth may pose downside risk to India's GDP.



Indian Companies

The aggregate 1-year RMI PD for Indian companies has remained relatively stable during the first quarter of 2018. Q1 2018 followed a calendar year which saw large involvement by the Indian government to tackle non-performing assets. The manufacturing sector proved to be a strong sector despite experiencing tapering growth, recording growth for the eighth consecutive month. Inflation rate saw a decrease while wholesale prices went up in light of rising prices of manufactured products. Current account deficit widened on a YoY basis due to large merchandise imports.



Economy

• India's real Gross Domestic Product for Q4 2017 grew at an annual rate of 7.2% against a 6.5% expansion in the same quarter last year. Sectors that experienced strong growth YoY include agriculture, forestry and fishing (4.1%), manufacturing (8.1%), construction (6.8%), finance, real estate and professional services (6.7%), and public administration and defence (7.2%). IMF maintained its growth forecast for India of 7.4% for 2018, unchanged from its previous projection. IMF believes that India will benefit from its structural reforms, recapitalisation efforts and the implementation of the goods and services tax.^{1,2}

- The manufacturing sector improved for the eighth consecutive month in March, but at the weakest pace since October 2017. This reflects softer expansions in new work and output, together with a decline in employment for the first time in eight months. The Nikkei India Manufacturing PMI fell to 51.0 from 52.1 in February, indicating the slowest improvement in operating conditions recorded since last October. Indian manufacturers raised their purchasing activity, with pre-production inventories rising in March 2018 after a decline in February 2018. Business confidence towards the 12-month outlook for output was retained, supported by marketing initiatives and expectations that client demand will continue to improve. However, the degree of optimism remained below the series average.³
- The annual rate of inflation, based on monthly Wholesale Price Index (WPI), decreased to an annual rate of 2.47% in March from an annual rate of 3.58% for the month of December last year. The increase in WPI was mainly due to rising prices for manufactured products. The MCX India Crude Oil Spot Index increased to 4188 from 3848 at the end of Q4 2017 due to tighter supplies and heathy demand.⁴
- India's current account deficit (CAD) increased to USD 13.5bn (2.0% of GDP) in Q4 2017 from USD 7.2bn (1.2% of GDP) in Q3 2017 and was substantially higher than USD 8.0bn (1.4% of GDP) in the same quarter in the preceding year. The widening of the CAD on a YoY basis is primarily due to a higher trade deficit of USD 44.1bn brought about by a larger increase in merchandise imports relative to exports. Net services receipts increased on a YoY basis due to a rise in net earnings from software services and travel receipts. Private transfer receipts, mainly representing remittances by Indians employed overseas, increased by 16.0% to USD 17.6bn as compared to the preceding year.⁵
- During Q1 2018, the Indian Rupee (INR) weakened 0.97% against the US dollar. The Fed Fund rate hike in March contributed to the subtle weakening of the INR together with concerns over a widening current account deficit. Foreign portfolio inflows during the quarter amounted to USD 2.11bn.⁶

Monetary

- According to the bi-monthly monetary policy statement on April 5, 2018, the RBI kept the policy rate (repo rate) at 6.00%. The reverse repo rate under the liquidity adjustment facility remained at 5.75%. Similarly, the Bank Rate remained at 6.25%.⁷
- Liquidity in the system moved between surplus and deficit during the February-March period. Anticipating the seasonal tightening of liquidity at the end of March, the Reserve Bank conducted four additional longer tenor (24-31 days), apart from the regular repo operations. In mid-March, additional liquidity of INR 1tn was released into the system through the redemption of Treasury Bills issued under the Market Stabilisation Scheme (MSS). Cash in circulation has returned to its pre-demonetisation levels. RBI also noted that a short-term regional shortage of currency might also be attributed to logistical issues of replenishing these notes, with empty ATMs in parts of the country causing disruptions and renewing debate over the ban of high-valued banknotes.^{8,9}
- The Monetary Policy Committee notes that there are uncertainties surrounding the baseline inflation path due to fiscal impacts and changes in crude oil prices. Retail inflation fell from a high of 5.1% in January to 4.4% following a decline in food and fuel inflation. CPI inflation excluding food and fuel remained unchanged at 5.2% for a third consecutive month in February. RBI continues to be committed to keeping headline inflation close to 4.00% on durable basis.¹⁰

 As the fight against loan delinquencies continues, SBI reiterated its firm stance that public sector banks would not have the luxury of a default fall-back on the government for capital. SBI urged banks to be efficient in what they do and the boards of these banks to exercise proper governance to ensure a sustainable future. In terms of recapitalisation, RBI has made known that more government may be needed to keep up these efforts.¹¹

Funding & Liquidity

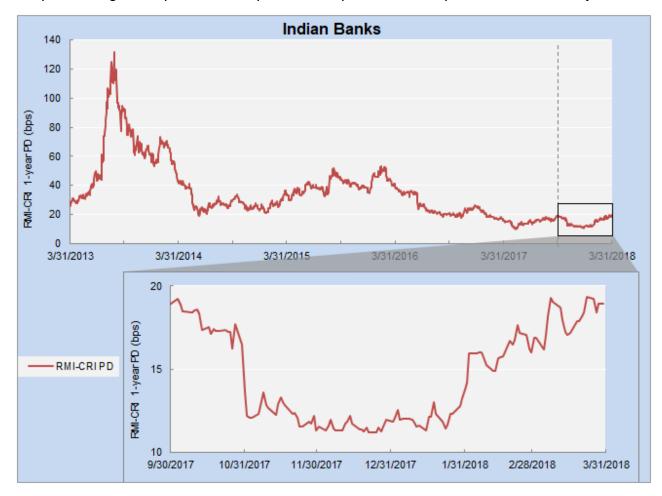
- Yields on India's 10-year government sovereign bonds did not see a major increase for Q1 2018. Yields were at 7.399% at the end of Q1 2018 as compared to 7.326% at the end of Q4 2017. March 2018 saw a huge decline in bond yields amidst market pressure after rallying to a 2-year high in February.
- The Indian Government has announced in March 2018 that it would be borrowing less from the market than what was anticipated initially. This came after it decided against front-load issuances in the first half of the fiscal year, which was done in the previous several years. The falling yields are likely to benefit the banking sector. Looking forward, bond prices will likely be driven by factors such as interest rates in global markets and the inflation trajectory in the Indian economy.¹²

Sovereign Credit Ratings

• Fitch kept its rating at Baa2 while S&P and Moody's kept their ratings on the sovereign bonds of India at BBB- in Q1 2018, unchanged from the previous quarter.

Indian Banks

The aggregate 1-year RMI PD for Indian banks remained stable but saw a slight uptrend from January to March 2018. Non-performing loans continue to plague both the private and public banks, depressing the profitability of Indian banks. Continuous aids and reforms by the RBI like the PSU bank capital injection and liquidity absorption tool aim to alleviate the problem. RBI is expected to remain cautious in regulating interest rate to mitigate the non-performing loans problem and prevent its spread to other parts of the economy.



Profitability

- Non-financial borrowings increased by 13.5% to INR 3.66tn on March 30, 2018 from INR 3.22tn on December 22, 2017. Other liabilities such as time deposits with nonfinancial institutions increased to INR 5.76tn in Q1 2018 from INR 4.99tn in Q4 2017.¹³
- The Credit-Deposit ratio for the banking system increased to 75.38% March 30, 2018 from 74.38% on September 29, 2017. This was due to a more substantial increase in bank credit from INR 81.0tn to INR 86.5tn as compared to the increase in deposits from INR 108.9tn to INR 114.7tn during Q1 2018.¹⁴
- Non-financial borrowings increased 6.19% to INR 3.09tn on September 29 from INR 2.91tn at the end of Q3 2017. Other liabilities such as time deposits with non-financial institutions decreased to INR 4.86tn in Q3 from INR 4.94tn in Q2.¹⁵

• RBI has indicated that it may not relax the new framework for the resolution of stressed loans despite requests from banks. This came after the announcement of new rules released on February 12, 2018 which mandates that lenders have to implement a resolution plan within 180 days for defaulted loan accounts above INR 20bn. This gives lenders less discretion which will increase the amount of bad loans, which currently stands at INR 8.82tn. Banks will be forced to make additional provisioning for these accounts, keeping their profitability under pressure.¹⁶

Funding & Liquidity

- The weighted-average call money rate, the interest rate on short-term finance repayable on demand, increased from 5.99% as of December 29, 2017 to 6.15% as of March 30, 2018. The call money rates were generally lower than the repo rate during Q4, indicating a stable banking system.¹⁷
- The amount of cash on the balance sheet of Indian banks decreased from INR 715.8bn on December 22, 2017 to INR 604.8 on March 30, 2018. The RBI has been trying to absorb excess liquidity in the market and the decrease in the amount of cash points to a liquidity level that is gradually adjusting whilst extra cash is being removed from the market.¹⁸
- Deposit rates generally remained stable in Q1 2018. According to the Reserve Bank of India's daily call money rates, interest rates increased to 6.90% on March 15, 2018, from 6.40% in Q4 2017.¹⁹
- During Q4 2017, the RBI withdrew a total of INR 15.13tn from the banking system via liquidity operations. During Q1 2018, the month of March witnessed the highest figure with RBI withdrawing INR 7.13tn via its liquidity operations.^{20,21,22}

Asset Quality

• Following the change in RBI's framework on non-performing assets (NPA), the amount of bad loans is set to soar as more of these loans will be deemed as NPA under the new framework. Accounts that were excluded from recognition in the past can no longer continue to have their exclusions and banks would need to recognise their non-performance when deemed necessary. Despite the potential emergence of NPA in the short-term, RBI's move will enable it to keep watch on the balance sheets of banks more closely. Profitability of banks is likely to be hit due to the surge in bad loans as they brace themselves for a difficult quarter ahead.^{23,24}

¹Nov 30, 2017, PRESS NOTE ON ESTIMATES OF GROSS DOMESTIC PRODUCT FOR THE SECOND QUARTER (JULY-SEPTEMBER) OF 2017-18, Ministry of Statistics and Programme Implementation, mospi.nic.in

²Apr 17, 2018, IMF pegs India growth at 7.4 per cent for FY19, The Economic Times, http://economictimes.indiatimes.com/

³Apr 3, 2018, Nikkei India Manufacturing PMI, Markit Economics, markiteconomics.com

⁴Apr 16, 2018, Index Numbers of Wholesale Price in India. Review for the month of March, 2018, DIPP eaindustry.nic.in

⁵Mar 16, 2018, Developments in Indias Balance of Payments during the Third Quarter (October-December) of 2017-18, The Reserve Bank of India, rbi.org.in

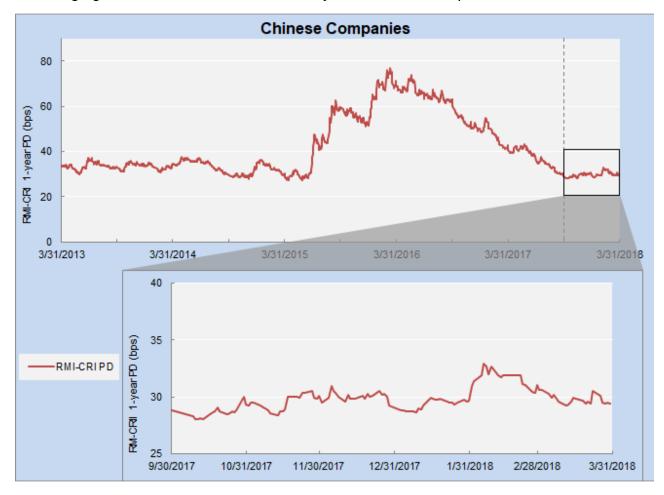
⁶ Apr 1, 2018, Daily Trends in FPI Investments, National Securities Depository Limited (NSDL), fpi.nsdl.co.in

⁷Apr 5, 2018, First Bi-monthly Monetary Policy Statement, 2018-19 Resolution of the Monetary Policy Committee (MPC) Reserve Bank of India, The Reserve Bank of India, rbi.org.in

- ⁸Apr 5, 2018, First Bi-monthly Monetary Policy Statement, 2018-19 Resolution of the Monetary Policy Committee (MPC) Reserve Bank of India, The Reserve Bank of India, rbi.org.in
- ⁹Apr 18, 2018, India ramps up banknote printing to end cash crunch, Financial Times http://www.financialexpress.com/
- ¹⁰Apr 5, 2018, First Bi-monthly Monetary Policy Statement, 2018-19 Resolution of the Monetary Policy Committee (MPC) Reserve Bank of India, The Reserve Bank of India, rbi.org.in
- ¹¹Mar 15, 2018, Capital: Govt no more default fall-back for PSBs, says SBI chief, The Hindu Business Line, http://www.thehindubusinessline.com/
- ¹²Mar 27, 2018, Market pressure: A lower-than-anticipated government borrowing for the first half of 2018-19 pulled down government bond yields by over 25 basis points, Livemint, http://www.livemint.com/
- ¹³Apr 13, 2018, Scheduled Commercial Banks Business in India, Reserve Bank of India, rbi.org.in
- ¹⁴Apr 13, 2018, Scheduled Commercial Banks Business in India, Reserve Bank of India, rbi.org.in
- ¹⁵Apr 23, 2018, What RBIs new bad loan rules mean for banks, Livemint, http://www.livemint.com/
- ¹⁶Apr 23, 2018, What RBIs new bad loan rules mean for banks, Livemint, http://www.livemint.com/
- ¹⁷Apr 6, 2018, Cash Reserve Ratio and Interest Rates, Reserve Bank of India, rbi.org.in
- ¹⁸Apr 13, 2018, Scheduled Commercial Banks Business in India, Reserve Bank of India, rbi.org.in
- ¹⁹Apr 10, 2018, Reserve Bank of India Bulletin April 2018, Reserve Bank of India, rbi.org.in
- ²⁰Apr 10, 2018, Reserve Bank of India Bulletin April 2018, Reserve Bank of India, rbi.org.in
- ²¹Mar 10, 2018, Reserve Bank of India Bulletin March 2018, Reserve Bank of India, rbi.org.in
- ²²May 10, 2018, Reserve Bank of India Bulletin May 2018, Reserve Bank of India, rbi.org.in
- ²³Feb 14, 2018, Bad loans to soar with RBI'S new loan norms, The Times of India, https://timesofindia.indiatimes.com/
- ²⁴Mar 28, 2018, Public sector banks anticipate tough Q4 as RBI tightens NPA norms, Business Standard, http://www.business-standard.com/

Chinese Companies

China maintained a steady 6.8% GDP growth YoY in the first quarter of 2018 amid US trade tensions and deleveraging activities. Unemployment decreased to a record-low of 3.89% in the first quarter of 2018, with a record-high number of new jobs in 2017. The 1-year aggregate PD for Chinese firms remained steady in Q1 2018. The growth in GDP was supported mainly by an accelerated increase in consumption while old heavily-indebted sectors such as mining and textile industries are experiencing slower growth rate. US trade tensions have also appeared as a downside factor to the economic growth as trade balance in the last quarter has slumped to a trade deficit in March 2018. To ensure economic stability, a series of regulations have been imposed to boost domestic demand and ease liquidity of enterprises, including easing the Required reserve ratio (RRR), corporate financing costs, and tax burden. Despite having a steady growth for three straight quarters, forecasters foresee that China's economic growth will slow down in the future as the gain in consumption is hard to offset the loss in heavily indebted industries. China's hardline on aggressive deleveraging has also softened as the country lowered bad loan provisions and RRR.



Economy

• The Chinese economy growth held steady at 6.8% YoY in the first quarter of 2018, marking the third-straight quarter of 6.8% growth. The steady expansion was mainly supported by solid consumption, disguising the struggle in mining and textile industries. While the retails sales increased by 10.1% from 2017, implying the strongest growth in the retail industry since November 2017, industrial production output eased to 6.0% after a 7.2% growth in the previous quarter. The soaring consumption that makes 77.8% of the quarterly expansion was driven by online sales that jumped 35.4% from the previous quarter. Fixed asset investment grew at a slower rate with electricity and utility sector falling the most from -6.1% in the previous quarter to -8.9% .^{25, 26}

- Consumer prices inflation in China fell to 2.1% YoY in March 2018 from a 54-months high of 2.9% in February 2018. Cost of both food and non-food products eased to a slower growth rate. Politically sensitive food prices declined by 2.3% while non-food cost eased by 0.4% from the previous month. Producer price index increased by 3.1% from the previous year in March 2018, softening from 3.7% in the previous month, making the lowest producer inflation since October 2016.²⁷
- China's official unemployment rate decreased to 3.89% in the first quarter of 2018 from 3.90% in the last quarter of 2017, the lowest since 2002. The Ministry of Human Resources and Social Security mentioned that China created a "record-high" 13.51mn new jobs in 2017, a growth of 370,000 compared with the previous year. The unemployment rate averaged 4.11% from 2002 till 2018, reaching an all-time high of 4.3% in Q4 2003 and an all-time low in Q1 2018.²⁸
- China's Caixin manufacturing purchasing managers index (PMI) fell to 51.0 in March 2018 from 51.6 in the prior month, missing the market consensus of 51.8. Consecutively, the Caixin China General Services PMI fell to 52.3 in March 2018 from 54.2 in February, while the Composite PMI fell from 53.3 in February to 51.8 in March. Generally, all of the PMIs dipped to a four-month low, indicating a modest pace of expansion. It was resulted from the weakest growth of production and new orders in the last four months while exports sales only increased marginally.^{29,30}
- Investment in fixed assets, a crucial driver of the economy, went up by 7.5% YoY reaching CNY 10.08tn in the first three months of 2018, and the growth rate in the March was 0.4 percentage points lower than the 7.9% growth in February. Real estate investment continued to deliver strong growth rates as it went up by 10.4% YoY in Q1 2018. The investment in residential buildings, which accounted for 69.1% of real estate investment, went up by 13.3%.^{31,32}
- China's trade balance slumped in March 2018 due to an unexpected fall in export, making the first trade gap since February 2017. China reported a trade deficit of USD 4.98bn in March 2018, compared to a surplus of USD 33.74 in the previous month and USD 23.56bn in the same month last year. Exports declined 2.7% from a year ago, missing market consensus of 10% rise due to seasonal factors around Lunar New Year and escalating trade tensions between China and US. Imports increased by 14.4%, driven by commodities that rose from the previous month. For Q1 2018 as a whole, China's trade surplus narrowed 23.2% from the same quarter in the previous year to USD 49.12bn.³³

Monetary

• China's central bank continued to maintain its benchmark interest rate at 4.35% since it was cut by 25bps in October 2015. On March 22, 2018, PBOC raised interest rates on standing lending facility (SLF) short-term loans by 5bps. Overnight SLF interest rate was raised to 3.4% while rates for 7-day and one-month loan were increased to 3.55% and 3.9% respectively. The adjustment followed Fed's rate hike as a symbolic reminder that China is following global market trend despite struggling on its financial risk at home.^{34, 35}

- China's primary rates increased as demand for cash rose at the quarter's end. Liquidity from markets was drained by the central banks for two consecutive weeks with a net total of CNY 480bn. The volume-weighted average rate of the benchmark seven-day repo at the quarter's end was about 37bps higher than the previous week's closing average rate of 2.70%. The effect of the net drain on rates was compounded by rising demand for cash as banks prepared for the Macro-Prudential Assessment (MPA). However, amid reasonable market cash condition, PBOC has skipped open market operations for a sixth straight session.³⁶
- The RRR continued to remain at 17% for large institutions and 15% for smaller banks in Q1 2018 since 2016. In a series of reductions, the central bank has brought the reserve ratio down from its 2011 peak of 21.5%. Further reduction commenced on April 25, 2018, which cut the RRR of both large and small banks by 100bps to free-up lending for small firms. The central bank has also been relying on market-based policy tools such as the short- and medium-term facility and reverse repos operations to adjust liquidity and market interest rates. In March 2018, China's central bank increased its repo rate by 5bps to 2.55% following the rate hike by the Fed.^{37,38,39}
- China's foreign exchange reserves increased by USD 9bn MoM to USD 3.14tn in March 2018, compared to a drop of USD 27bn in February. The increase was in line with market expectation on a firmer RMB following the weakening US dollar and escalating trade tensions between the two countries. Meanwhile, the gold reserves value had increased from USD 78.06bn at end-February 2018 to USD 78.42bn in March 2018. Foreign Exchange Reserves in China averaged USD 959bn from 1980 until 2018, reaching an all-time high of USD 3.99tn in June of 2014 and a record low of USD 2.26bn in December of 1980.40

Funding & Liquidity

- 10-year government bond yield fell from 3.89% in December 2017 to 3.73% at the end of March 2018. 1-year government bill yield decreased from 3.76% to 3.3% over the same period.^{41, 42}
- The 3-month 5-day average SHIBOR had decreased from 4.91% on 29 December 2017 to 4.46% 30 March 2018.⁴³
- The value of new yuan loans provided by the Chinese banks extended to CNY 1.12tn in February 2018 as compared to CNY 839bn in December 2017, yet missing market expectation of CNY 1.2tn. After recording an all-time high of CNY 2.99tn in January 2018, Banks Balance Sheet in China averaged CNY 648.69bn from 2004 to 2018.⁴⁴

Policy

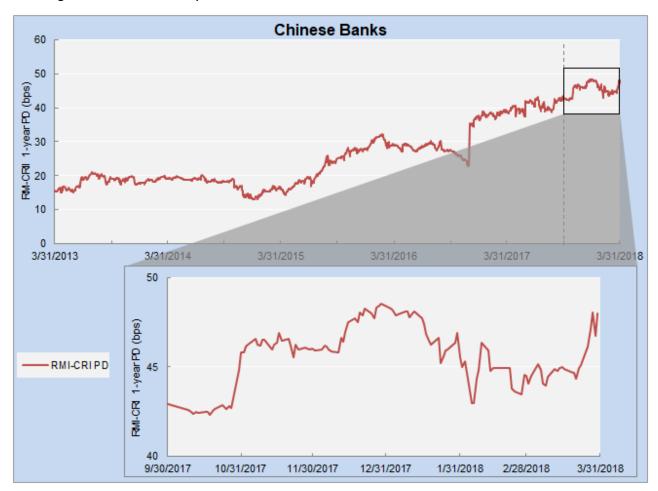
 China's economy grew steadily at 6.8% in Q1 2018, yet other indicators such as industrial production and inflation suggest some cooling. Forecasters foresee China's economic growth to slow down as trade tensions with the US and the campaign to clean up the financial sector remain as downside factors. China's central bank hard-line on aggressive deleveraging has shown signs of softening with Reserve Requirement Ratio (RRR) being cut down and accelerated M2 money supply growth, raising concerns among investors about risks to China's economic growth. March financial result suggested a growth slowdown in old economy sectors which are heavily-indebted. The Politburo meeting cited that China will strive to boost domestic demand to ensure economic stability, while maintaining a proactive fiscal policy and keeping monetary policy prudent and neutral. The state planner mentioned in April that commercial and industrial electrical prices will be cut by an average of 10% to support emerging industries and further lower corporate financing costs and tax burdens. Adding to the trade tensions, temporary anti-dumping deposits will be imposed on US sorghum imports and foreign ownership limits, while being removed for auto ventures in coming years. The target for economic growth will be kept at around 6.5% in 2018, unchanged from 2017.45,46

Sovereign Credit Ratings

• Fitch maintained rating A+ on the Chinese government with a stable outlook while Moody's and S&P credit rating for China stood at Aa3 and AA- with a negative outlook.

Chinese Banks

The aggregate 1-year RMI PD remained stable over the first quarter of 2018. Credit conditions have been relaxed with lower non-performing loan provisions and lower Required Reserve Ratio (RRR). The easing policy increased cash for lending, especially for smaller institutions, boosting bank profits. Banks profits are shown to surge, as capital is expanded through the medium-term loan injection. Non-performing loans of the big commercial lenders remain steady in the first quarter of 2018 amid the government's efforts to rein in risks. The net interest margin, a measure of the difference between what banks pay for deposits and what they earn on loans, has risen for five straight quarters following five years of consistent declines. Reducing risk in the Chinese financial system is still of top priority for the government as it implements measures to limit financial risk.



Profitability

• Net profit in Chinese commercial banks surged amidst regulatory scrutiny. Aggregate net income for 26 A-share Chinese commercial banks was CNY 406.525bn in the first quarter of 2018, with a 5.6% YoY growth. The growth accelerated by 2 percentage points compared to the same quarter in 2017. Efforts to deleverage have slowed the growth of banks' balance sheets, but in other aspects, they have boosted profitability. The commercial lenders also saw modest growth in the non-performing loan ratio for the first quarter of 2018.⁴⁷

Funding & Liquidity

China's central bank injected a net CNY 327bn into financial institutions via its 1-year medium-term lending facility (MLF) in the last week of Q1 2018 with rates unchanged. The new MLF injection exceeded the value of MLF maturing on the same date that was worth CNY 189.5bn. The central bank would let some commercial bans temporarily keep fewer required reserves to help them cope with the increasing demand for cash as banks prepared for the Macro-Prudential Assessment (MPA).⁴⁸

Regulations

- In recent months, China's banking regulators have softened rules requiring lenders to set aside provisions against bad debt losses. The non-performing loan provision is lowered to 120% for banks with healthy books, down from 150%. The policy is an incremental move to offset a crackdown on shadow banking and to boost bank profits. The China Banking Regulatory Commission (CBRC) has been enforcing the highest requirement for bad loan provisions among worldwide countries. Under the new regulations, CBRC allows province-level bank regulators to ease the ratio to as low as 120% of NPLs and 1.5% of loans from a previous 2.5%. With the new adjustment, China's system-wide provisions equaled to 181% of NPLs and 3.2% of total loans, which brings China closer to international standards.⁴⁹
- China Banking Regulatory (CBRC) has been increasing scrutiny on bank shareholders to control risk and excessive leverage of financial institutions. The regulation, released on February 2, 2018, orders shareholders who own more than 5% stake in commercial banks through the use of financial products to reduce holdings within the year 2018. The policies also forbid shareholders from imposing inappropriate control over banks and seeking illegitimate interests. The CBRC will conduct on-site checks on small and mid-tier banks' shareholding structures. Any other persisting stake purchase of more than 5% by investors must seek for CBRC's approval. The CBRC is currently preparing another set of rules on shareholding custodianship to further increase transparency and standardize the shareholding structure.⁵⁰
- CBRC refined its programs on improving finances for micro and small enterprises (MSEs). The regulator amended its MSE loan guideline initiated back in 2015 to only focus on loan less than CNY 10mn. The guideline was created to ensure the MSE loan and account growth to match at least the growth of overall loans, however, practices in less experienced banks have led to more bad loans, driving up the cost of borrowings and making MSEs even harder to access financing. Furthermore, China Central Bank will cut RRR by 100bps on April 25 to increase lending capacities to MSEs. To prevent monetary easing from forming, a series of regulations is attached by authority, including the requirements on how the fund should be used by MSEs and the obligation for banks to pay back costly loans via medium-term lending facility (MLF) which sums up to CNY 900bn in prior.^{51,52}

Asset Quality

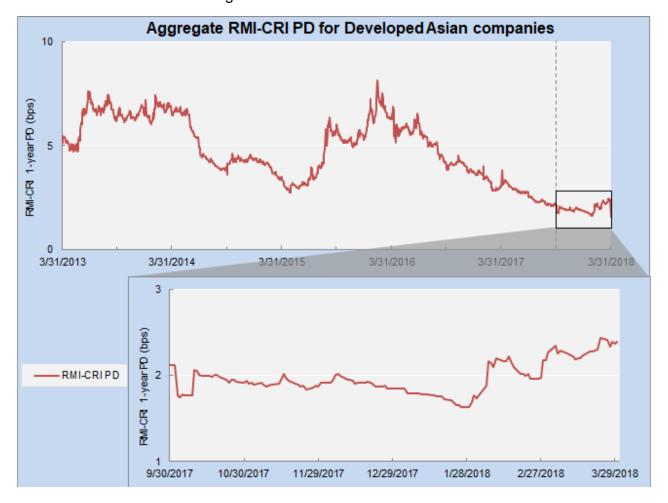
• The CBRC announced that the non-performing loan ratio of commercial banks in China dropped from 1.74% to 1.45% amid the government's strengthened efforts to rein in risks. That marks the first decline since 2013 and the lowest level since 2014. Outstanding bad loans from commercial banks amounted to CNY 1.71tn at the end of 2017. As the government tried to guide more funds to the needy sectors, banks have extended more loans to help micro-sized companies and agricultural business.

²⁵April 17, 2018, China GDP Annual Growth Rate, Trading Economics, http://www.tradingeconomics.com

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- ³⁵April 2, 2018, China central bank says it raised interest rates on SLF loans in March, Reuters, http://www.reuters.com
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- ³⁸March 22, 2018, Chinas central bank lifts short-term rates in step with Fed, FT, http://www.ft.com
- ³⁹February 13, 2018, China banks back in vogue as share prices rally, FT, http://www.ft.com
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- ⁴²April 9, 2018, Yield of Government Securities, China Foreign Exchange Trade System, http://www.chinamoney.com.cn
- ⁴³April 9, 2018, SHIBOR, Shanghai Interbank Offered Rate, http://www.shibor.org
- ⁴⁴April 10, 2018, China New Yuan Loans, Trading Economics, http://www.tradingeconomics.com
- ⁴⁵March 28, 2018, China's economic growth stayed strong in first quarter, but outlook cloudy, Reuters, http://www.reuters.com
- ⁴⁶April 24, 2018, China to cut RRR further, M2 growth seen accelerating, Reuters, http://www.reuters.com
- ⁴⁷May 4, 2018, Chinas 26 A-share Banks Post Robust Profits Results for Q1 2018, China Banking News, http://www.chinabankingnews.com
- ⁴⁸March 16, 2018, China central bank injects 327 bln yuan via MLF, rates unchanged, Reuters, http://www.reuters.com
- ⁴⁹March 7, 2018, Beijing puts foot on accelerator for bank lending, FT, http://www.ft.com
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- ⁵¹March 21, 2018, Banking Regulator Tweaks Policies to Better Serve Small Businesses, Caixing Global, https://www.caixinglobal.com
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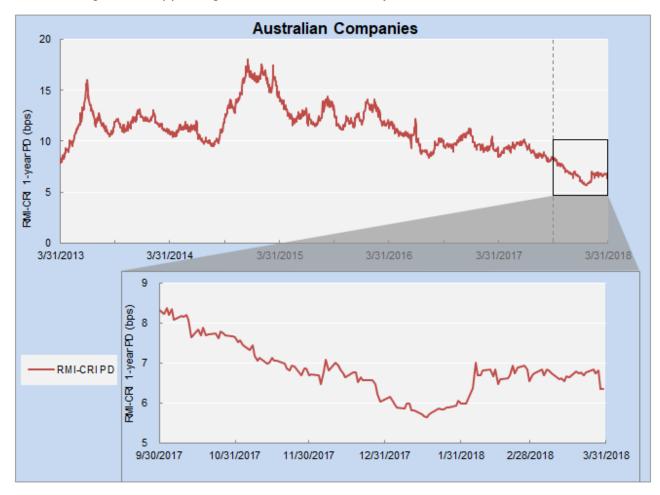
Asia-Pacific - Developed economies

The RMI-CRI aggregate 1year PD for listed companies in the developed Asia Pacific region increased during the first quarter of 2018, suggesting a lower credit outlook. Rising trade frictions and diminishing capital inflow as the US slowly raises interest rates could be some of the reasons that may slow down the region's growth. Despite those threats, most major countries have seen GDP YoY expansion in the latest quarter. Singapore's economy grew during Q1 with 4.3% GDP YoY growth. This is mainly due to the robust manufacturing sector and the improvement in services sector despite the extended poor performance in the construction sector. Likewise, Taiwan also reported a 3% GDP YoY growth, beating estimates. The strong growth was supported by strong exports and private consumption. South Korea's economy saw a quarterly growth of 1.1% YoY after a contraction in the previous quarter. A boost in exports led the return to the economy's expansion. However, employment and consumption growth is still weak. For the full-year GDP growth for 2018, South Korea is expecting to 3% GDP growth. Developed Asia Pacific economies are expected to continue to do well for 2018 but risks to global trade still remain.



Australian Companies

The aggregate 1-year RMI PD for Australian companies remained stable during Q1 2018. Based on Q4 data, economic growth expanded with significant surges in household consumption and government consumption. Unemployment rate remained at a constant rate after a drop to a four-year low rate in December. Going forward, the credit outlook for Australian firms remain dependent on the rebalancing of the economy as the increasing performances of manufacturing, services, construction sectors and decreasing unemployment rate fades the concern in household debts. Credit standards have been tightened to reduce the risk profile of borrowers. Attempts to support economic growth are also assisted by Reserve Bank of Australia's(RBA) monetary policy in boosting investment and hiring. Low level of interest rates, further progress in reducing unemployment, as well as having inflation return to target are supporting the Australian economy.



Economy

- The Australian economy expanded by 0.4% from Q3 2017 to Q4 2017, lower than the 0.6% growth from Q2 2017 to Q3 2017. The economy increased by 2.4% YoY, short of forecasts for 2.5% growth and is lower than its 2.9% growth in 2016. It was the weakest growth since a contraction in September 2016.⁵³
- The lower GDP growth in Q3 was driven largely by net trade and non-dwelling construction. The household spending component that drives the positive growth of GDP accelerated sharply by 1% from Q3 2017 to Q4 2017, the largest increase over a year. An increase of 1.1% in employee wages is a factor of increasing household spending. Government spending gave a prominent contribution to the economic growth as well with 1.7% surge in Q4 2017.⁵⁴

- The Reserve Bank of Australia's (RBA) had left the cash rate unchanged at 1.5%, amid rapid improvements in the global economy and tight labor markets. The economy is growing moderately with 2.4% over 2017, and is forecasted for a faster growth in 2018. Inflation remains low at the midpoint of its 2-3% target, with both CPI and underlying inflation running a little below 2%.⁵⁵
- The unemployment rate remained at a constant rate of 5.5% throughout the first quarter in 2018, after a drop in December 2017 making it a four-year low rate. The number of full-time jobs rose in March with 4,900 jobs added, way below of the estimated 21,000. The number of unemployed fell by 2,900, with those looking for full-time work increased by 9,300 while those looking for part-time jobs decreased by 11,700. Meanwhile, the labor force participation rate inched down to 65.5% in March from 65.6% in February, the highest level since October 2011.⁵⁶
- The Australian Performance of Manufacturing Index (PMI), as reported by The Australian Industry Group, surged to 63.1 in March 2018 from 57.5 in February 2018. The index now remains at the highest expansion since 2005, with above the 50-point threshold for 18 consecutive months. All seven sub-indexes expanded in March, with the indexes of new orders, employment, and deliveries recording all-time high. The equivalent index for services (PSI) lifted by 2.9 points to 56.9 in March, indicating accelerated growths in new orders, sales, stocks, and employment. Also, the Australian Performance of Construction Index (PCI) rose to 57.2 in March 2018 from 56.0 in February. Activity expanded the most in commercial and engineering construction while softened in house building. 57,58,59
- Key export prices rose 4.9% in Q1 2018, following a rise in last quarter of 2.8%. Live animals posted the highest increase in prices in this quarter. Through the year to Q4 2017, the export index price fell by 1.4%, driven by metalliferous ores and metal scrap. On the other hand, import prices rose 2.1% in Q1 2018, following a 2.0% rise in the previous quarter. The rise was driven by higher prices in inorganic chemicals. Trade surplus increased by 13% to AUD 1.53bn in March 2018, the largest trade surplus since May 2017. Both exports and imports expanded by 1% MoM.^{60,61}

Monetary Policy

• The RBA has maintained its benchmark interest rate to a record low of 1.5% since August 2016 to boost investment and hiring. Meanwhile, in order to prevent asset bubbles from forming due to cheap cash, RBA has been harnessing loan curbs. Amid a sustainable growth in the economy with a significant increase in full-time job numbers and returning inflation to target, monetary policy is largely seen to be on hold for the near future. In case of adjustments, the cash rate will be more likely up rather than down.⁶²

Funding & Liquidity

- Yields on 10-year Australian government bonds fluctuated throughout the quarter with 2.75% in January 2018, 2.86% in February 2018, and plunged to the lowest of 2.72% in March 2018. The previous quarter reported a decreasing rate from the highest 2.78% in October 2017 to 2.58% in December 2017.⁶³
- The 3-year fixed lending rates to small businesses remained unchanged at 5.25% after it increased 5bp from 5.20% in December 2017 to 5.25% in January 2018. The lending rates for owner-occupied housing loans remained unchanged at 5.20% in the latest quarter.⁶⁴

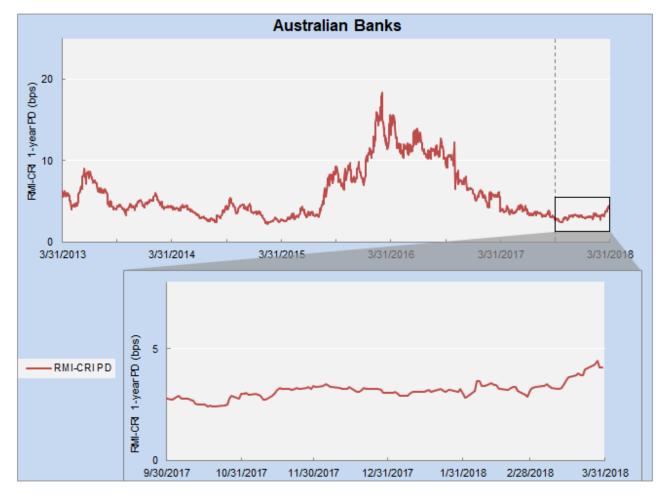
 Average commercial lending during the quarter increased driven mainly by lending to the business sector as total loans to financial intermediaries remained steady in Q1 2018. Meanwhile, total lending to individuals was higher by 1.17% quarter-on-quarter and total lending to government remains at a similar rate.⁶⁵

Sovereign Credit Ratings

 Standard & Poor's and Fitch Ratings maintained their AAA ratings on Australia, while Moody's maintained their Aaa rating. Fitch and Moody's had stable outlooks on the government's credit, whereas S&P had a negative outlook.⁶⁶

Australian Banks

The aggregate 1-year RMI-CRI PD slightly increased over the quarter. Earnings may come under pressure from the increasing cost of regulations as regulators attempt to increase banks' capital ratio. The profitability of banks has slightly decreased due to lower non-interest income. However, net interest margin increased slightly with household debt continued to rise, increasing to over 180% of household's disposable income. Future headwinds will be the eventual rise in interest rate, concerning the households' ability to meet their hiking obligation. Asset performances continue to improve as loan impairment expenses dropped to a low level. This will assist banks to record profit in 2018.



Profitability

Australia's major banks, including ANZ, NAB, Westpac and Commonwealth Bank, reported a cash profit after tax of AUD 15.2bn for the 2018 half year, down 2% compared to the previous corresponding period. The weakening financial performance is driven by lower non-interest income and higher restructuring and regulatory costs. Aggregated net interest income increased by 4.8% while aggregated non-interest income decreased by 5.8% due to one-off asset disposals, the removal of ATM fees and regulatory changes.

Funding & Liquidity

 Mortgage and deposit re-pricing has offset lower earnings in capital market's income and increased aggregate average net interest margin by 3bps to 206bps as of the first half of 2018 financial year. The Liquidity Coverage Ratio of Australian banks is at an average of 131.5%, compared with the 100% minimum. Leverage ratio for the majors is at an average of 5.5%, higher than the currently agreed minimum requirement of 3%.^{68,69}

Asset Quality

• The Australian Prudential Regulation Authority (APRA) has been implementing the prudential cap policy on interest-only lending. The major banks' aggregate charge for bad and doubtful debts decreased by AUD 431mn to AUD 1.8bn for the half year of 2018, while gross impaired assets across the majors decreased from AUD 8.84bn to AUD 8.54bn. There are still weaknesses related to the household debt as it continues to rise. Despite APRA capping the new interest-only lending at 30% of the total new residential mortgages and limiting the generation of such loans at a loan-to-value ratio above 80%, the majors recorded an increase in average interest-earning assets across their portfolios of 1% to 777.195. As the major banks also managed to decrease gross impaired assets, it demonstrates balance sheet resilience.⁷⁰

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⁵⁴March 7 2018 Australia GDP Growth Rate, Trading Economics tradingeconomics.com

⁵⁵April 3 2018 Statement by Philip Lowe, Governor:, Reserve Bank of Australia, rba.gov.au

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⁶⁵May 9 2018 Bank Lending Classified by Sector, Reserve Bank of Australia, rba.gov.au

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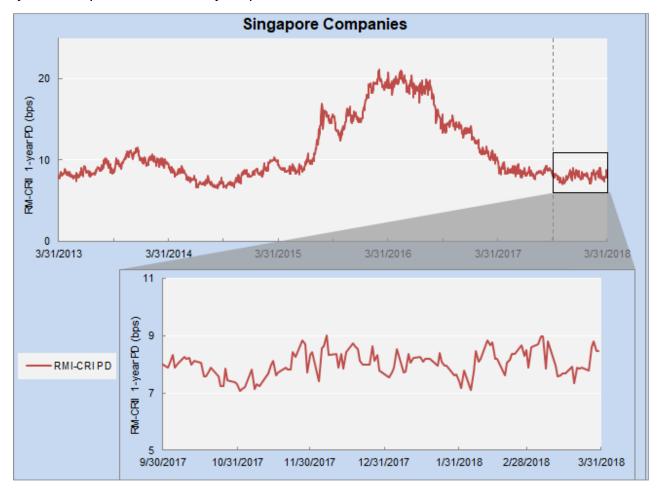
⁶⁸May 7 2018 Major Australian Banks: Half Year 2018 Results Analysis, KPMG, kpmg.com.au

⁶⁹April 30 2018 Major banks USD 1.3tn mortgage books stress tested by Fitch, Australian Financial Review, afr.com

⁷⁰May 7 2018 Major Australian Banks: Half Year 2018 Results Analysis, KPMG, kpmg.com.au

Singapore Companies

The RMI-CRI aggregate PD for Singapore firms slightly increased during the first quarter of 2018, from 6.70bps in last quarter to 8.53bps by the end of March 2018. The economy grew by 4.3% on a YoY basis. The increase was mainly fueled by the expansion in the manufacturing sector. The positive economic momentum likely continued in 2018. Data form March shows that the unemployment rate declined largely due to the continued contraction in Work Permit Holders in Construction and Marine Shipyard. Private consumption could also be benefiting from a wealth effect associated with recovering real estate prices. Furthermore, the export slightly moderated and manufacturing PMI recorded a multi-year high, pushed up by faster expansions in factory output and new orders.



Economy

• Based on the advance estimates released by the Ministry of Trade and Industry, the economy grew by 4.3% on a YoY basis in Q1 2018, higher than the 3.6% growth in Q4 2017. The economy grew by 1.4% on a quarter-on-quarter seasonally-adjusted annualized basis, a moderation from the 2.1% growth in Q4 2017. The manufacturing sector expanded by 10.1% YoY in the first quarter, faster than the 4.8% growth in the previous quarter. All clusters within the sector expanded, with the electronics and precision engineering clusters contributing the most to the sector's growth. On a quarter-on-quarter seasonally-adjusted annualized basis, growth came in at 23.3%, a sharp turnaround from the 14.8% contraction in the preceding quarter. The construction sector contracted by 4.4% YoY in the fourth quarter, extending the 5.0% decline in the previous quarter. The weak performance was due to a fall in both private sector and public sector construction activities. The services producing industries expanded by 3.8% YoY in the fourth quarter, slightly faster than the 3.5% growth in the previous quarter. Growth was primarily driven by the finance & insurance and wholesale & retail

- trade sectors. The services producing contracted by 2.1%, reversing from the 6.3% expansion in the previous quarter.⁷¹
- CPI-All Items inflation and MAS Core Inflation eased to 0.2% and 1.5% respectively in March 2018. Food inflation dipped to 1.4% in March from 1.5% in the preceding month, mainly reflecting smaller year-ago increases in air fares and holiday expenses due to a smaller increase in the prices of non-cooked food items and prepared meals. Private road transport fell by 0.6% in March, reversing the 0.6% increase in February, due to lower car prices following a decline in Certificate of Entitlement (COE) premiums. Services inflation fell to 1.4% in March from 1.9% in previous month, mainly reflecting smaller year-ago increases in air fares and holiday expenses. CPI less imputed rentals on owner-occupied accommodation moderated to 1.2% in March largely on account of lower services and private road transport inflation.⁷²
- The overall unemployment rate including foreigners decreased slightly from 2.1% in December 2017 to 2.0% in March 2018. The unemployment rate for residents decreased to 2.8% from 3.0% in March 2018 while unemployment rate for citizens remained unchanged at 3.0%. Total employment (excluding Foreign Domestic Workers) contracted by 2100 in 1Q 2018, after a seasonal increase in 4Q 2017. The decline in 1Q 2018 was largely due to fewer Work Permit Holders in Construction and Marine Shipyard. However, the decline in 1Q 2018 was smaller than that observed in 1Q 2017, due to a smaller contraction in employment in Construction. Sectors which had higher concentration of locals in its manpower such as Community, Social & Personal Services, Financial & Insurance, Information & Communications and Transportation & Storage continued to post employment increases.⁷³
- Survey results released by the Singapore Institute of Purchasing and Materials Management recorded an increase of 0.3 points from the previous month to record a faster expansion at 53.0. The Singapore manufacturing PMI has recorded its 19th month of consecutive expansion. This latest PMI reading was mainly attributed to a faster growth in factory output, as well as higher new orders and new exports.⁷⁴
- The seasonally adjusted retail sales in March 2018 increased by 2.3% on a MoM basis and decreased 1.5% on a YoY basis compared to March 2017. Excluding motor vehicles, retail sales rose by 1.1% MoM while rising by 2.6% YoY, due to lower vehicle sales in 2018. The total retail sales value in March 2018 was estimated at SGD 3.8bn. The seasonally adjusted sales of food & beverage services in March 2018 decreased 1.3% MoM and increased 3.6% YoY. The total sales value of food & beverage services in March 2018 was estimated at SGD 716mn, higher than the SGD 691mn last September.⁷⁵
- Singapore's NODX declined by 2.7% YoY in March 2018, as both electronics and nonelectronics declined at a slower pace. The decline was lower than the 9% decrease in the previous month. NODX to majority of the top markets increased in March 2018, except China, Hong Kong, Thailand and Malaysia; growth was led by the US, Japan and the EU 28. Total trade decreased over the year in March 2018; both imports and exports moderated from recent highs.⁷⁶

Monetary

• Since October 2017, the Singapore dollar nominal effective exchange rate has appreciated in the upper half of the policy band, apart from a brief period of decline in early 2018. This development reflected, in part, broad-based US dollar weakness and depreciation in a number of regional currencies against the Singapore dollar. The Singapore economy is likely to remain on its steady expansion path in 2018. Upward pressures on MAS Core Inflation are expected to persist over the course of 2018 and beyond, underpinned by an improving labor market. MAS has therefore decided to increase slightly the slope of the Singapore dollar nominal effective exchange rate policy band, from zero percent previously. The width of the policy band and the level at which it is centered will be unchanged. This policy stance is consistent with a modest and gradual appreciation path of the Singapore dollar nominal effective exchange rate policy band that will ensure medium-term price stability. The measured adjustment to the policy stance takes into account the uncertainty in macroeconomic outcomes presented by ongoing trade tensions.

Funding & Liquidity

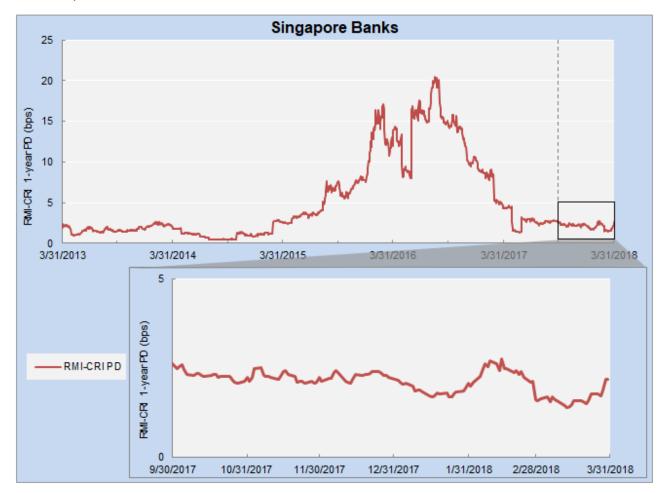
- Yields of 10-year Singapore government bonds increased to 2.29% on March 31 2018 from 2.00% on December 30 2017.
- Lending to non-bank customers rose from SGD 651.9bn in Q4 2017 to SGD 661.6bn in Q1 2018. Total loans to businesses rose from SGD 389.6bn in December 2017 to SGD 397.8bn in March 2018 while loans to consumers rose marginally from SGD 262.2bn in December 2017 to SGD 263.7bn in March 2018.⁷⁸
- The amount of outstanding sovereign bonds increased by SGD 4.6bn to SGD 111bn in Q1 2018.⁷⁹
- The prime lending rate remained constant at 5.33% in Q1 2018.

Sovereign Credit Ratings

 All three major rating agencies kept their highest investment grade ratings for Singapore sovereign bonds over Q1 2018.

Singapore Banks

The RMI-CRI 1-year aggregate PD for Singapore banks remained stable during the first quarter of 2018, from 20.68bps in last quarter to 21.05bps by the end of March 2018. UOB, OCBC and DBS showed their stronger performance compared with the previous quarter through higher earnings during Q1 2018. Earnings of Singapore banks continue to be driven by higher interest income and fees from wealth management and loan growth. Funding & liquidity condition slightly increased. As for capital levels and asset quality, Singapore banks remain as some of the most robust banks in the world and are compliant with all capital requirements. We witnessed some slight movements of NPL ratios in Singapore banks over the first quarter.



Profitability

- Singapore banks reported increase in profits in the first quarter of 2018. Quarterly net profits in DBS, OCBC, and UOB increased by 26%, 29%, and 21% from the same period last year. The strong performance was mainly attributed to broad-based growth in loans and non-interest income, higher net interest margin and wealth management income as well as lower allowances. In Q1 2018, the allowances for loans and other assets of OCBC for Q1 2018 were SGD 12mn, significantly lower as compared to SGD 178 million in the preceding quarter and SGD 168 million a year ago, as the prior periods included allowances set aside for corporate accounts in the offshore support services and vessels sector. The total allowances for loans and other assets of DBS and UOB decreased by 18%, and 5% YoY respectively from Q1 2017.81,82,83
- Data from the Monetary Authority of Singapore showed that the amount of corporate loans issued to non-bank customers increased marginally by 1.48% to SGD 661.6bn at the end of Q1 2018 from 651.9bn in the previous guarter.⁸⁴

Funding & Liquidity

- Total deposits in Singapore banks increased by SGD 7.3bn in Q1 2018. Local currency deposits increased by SGD 7.0b after a decrease of SGD 1.03bn in Q4 2017. Foreign currency deposits increased by about SGD 0.26bn during Q1 2018.⁸⁵
- Singapore's fixed deposit rates remained the same during Q1 2018 for both 3-month, 6-month and 12-month deposits. Current fixed deposit rates are at 0.15%, 0.22% and 0.34% respectively. The prime lending rate was also unchanged at 5.33% during the first quarter.⁸⁶

Capital Levels & Regulations

 All three Singapore banks kept their Tier 1 Common Equity ratios to be well above the recommended Basel III guidelines, making them some of the most well-capitalized banks in the world. The three banks also maintain the capital position to comply with International Accounting Standards Board IFRS9, which becomes effective after January 2018.

Asset Quality

- Loans placed under the "special mention" category declined to 1.93% of total exposure at the end of Q1 2018, from 2.11% in the quarter before. Loans classified as doubtful increased to 0.27% of total exposure. Loans marked as a loss lowered to 0.22% in Q1 2018. Overall, Singaporean banks are trying to improve their asset quality by recognizing more exposures as losses and cutting back on the exposures that are doubtful or under special mention.⁸⁷
- NPL ratios at DBS, UOB and OCBC saw some slight movements in Q1 2018. Overall NPL ratio at DBS fell to 1.6% from 1.7% in the previous quarter. NPL ratio at UOB also declined to 1.7% as at March 2018 from 1.8% as at 31 December 2017, and the bank indicates that its NPL coverage remained strong at 91%, or 190% after taking collateral into account. NPL ratio for OCBC slightly increased to 1.4% from 1.3% in the previous year mainly attributable to the downgrade of exposures associated with the offshore support services and vessels sector.^{88,89,90}

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⁷²April 23,2018 Consumer Price Developments in March 2018, MAS Singapore, http://www.mas.gov.sg/

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- ⁸⁹April 30, 2018, DBS first-quarter net profit up 26% to record SGD 1.52 billion, return on equity rises to 13%, highest in decade, DBS http://www.ocbc.com
- ⁹⁰May 7, 2018, OCBC Group First Quarter 2018 Net Profit up 29% to SGD 1.11 billion, OCBC Group, www.dbs.com.sg

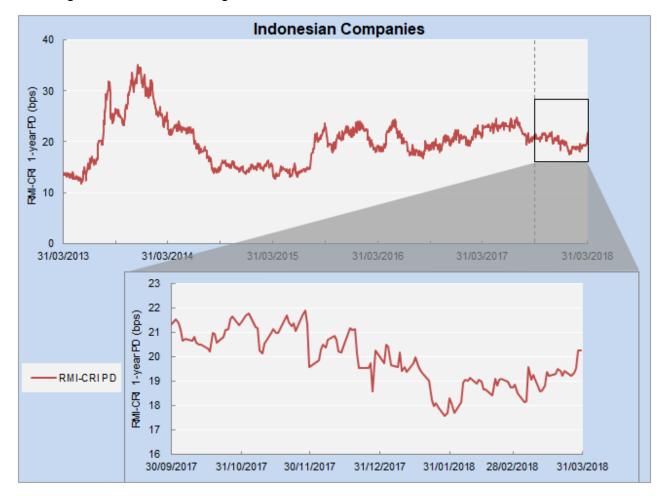
Asia-Pacific - Emerging economies

The RMI-CRI aggregate 1-year PD for listed corporations in emerging Asia, excluding India and China, was mostly stable during Q1 2018, albeit at a higher level overall compared to the end of Q4 2017. In terms of economic growth, Indonesia's economic acceleration continued in Q1 2018, however, at a slower than expected pace at 5.06% YoY that mainly resulted from eight interest rate cuts in the past two years. The Malaysian economy, as measured by gross domestic product (GDP), expanded 5.4% in the Q1 2018 from a year earlier, driven mainly by private sector spending and export. Thailand's economy posted its fastest GDP growth in five years in Q1 2018 at 4.8% YoY with higher private consumption and improved exports.



Indonesian Companies

The RMI-CRI aggregate 1-year PD for Indonesian companies increased slightly for the quarter of Q1 2018. Indonesia's economy experienced a growth of 5.06% YoY in Q1 2018, missing market expectations of 5.18%. Indonesia's inflation decreased for the first quarter of 2018, with a CPI of 3.4% from 3.6% in Q4. Trade surplus for the whole Q1 2018 amounts to USD 0.28bn, where most of which was derived from a surplus in non-oil and gas trade, offsetting the deficit in oil and gas trade balance.



Economy

The Indonesian economy expanded by 5.06% YoY in Q1 2018, a slower pace as compared to the previous period and below market expectations of 5.18%. Private consumption and fixed investment were the main drivers behind the growth of the economy in this quarter (at 4.95% and 7.95% respectively). In addition, exports rose at a slower pace (at 6.17% compared to 8.5% in Q4 2017).⁹¹

- The Consumer Price Index (CPI) of Indonesia reached 3.4% in March. Respectively, the inflation of volatile food reached 4.06% (YoY), core inflation at 2.67% (YoY), inflation of administered prices at 5.11% (YoY). Going forward, inflation is projected to stay at around 3.5% throughout 2018. Therefore, it is important that the central and regional governments as well as Bank Indonesia strengthen their coordination to keep inflation at check especially on the rising inflation of volatile food.⁹²
- Wages of Indonesian workers likely increased in Q1 2018. Nominal wage of farmers per day increased by 0.95% during Q1 2018 from IDR 51,110 in January 2018 to IDR 51,598 in March 2018.⁹³
- Indonesia's trade balance recorded a surplus of USD 1.09bn in March 2018, as compared to a trade deficit in December 2017. The surplus in March 2018 was attributable to the increasing surplus in non-oil and gas trade balance. The non-oil and gas trade surplus reached USD 2.02bn in March 2018 while oil and gas trade balance deficit deteriorated to USD 0.92bn. The increase in non-oil and gas export is driven by the export of mineral fuel, ore, crust, metal ash and steel. Bank Indonesia believes that the trade balance performance will improve as the global economy recovers and global commodity prices increase.⁹⁴
- According to Nikkei Indonesia Manufacturing Purchasing Managers' Index (PMI), Indonesia's PMI fell from a 20-month of 51.4 in February to 50.7 in March. This reflected a softer pace of improvement in the manufacturing sector in March.⁹⁵

Monetary

• On April 18th and 19th 2018, the Bank Indonesia (BI) Board of Governors agreed to hold the BI 7-day repo rate, deposit facility rate, and lending facility rate at 4.25%, 3.50% and 5.00% respectively. The decision is consistent with Bank Indonesia's efforts to maintain macroeconomic and financial system stability, while also building domestic economic recovery momentum. Looking forward, Bank Indonesia will continue to coordinate with the Government to reinforce the policy mix in order to maintain macroeconomic stability, financial system stability and strengthen fundamentals of Indonesia's economy. 96

Funding & Liquidity

- Yield on Indonesia's 5-year bonds remained relatively flat as it stays at 5.94% at the end March 2018 from 5.96% as of end December 2017. The relatively decent performance in the export and household spending sectors during the fourth quarter might also keep yields low. However, the government expects that its bond yield will rise given that investors have started selling risky emerging market assets in the environment of a rising US yield and US dollar.
- Indonesia's official reserve assets position stood at USD 126bn as of end-March 2018, lower than the end of February 2018 level registered at USD 128.06bn. The decrease was primarily attributable to the repayment of external government debt and the stabilization of the currency amidst global financial market uncertainty. Bank Indonesia considered the official reserve assets remain adequate in line with the sustainability of Indonesian economic growth.⁹⁷

• Long-term external debt grew 9.5% (YoY) in February 2018. Long-term external debt consisted of public sector external debt amounting to USD 181.4bn (50.9% of total long-term external debt) and private sector external debt amounting to USD 174.8bn (49.1% of total long-term external debt). The cost of government's external debt is getting lower along with the increasing investor confidence in Indonesia which is supported by better economic fundamentals. The development of external debt in February 2018 remains manageable. The ratio of Indonesia's external debt to GDP is stable at 34%.⁹⁸

Politics

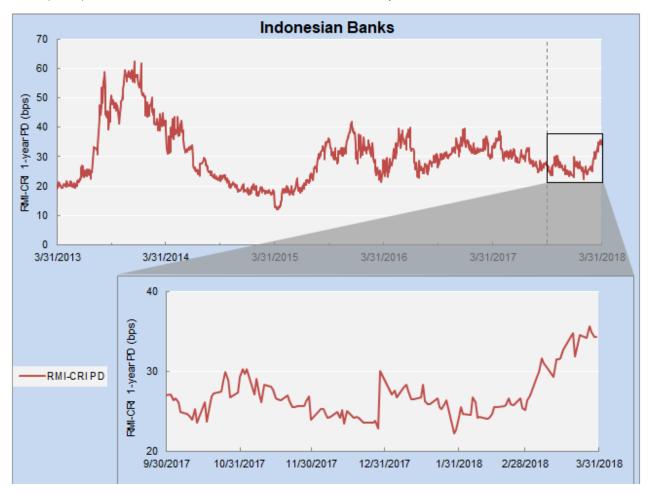
• The Indonesian authorities are planning to introduce measures to prevent vote-buying and corruption in the 2018 upcoming June 2018 regional elections. The Elections Supervisory Agency plans to work with the National Police and the Financial Transaction Reports and Analysis Centre in tackling violations to prevent money politics. Candidates will be required to submit their wealth report to the General Elections Commission upon registering for the election.⁹⁹

Sovereign Credit Ratings

Moody's and S&P kept their ratings on the local currency long term bonds of Indonesia at Baa3 with a positive outlook and BBB- ratings with a stable outlook respectively in Q1. Fitch maintained its outlook on Indonesia's sovereign bond at BBB with a stable outlook, keeping it at investment grade level. This reflected the Indonesian government's consistent effort to ramp up productive spending and attract foreign investments. 100

Indonesian Banks

The RMI-CRI aggregate 1-year PD for Indonesian banks increased slightly in the end of March 2018 as compared to December 2017. Loans extended by Indonesian banks grew at 9.2% in March from a year earlier, versus 8.6% in February. Meanwhile, non-performing loans (NPL) stood at 3%, a decrease from 3.2% in the previous month.¹⁰¹



Profitability

• The three largest majority state-owned Indonesian banks reported better earnings on a YoY basis in Q1 2018. Bank Mandiri reported a jump in net income with an increase of 44% in Q1 2018 while Bank Rakyat Indonesia reported an increase in net income of 11.4% and Bank Negara Indonesia reported a YoY increase in net income of 13.3%.

Funding & Liquidity

- The liquidity ratio (liquid assets/bank deposits) of Indonesian banks improved to 23% in February 2018.¹⁰²
- The Jakarta 3-month interbank rate decreased slightly from 5.37% at the beginning of Q1 2018 to 5.36% by the end of Q1 2018. Similarly, the 1-month interbank rate decreased from 5.18% at the beginning of Q1 2018 to 5.03% by the end of Q1 2018.

Regulation

 The Financial Services Authority has told the country's systemically important banks to create a Tier-1 capital surcharge of between 1% and 3.5% of risk weighted assets by Jan 2019. Indonesia's systemically important banks are categorised into five categories which will decide the size of the new capital surcharge. The regulator will revise the classification in March and September every year based on the lenders' performance data.¹⁰⁴

Asset Quality

• According to Bank Indonesia, the financial system remained stable. Capital adequacy ratio and liquidity ratio of Indonesian banks, as of February 2018, stood at 23.1% and 23% respectively, while non-performing loans (NPL) stood at 2.9% (gross) or 1.3% (net). The potential growth of credit is likely to continue in line with the monetary and macroprudential policy easing. Furthermore, economic financing through the capital market, including initial price offerings, rights issue and corporate bonds, is expected to increase in line with financial market deepening efforts.¹⁰⁵

⁹¹May 7, 2018, Indonesia GDP Annual Growth Rate, Trading Economics, http://www.tradingeconomics.com/

⁹² Apr 2, 2018, Inflation in March Remains Controlled, Bank Indonesia, http://www.bi.go.id

⁹³Apr 24, 2018, Real and Nominal Wage for Farmworker in Indonesia (IDR), Indonesian Statistics Bureau (BPS), http://www.bps.go.id/index.php

⁹⁴Apr 16, 2018, Indonesias Trade Balance Records Surplus, Bank Indonesia, http://www.bi.go.id

⁹⁵Apr 2, 2018, Output expands only slightly in March, Markit Economics, https://www.markiteconomics.com

⁹⁶Apr 19, 2018, BI 7-Day Reverse Repo Rate Held at 4.25%: Supporting the Momentum of Recovery Amid High Global Risk, Bank Indonesia, http://www.bi.go.id

⁹⁷Apr 6, 2018, Official Reserve Assets Amounted to USD126.00 Billion in March 2018, Bank Indonesia, http://www.bi.go.id

⁹⁸ Apr 16, 2018, External Debt Statistics of Indonesia - April 2018, Bank Indonesia, http://www.bi.go.id

⁹⁹Jan 26, 2018, Indonesia gears up to fight 'cash politics', The Straits Times, https://www.straitstimes.com

¹⁰⁰Apr 4, 2018 Indonesian Sovereign Rating: Market Data and Info, Bank Indonesia, http://www.bi.go.id

¹⁰¹May 18, 2018, Indonesia's March loan growth accelerates to 9.2 pct y/y, Reuters, https://www.reuters.com

¹⁰²Apr 19, 2018, BI 7-Day Reverse Repo Rate Held at 4.25%: Supporting the Momentum of Recovery Amid High Global Risk, Bank Indonesia, http://www.bi.go.id

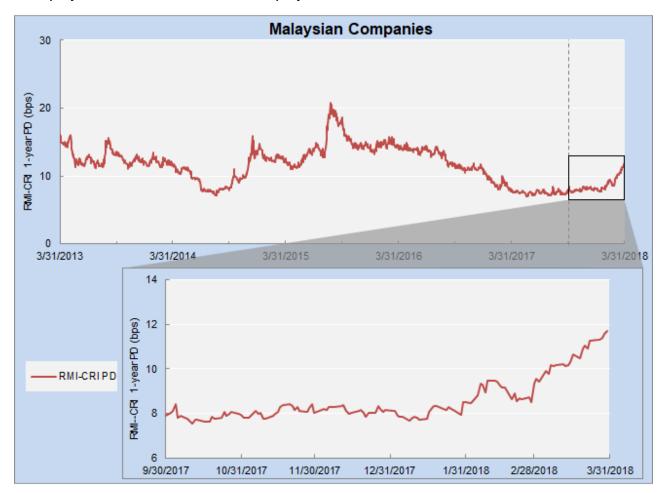
¹⁰³Apr 4, 2018 Jakarta Interbank Offered Rate (JIBOR), Bank Indonesia, http://www.bi.go.id

¹⁰⁴ Mar 28, 2018, Indonesia imposes extra capital requirements on top banks, The Business Times https://www.businesstimes.com.sg

¹⁰⁵Apr 19, 2018, BI 7-Day Reverse Repo Rate Held at 4.25%: Supporting the Momentum of Recovery Amid High Global Risk, Bank Indonesia, http://www.bi.go.id

Malaysian Companies

The RMI-CRI aggregate 1-year PD for Malaysian companies slightly increased to around 12bps over Q1 2018. Malaysia's economy grows slower but private sector spends more and unemployment rate decreases. Unemployment rate decreased to 3.3% YoY. 106



Economy

• GDP of Malaysia growth slowed to 5.4% YoY in Q1 2018 from 5.9% in Q4 2017. The GDP growth is mainly driven by growth in private sector spendings 5.2% and growth in net exports 62.4% during Q1 2018. Domestic demand recorded a moderate growth of 4.1%, due to lower growth of private sector expenditures of 5.2% and a marginal decline in public sector spendings of -0.1%. Private consumption registered a sustained growth of 6.9%. Headline and core inflation declined to 1.8% and 1.9% respectively in the same period.¹⁰⁷

- Malaysia's CPI rose by 1.3% on a YoY basis in March 2018. Among the major groups which recorded increases were the indices for Food & Non-Alcoholic Beverages (+2.8%), Furnishings, Household Equipment & Routine Household Maintenance (+2.1%), Restaurants and Hotels (+2.0%), Health (+2.0%), and Housing, Water, Electricity, Gas & Other Fuels (+2.0%), Education (+ 1.1%), Recreation Services & Culture (+0.5%) and Alcoholic Beverages & Tobacco (+0.1%).¹⁰⁸
- Malaysia's unemployment rate decreased to 3.3% and the labour force participation rate in Malaysia is 68.8% in March 2018.¹⁰⁹
- In March 2017, Malaysia exports recorded an increase of 2.2% YoY to MYR 84.5bn. On the contary, imports declined MYR 7.4mn (-9.6%, YoY) to MYR 69.8bn. On a YoY basis, exports rose due to higher exports to Hong Kong (+MYR 2.4bn), European Union (+MYR 454.4mn), Thailand (+MYR 405.4mn), India (+MYR 340.5mn) and Republic of Korea (+MYR 288.2mn). On a YoY basis, lower imports were mainly from United States (-MYR 3.9bn), China (-MYR 2.7bn), Republic of Korea (-MYR 648.9mn), Vietnam (-MYR 518.3mn) and Brazil (-MYR 415.7mn).

Monetary

- On January 25, Bank Negara Malaysia announced that it decided to increased the Overnight Policy Rate (OPR) by 25 basis points to 3.25%, citing global economic growth has strengthened further, with growth becoming more entrenched and synchronised across regions. Looking ahead, the strong growth momentum of Malaysia is expected to continue in 2018, sustained by the stronger global growth and positive spillovers from the external sector to the domestic economy.¹¹¹
- In March 2018, broad money (or M3), which measures the money supply, increased by 5.9% YoY to MYR 1.75tn. 112
- The ringgit appreciated by 1.6% against the USD in March. The international reserves of Bank Negara Malaysia amounted to USD 110.0bn as of 13 April 2018. 113

Funding & Liquidity

- The market indicative yield on the 10-year Malaysia government securities slightly increased to 3.95% in March 2018, compared to 3.91% in December 2017. The same yield measure on 5-year Malaysia government securities decreased to 3.54% from 3.56% over the same period.¹¹⁴
- Bank loans approved to finance, insurance and business activities increased to MYR 2.74bn in March 2018 from MYR 2.42bn one year ago. Meanwhile, loans approved to the manufacturing segment increased to MYR 3.29bn in March and loans approved to the wholesale, retail trade, restaurants and hotels segment increased to MYR 2.63bn, while loans approved to construction decreased from MYR 3.06bn a year ago to MYR 1.94bn in March.¹¹⁵

Regulations and Politics

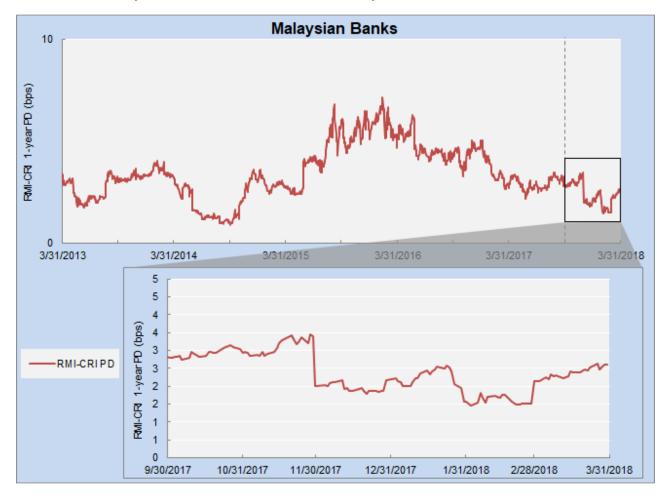
- Mahathir Mohamad, 92, became Malaysia's new prime minister after winning the historic general election that ended the six-decade rule of the United Malays National Organisation (UMNO). Mahathir's four-party Pakatan Harapan alliance won 112 of 222 parliamentary seats in the vote on May 9. Meanwhile, the former prime minister, Najib Razak, had faced increased public pressured over a goods-and-services tax that boosted prices and a money laundering scandal involving hundreds of millions of dollars through 1MBD, a state owned company. Najib was banned from leaving the country and facing investigation on the corruption scandal. 116,117
- The new prime minister, Mahathir, has named Lim Guan Eng as the country's finance minister on May 15. Lim's primer task is going to be removing a 6% goods-and-services tax within 100 days, raising fuel subsidies and increasing minimum wages. At the same time, the government will also face challenges of bringing down debt and maintaining the fiscal deficit at a manageable level after scraping the consumption tax.¹¹⁸

Sovereign Credit Ratings

• The Malaysian government maintained its sovereign credit ratings at all three rating agencies. The country was rated at A3, A- and A- respectively by Moody's, S&P and Fitch. All three agencies assigned a stable outlook for their ratings on Malaysia.

Malaysian Banks

The RMI-CRI aggregate 1-year PD for Malaysian banks remained stable around 2-3bps in Q1 2018, as the banking system remained well capitalized. Stable total bank deposits continue to ensure liquidity in Malaysian banks. Though asset quality worsened slightly, the financials of Malaysian banks remained in the safety zone.



Lending

- The amount of bank loan applications has increased to MYR 76.65bn in March 2018 from MYR 57.11bn in December 2017. Loan applications for finance, insurance and business activities have increased to MYR 5.72bn in March 2018 from MYR 3.08bn in December 2017.¹¹⁹
- The base lending rate of Malaysian commercial banks remained stable at 6.68% in December. The weighted base rate also increased to 6.90% in March 2018 from 6.68% in December 2017.¹²⁰

Funding & Liquidity

- Total bank deposits increased to MYR 1.791tn in March 2018 from MYR 1.746tn in December 2017. The repurchase agreements increased to MYR 20.7bn in March from MYR 18.3bn in December 2017.¹²¹
- Savings deposits in banking system increased to MYR 155.30bn in March 2018 from MYR 150.51bn in December 2017.¹²²

Capital Levels & Regulations

 The Common Equity Tier 1 Capital ratio for Malaysian banks decreased to 13.2% in March 2018 from 13.5% in December 2017. Similarly, the Tier 1 Capital ratio decreased to 14.0% from 14.5% in the same period.¹²³

Asset Quality

 The value of impaired loans at Malaysian banks has increased to MYR 25.26bn in March 2018 from MYR 24.28bn in December 2017. The ratio of net impaired loans to net total loans decreased to 0.99% from 1.1% in the same period.¹²⁴

¹⁰⁶RefMalaysiaone

¹⁰⁷May 16, 2018, Economic and Financial Developments in the Malaysian Economy in the First Quarter of 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹⁰⁸April 18, 2018, Consumer Price Index Malaysia March 2018, Department of Statistics Malaysia, https://www.statistics.gov.my

¹⁰⁹ May 10, 2018, Key Statistics of Labour Force in Malaysia, March 2018, Department of Statistics Malaysia, https://www.statistics.gov.my

¹¹⁰May 04, 2018, Monthly External Trade Statistics March 2018, Department of Statistics Malaysia, https://www.statistics.gov.my

¹¹¹ Jan 25, 2018, Monetary Policy Statement, Bank Negara Malaysia, http://www.bnm.gov.my

¹¹²March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹¹³Apr 18, 2018 MONTHLY HIGHLIGHTS MARCH 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹¹⁴March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹¹⁵March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹¹⁶May 10, 2018, Mahathir Wins in Historic Malaysia Power Shift, Bloomberg, http://www.bloomberg.com

¹¹⁷ May 12, 2018, Najib Razak banned from leaving Malaysia, Financial Times, https://www.ft.com

¹¹⁸May 14, 2018, Malaysia finance minister seen as safe pick as budget risks rise, Business Times, https://www.businesstimes.com/

¹¹⁹March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹²⁰March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹²¹March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

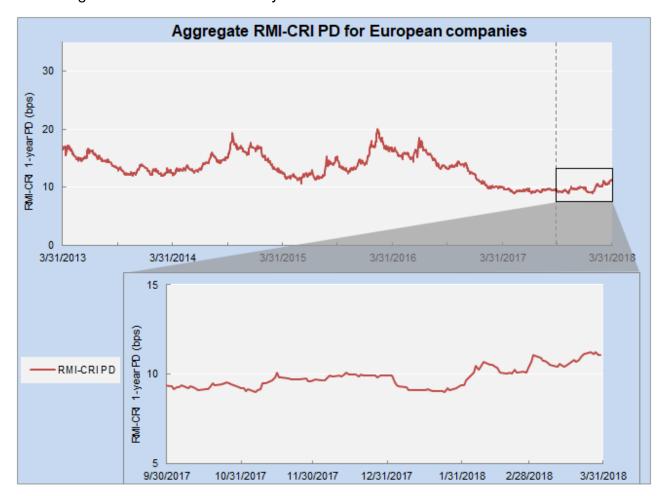
¹²²March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹²³March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

¹²⁴March 31, 2018, Monthly Highlights and Statistics March 2018, Bank Negara Malaysia, http://www.bnm.gov.my

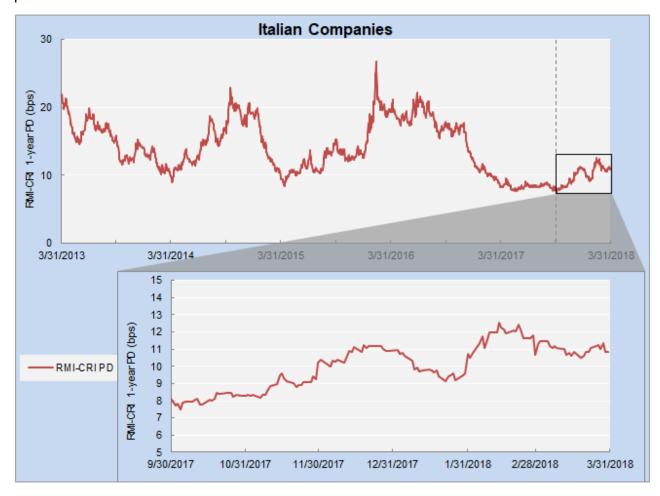
Europe

European firms ended Q1 on a negative note as the aggregate 1-year Probability of Default edged higher from the end of Q4. The 2018 Great Britain and Ireland cold wave and the Carillion crash have had a detrimental effect on the credit quality of UK firms. The storm, which covered much of Ireland in layers of thick snow had a negative effect on UK firms in several areas. Overall UK construction activity dropped significantly while retail firms lost millions during the storm as food shop visits declined by an average of 5% across the region. The rest of Europe seemed to fared better as European private sector activity surveys came off their multi-year highs but remained at healthy levels and continued to suggest economic expansion. Sales and earnings however were depressed by the strengthening of EUR over the past twelve months. The credit outlook for European companies remains negative as the first signs of deceleration are likely to continue into Q2.



Italian Companies

The aggregate 1-year RMI PD for Italian companies slightly increased during the first quarter of 2018, from 11.12bps in the last quarter to 12.53bps by the end of March 2018. Q1 saw credit outlook of Italian companies slightly worsen with the hung parliament resulting from Italian election. The economy grew by 0.3% over the quarter, and recorded a 1.4% YoY growth. Italy's economy is in much better shape than before the last general election in 2013. GDP has been expanding for three years, unemployment is declining and banks are healthier. Yet Italy's growth remains among the slowest in Europe. The Italian government is also expected to make significant progress in reducing its high sovereign debt. However, political uncertainties are still threats that may disrupt Italy's road to recovery. Scrutiny still need to be increased on the continuous development of Italy politics. Slow bank reform, high public debt and political uncertainty are likely to weigh in the economy in the following quarters of 2018.



Economy

• The GDP of Italy is estimated to increase by 0.3% moving from Q4 2017 to Q1 2018. The economy expanded by 1.4% YoY as Italy continues to rebound from Eurodebt crisis back in 2011. The economy's recovery from its worst recession since World War II has gained pace and Italy's public debt stabilized at around 132% of gross domestic product, the highest in the euro zone after Greece's. The Italian government targeted it to fall to 131.6% in 2017. According to European Central Bank Governing Council, the virtuous circle of supply and demand is gaining momentum: the rise in households' disposable income and the decline in firms' spare capacity mean that the improved outlook is increasingly translating into higher consumption and investment. In January the Bank of Italy forecasted GDP growth of 1.4% for 2018 and 1.2% for the following year. The ECB plans to publish new guidelines requiring lenders to better

- protect against loans that turn sour, a move that makes additional bad debt reduction necessary to lower banks' risks and funding. 125,126
- Italy's unemployment rate was 11% in March 2018, steady over February 2018. The country ended the quarter with 23.134mn people employed. 2.865mn people were unemployed, a 0.7% increase over the previous month. Youth unemployment (aged 15-24) was 31.7%, down 0.9% over the previous month.¹²⁷
- Italy's manufacturing Purchasing Managers' Index (PMI) an index of sentiment in the manufacturing sector fell to 55.1 in March from 56.8 in February, which was the lowest level recorded since last July, although PMI remains comfortably above its historical average. Relatively slower market activity and supply-side constraints restricted growth. Both output and new orders rose at weaker rates, whilst business sentiment softened to its lowest level since last summer. Nonetheless, jobs were again added at a solid pace as workloads continued to grow. On the price front, inflation rates for both input costs and output charges weakened.¹²⁸
- Italy's services PMI came in at a level of 52.6 during March from 55.0 in February, the weakest rate of growth by the index for five months with both activity and new work rising at the weakest rates since last October. Employment also rose at a slower pace and cost inflation weakened further, whilst competitive pressures led to a decline in prices charged. Business confidence was little changed since the previous month. March saw another round of job creation amongst Italian service providers. Growth in employment has now been recorded for 18 months in succession although the latest gain was the lowest in just under half-a-year.¹²⁹
- The European Commission Italy Economic Sentiment Indicator (ESI), which assesses
 the economic outlook of EU countries as a weighted average of the industrial, services,
 construction, retail and consumer sectors, reported a reading of 110.1 in January, 111.6
 in Feburary and 109.8 in March. These figures are slightly lower than the 111.8 average
 reported over Q4 2017.¹³⁰
- The confidence climate in March 2018 increased from 115.7 to 117.5. All components improved: economic from 140.1 to 141.9, personal from 108.0 to 109.3, current from 113.0 to 115.1 and future component from 119.8 to 121.1. The balance concerning expectations on unemployment decreased from 16.2 to 11.9. Both the balance on inflation perceptions referring to the last 12 months and the balance on inflation expectations for next 12 months decreased from 0.3 to -4.4 and from -1.9 to -8.9.¹³¹
- Retail sales, indexed by the Markit Retail PMI posted 48.0 during March. That was down from 50.4 in the previous survey period and signaled a monthly decline in retail sales for the fourth time in the past five months. Italy's retail sector endured a challenging month in March as sales fell on both monthly and annual measures. Poor weather, lower footfall and a reduced willingness to spend amongst consumers were all reported to have led to the disappointing result. Nonetheless, sales are expected to recover somewhat in April, and companies raised their purchasing and boosted inventories accordingly.¹³²

Funding & Liquidity

- Yields on 10-year Italian bonds largely decreased during Q1 2018, from the 2.095% high on 2th January 2018 to the 1.786% low on March 30, 2018.
- Interest rates on loans (other than bank overdrafts) to non-financial corporations fell during Q1 2018, down from 2.22% in December 2017 to 2.18% in March 2018. Bank interest rates (including revolving loans, overdrafts and extended credit card credit) to corporations rose in February to 3.01% before falling to 2.94% in March 2018. Loans for house purchases decreased from 1.93% to 1.89% in the first quarter.^{133,134,135}
- Preliminary estimates for outstanding loans to non-financial institutions stood at EUR 741,493mn. Total outstanding loans overall slightly increased by 0.55% from the previous quarter.¹³⁶

Politics

- The 2018 Italian general election was held on 4 March 2018 after the Italian Parliament was dissolved by President Sergio Mattarella on 28 December 2017. Voters were electing the 630 members of the Chamber of Deputies and the 315 elective members of the Senate of the Republic for the 18th legislature of the Italian Republic since 1948. The election took place concurrently with the Lombard and Lazio regional elections. The centre-right alliance, in which Matteo Salvini's League emerged as the main political force, won a plurality of seats in the Chamber of Deputies and in the Senate while the anti-establishment Five Star Movement led by Luigi Di Maio became the party with the largest number of votes and the centre-left coalition, led by former Prime Minister Matteo Renzi, came third. However, no political group or party won an outright majority, resulting in a hung parliament.¹³⁷
- After the 2018 Italian parliamentary elections, a new government is due to be held by the end of 2018. The Italian Constitution does not provide time limits for the formation of the Italian government after an election, but the Italian president Sergio Mattarella has planned to dissolve the Parliament in August 2018 if any investiture attempt would fail by that month. As none of the three factions look likely to have enough seats to govern alone, and no government is possible without the support of other parties, some kind of coalition will therefore be necessary for a majority in Italy's 630-seat parliament. 138
- There are several scenarios to form a cabinet that could receive a parliamentary majority of both the two chambers of the Italian Congress: a government agreement between the Five Star Movement and Lega-Salvini Premier with unspecified prime minister (the most probable scenario); a government agreement between the Five Star Movement and the Partito Democratico, although party vertices has said that the party would be the main opposition party to any coalition or agreement that would be formed; a government between the center-right coalition and the center-left coalition; a provisional government that would approve the balance law and modify the Italian electoral law of 2017 and then force Sergio Mattarella, the Italian president, to dissolve the Congress and held a new elections sometimes in late 2018 or early 2019.¹³⁹
- Italian banks are working to shift risky assets off their balance sheets, as the country's economy gathers pace. Gross bad loans held by Italian banks fell to EUR 167.23bn in December 2017 from EUR 173.07bn in November 2017. Net of write-downs, bad loans were EUR 64.37bn in December, down from EUR 65.91bn in November.¹⁴⁰

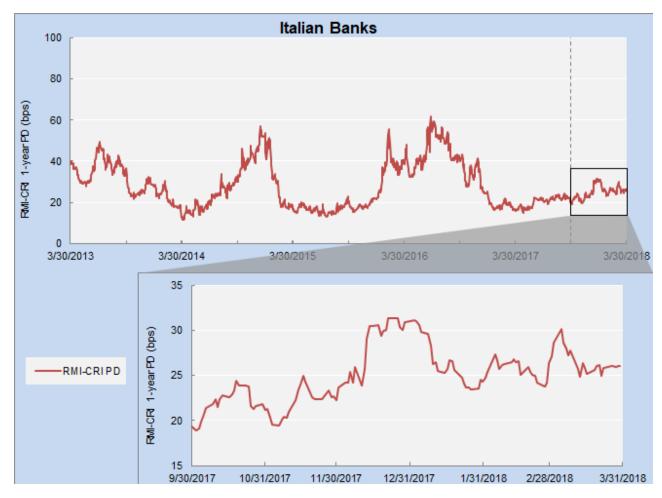
• Italy's latest published public accounts were that of Q4 2017. Total revenues for General government grew by 0.7% while total expenditures remained unchanged compared with the same quarter of the previous year. The growth of total revenues results from an increase in current revenues (+0.9%) and a decrease of total capital revenues (-16.5%). The trend in expenditures results by a decrease in current expenditures (-0.4%) and an increase in capital expenditures (+6.2%). The General government deficit (net borrowing) to GDP ratio was 1.6% in the fourth quarter of 2017, compared with the 1.9% in the fourth quarter of 2016. Italy's debt-to-GDP ratio is set to stand at 131.8% based on latest data in Q4 2017. 141,142

Sovereign Credit Ratings

Moody's retained its rating of Baa2 with a negative outlook due to uncertain prospects
of the Italian economy and its ongoing negotiations with the European Commission.
Fitch did not revise its ratings of BBB with a stable outlook. S&P retained its rating of
BBB with a stable outlook.¹⁴³

Italian Banks

The aggregate 1-year RMI PD for Italian banks remained relatively constant over Q1 2018 as Italian banks began to stabilize. However, challenges remain due to uncertain politics. Investors remain doubtful of Italian banks' profitability as they lag behind their European competitors in terms of modernization and technology. To improve its profitability, Italian banks embarked on a push towards innovation and transform its business model. Funding and liquidity has been adequate for Italian banks over Q1, with credit supply to medium sized and large manufacturing continue to be favorable. In the meantime, asset quality at Italian banks continue to improve with the ratio of new non-performing loans to outstanding loans decreasing. But coverage ratio decreased, which means Italian bank system is still facing challenges.



Profitability

• As concerns of a meltdown subside, Italian banks can be said to have overcome the systematic risk in general. However, Italian banks are still having a hard time trying to raise capital as investors remain unsure about their profitability. After the completion of bailouts and reforms in the Italian banking system, the new focus of Italian banks is to rebuild investors' confidence through proving that they are profitable. The profitability of Italian banks is very much dependent on the economic growth of Italy as well as the interest rate charged. As the Italian economy starts to recover, profit forecast and outlook for Italian banks are increasingly favorable. Shares of Italian banks increased by 7% compared to a decrease of 5.8% in the Europe STOXX 600 Banks Index. UniCredit, Italy's biggest lender, also posted a net profit of EUR 1.1bn excluding one-off items in Q1 2018, up 22.6% on a YoY basis. The substantial jump in earnings compared to the same period in 2017 sent a strong signal to investors on the future profitability of Italian banks.¹⁴⁴

Funding & Liquidity

- Coupons on new 5-year euro-denominated Italian bank bond issuances increased to 1.02% during Q1 while 3-month Euribor rate fluctuated slightly during the quarter.
- The 12-month percentage change in deposits of funds by Italian residents was 3.87% in March 2018, while total deposits of non-domestic residents increased by 0.74%. Bank funding from the Eurosystem decreased by 2.86% compared to March 2017, while debt securities issued by banks fell 17.15% compared to the same period last year. Total deposits and postal savings by residents and non-financial corporations was EUR 235.62bn, based on latest data published in Q1 2017.¹⁴⁵
- Interest charged on business loans (other than bank overdrafts) of over EUR 1mn to non-financial institutions was 1.04% in March 2018, down from the 1.16% reported in December 2017. Similar loans with collateral and/or guarantees were charged with an interest rate of 1.49%, down from 1.68% charged during March 2017. Bank interest rate on loans to sole proprietors was 2.99% in March 2018, slightly down from 3.20% in the same period last year.¹⁴⁶
- The Bank of Italy's liabilities to Euro-area financial counterparties totaled EUR 117.5bn in March 2018.¹⁴⁷
- Italian bank liabilities towards the Eurosystem slightly decreased to EUR 251bn in February 2018 from EUR 252bn in November 2017. Lenders increased their funds held at the ECB by 25.9% YoY in February 2018 while capital and reserves increased to EUR 441bn during the three months ending February 2018.¹⁴⁸
- According to the latest bank lending survey, Italian banks reported that in the fourth quarter of 2017, credit supply policies remained favorable for firms and were virtually unchanged for both corporate and household loans, while demand increased further. The demand for business lending improved in the fourth quarter of 2017. The main contributory factors were persistently low interest rates and the favorable performance of spending on fixed investment.¹⁴⁹

Asset Quality

- The Bank of Italy said that the ratio of new non-performing loans to outstanding loans fell to 2.1% as a whole in 2017 from 2.6% in 2016. The non-performing ratio for loans to firms rose to approximately 3.4% from 2.6% in Q3 while a similar measure for loans to households fell by one tenth of a point to 1.2%.¹⁵⁰
- Share of non-performing loans to total loans fell from 7.8% to 7.3% in Q4. Both sales of bad loans and internal recovery processes contributed to the fall. The coverage ratio at Italian banks has rose to 53.8% from 53.3%.¹⁵¹

¹²⁵May 2, 2018, Preliminary estimate of GDP, Italian National Institute of Statistics, istat.it

¹²⁶Feb 10, 2018, Bank of Italy Revises GDP Growth Forecast Up, Bloomberg, https://www.bloomberg.com/

¹²⁷May 2, 2018, Employment and unemployment: provisional data, Italian National Institute of Statistics, istat.it

¹²⁸April 3, 2018, Manufacturing sector records slowest growth for the eight months in March, Markit, https://www.markiteconomics.com/

¹²⁹April 5, 2018, Italian service sector expansion softens during March, Markit, https://www.markiteconomics.com/

¹³⁰April 27, 2018, Economic sentiment indicator for Italy, Eurostat, ec.europa.eu/eurostat

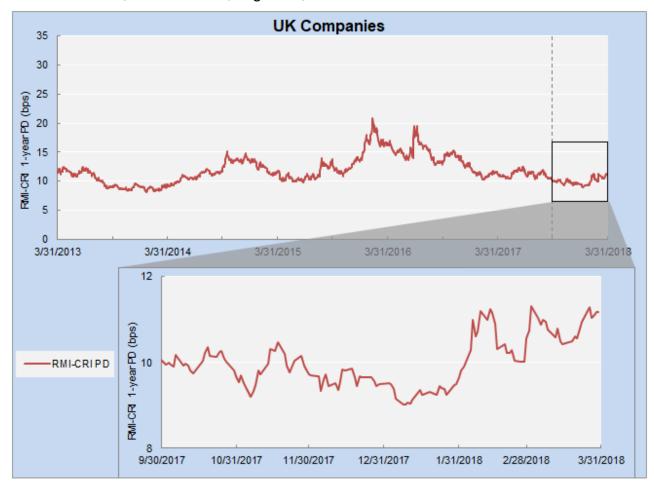
¹³¹March 27 2018, Consumer and business confidence, Italian National Institute of Statistics, istat.it

¹³²April 6, 2018, Retail sales decline in March, Markit, https://www.markiteconomics.com/

- ¹³³May,2018 Italian MFIs: Interest per annum on new loans to non-financial corporations,, ECB, sdw.ecb.europa.eu
- ¹³⁴May,2018 Italian MFIs: Revolving loans & overdrafts, convenience & extended credit card credit to corporations,, ECB, sdw.ecb.europa.eu
- ¹³⁵May,2018 Italian MFIs: Cost of borrowing for households for house purchase, ECB, sdw.ecb.europa.eu
- ¹³⁶April,2018 Italian MFIs: Total loans to non-financial corporations, ECB, sdw.ecb.europa.eu
- ¹³⁷March ,2018 Italy looks set for fresh elections as it enters third month without government, Guardian, https://www.theguardian.com
- 138 March ,2018 Italian elections 2018 full results, Guardian, https://www.theguardian.com
- ¹³⁹March ,2018 Political instability drags in Italy with populist parties split on key issues, CNBC, www.cnbc.com
- ¹⁴⁰Feb 9, 2018, Bad loans at Italian banks fell to 167.23bn euros in December, Reuters, https://www.reuters.com
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- ¹⁴²April, 2018, General Government gross debt quarterly data, Eurostat, ec.europa.eu/eurostat
- ¹⁴³April, 2018, Rating: Italy Credit Rating, CountryEconomy https://countryeconomy.com
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- 145 May, 2018, [TSC40600] Bank funding (12-month percentage changes), Banca Italia, https://infostat.bancaditalia.it
- 146 May, 2018, Bank interest rates on euro loans to non-financial corporations, Banca Italia, https://infostat.bancaditalia.it
- ¹⁴⁷May, 2018, Bank of Italy balance sheet: liabilities liabilities to euro area financial counterparties denominated in euros, Banca Italia, https://infostat.bancaditalia.it
- ¹⁴⁸April 13, 2018, Economic bulletin April 2018, Banca Italia, http://www.bancaditalia.it
- ¹⁴⁹April 13, 2018, Economic bulletin April 2018,, Banca Italia, http://www.bancaditalia.it
- ¹⁵⁰April 13, 2018, Economic bulletin April 2018,, Banca Italia, http://www.bancaditalia.it
- ¹⁵¹April 13, 2018, Economic bulletin April 2018,, Banca Italia, http://www.bancaditalia.it

UK Companies

The aggregate RMI-CRI 1-year PD for companies in the UK remained stable but is showing a subtle uptrend. GDP growth was sluggish at 0.1% QoQ. Consumer spending for the quarter further declined when compared to the previous quarter making it the weakest spend performance for any year since 2012. Trade deficit narrowed on the account of the fall in imports of machinery and transport equipment, and miscellaneous manufactures. The UK continues to be hassled by the uncertainty brought about by Brexit and its complex dealings on various areas, such as trade, migration, etc.



Economy

- The UK's Q1 2018 GDP was estimated to have grown by 0.1% QoQ, up from 0.4% in Q4 2017. Q1 2018 growth was the slowest since Q4 2012, with construction contributing the most to the downward pull on GDP, falling by 3.3%. Production increased by 0.7%, with manufacturing growth slowing to 0.2%. The services industries were the largest contributor to GDP growth, increasing by 0.3% and contributing 0.21 percentage points in Q1 2018. Transportation, storage and communication grew by 0.4% contributing 0.05 percentage points. Agriculture contracted by 1.4%, while government services and financial services grew by 0.1% and 0.4% respectively.¹⁵²
- The unemployment rate was 4.3% for the period of December 2017 to February 2018, down from 4.8% recorded during this same period one year ago, matching the rate recorded in the preceding three months of September 2017 to November 2017. The employment rate was 75.4%, 0.1 percentage points higher than the previous three months, and the highest since comparable records started in 1971. Estimates indicate that average weekly earnings for employees in real terms increased by 0.2% excluding bonuses, compared to last year. 75.4% of men aged 16 to 64 were in work, while 71.0% of women of the same age band were in work.¹⁵³

- Consumer spending showed a further decline in Q1 2018 based on Visa's UK Consumer Spending Index, rounding off the worst quarter in over five years. High street spending declined again while e-commerce saw a fall as well for the first time in 10 months. Face-to-face spending fell further by 3.0%. The quickest reduction was seen for transport & communication (-8.6%), while marked declines were also seen in household goods (-5.8%) and recreation & culture (-5.6%). Clothing & footwear fell at the quickest pace for five months (-2.7%). However, food and drinks saw spending increase by 5.7%. Hotels, restaurants & bars remained a bright spot, with spending up 4.2% on the year.¹⁵⁴
- In the 3 months to March 2018, the deficit on trade in goods and services narrowed by GBP 0.7bn to GBP 6.9bn. The narrowing deficit is attributed to falls in imports of machinery and transport equipment (mainly ships and aircraft), and miscellaneous manufactures (mainly clothing and works of art) of GBP 1.3bn and GBP 0.5bn respectively in the period. The UK trade in goods deficit with non-EU countries narrowed GBP 1.5bn to GBP 9.9bn, while the deficit with the EU widened GBP 0.4bn to GBP 24.7bn. This resulted in the total trade in goods deficit narrowing by GBP 1.1bn to GBP 34.6bn.¹⁵⁵
- The Markit/CIPS Purchasing Managers' Index (PMI) for the manufacturing sector hit a 17-month low at 53.9 in April 2018, down from 54.9 in March. Manufacturing production rose, capping off 21 months of consecutive growth. Companies reported that output was scaled up in response to higher intakes of new business, stronger client confidence, improved weather, new product launches and increased capacity.¹⁵⁶
- In the construction sector, the PMI index was at 52.2 for April 2018, which was a vast improvement from a 20-month low of 47.0 in March. The reading for the month of April was the highest since November 2017, signaling a moderate expansion of overall construction output. Residential work was the best performer, with its rate of growth being the strongest since May 2017. Survey respondents attributed the growth to the resumption of building operation after the snow disruptions in March. However, some construction firms are still feeling the knock-on impact of the bad weather conditions which caused delays to sales completion. Nevertheless, latest survey data indicated that construction firms are relatively upbeat about the 12-month business outlook, with the degree of confidence the strongest recorded since May 2017.¹⁵⁷

Monetary

- In its meeting on March 21, 2018, the Monetary Policy Committee (MPC) of the Bank of England unanimously voted to maintain the Bank Rate at 0.5% to meet its 2% inflation target. The Committee also voted unanimously to maintain the stock of sterling non-financial investment-grade corporate bond purchases at GBP 10bn and the stock of UK government purchases at GBP 435bn. The purchasing activities would be financed by the issuance of central bank reserves. CPI inflation was 2.7% in February 2017, which is expected to be eased further but still maintaining above the 2% target. 158
- CPI 12-month rate was at 2.5% in March 2018, down from 2.7% in February 2018. The rate has fallen back to its lowest since March 2017 after reaching a recent high of 2.8% towards the end of 2017. The largest contribution to the change in the rate came from prices for clothing and footwear rising by less than they did a year ago, with the effect coming mainly from a range of items of women's clothing. Price movements for alcoholic drinks and tobacco also made a downward contribution to the change in the rate.¹⁵⁹

Politics

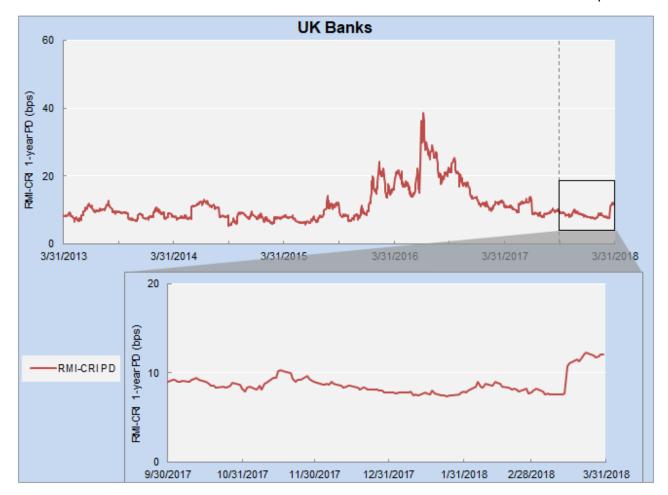
- The UK and EU have agreed on an implementation period for Brexit which was said to be a "decisive step" in the process. The agreed transitional period will last from Brexit day on March 29, 2019 to December 31, 2020. During which, the UK will be able to negotiate, sign and ratify its own trade deals. However, the UK will still be a party to existing EU trade deals with other countries. In terms of border relations, EU citizens arriving in the UK between these two dates will enjoy the same rights and guarantees as those who arrive before Brexit. The same will apply to UK expats as well.¹⁶⁰
- Underlining the importance of a satisfactory solution to post-Brexit customs arrangements, PM Theresa May has split her cabinet into two groups to consider options for a proposal. One group will look at a "customs partnership" whereby the UK would collect tariffs on behalf of the EU, while the other group will delve into "maximum facilitation" which will be a solution making use of technology to minimize the needs for customs checks. 161

Sovereign Credit Ratings

 Moody's long term rating on the UK remains at Aa2, two notches below the highest possible Aaa rating. Meanwhile, S&P's rating kept unchanged on the country's foreign and local currency long term debt at AAu, one notch below the coveted AAA. Fitch Ratings also kept the sovereigns long term debt rating at AA, one rank from its highest rating of AAA.

UK Banks

The RMI-CRI aggregate 1-year PD for banks in the United Kingdom increased slightly in Q1 2018. In terms of fundamentals, profitability judged from net income levels is concerning as a number of banks reported falling net income in Q4 2017, as we await the publication of results for Q1 2018. The FTSE 350 Banks Index showed a fall of 9.0% over the quarter.



Profitability

- According to the Monetary financial institutions quarterly income and expenditure tables released by the Bank of England, the net interest receivable were GBP 16.67bn at the end of Q4 2017 up from GBP 16.51bn at the end of Q3 2017. Interest receivables were GBP 35.26bn, while interest payable were GBP 18.60bn. While interest payable were on deposits increased by almost 13%, interest receivables from loans and advances increased by almost 6%.¹⁶²
- Banks reported a decrease in net fees and commissions to GBP 4.52bn across Q4 2017. Dividends paid by banks decreased substantially to GBP 1.03bn in Q3 2017 from GBP 4.61bn in the previous quarter.
- In terms of adjusted net income, Barclays reported a net loss of GBP 936.8mn in Q4 2017, down from a profit of GBP 648.6mn in Q3 2017. Lloyds reported a net profit of GBP 306.9mn in Q4 2017, down from GBP 1.47bn in Q3 2017. HSBC reported a decrease in net profit to USD 2.22bn in Q4 2017 from USD 3.53bn in Q3 2017. The Royal Bank of Scotland (RBS) also similarly reported a lower net income at GBP 318.9mn in Q4 2017 compared to GBP 698.2mn in Q3 2017.

Funding & Liquidity

- According to the Bank Liabilities Survey produced by the Bank of England, UK banks and building societies reported that total funding volumes increased in the three months to mid-March 2018. Retail deposit funding (which includes deposits from households and from private non-financial firms) decreased significantly but was offset by the huge increase in 'other' funding (which includes wholesale deposits and wholesale debt funding). Lenders expect a pick-up in retail deposit funding which would further increase the total funding volume for Q2 2018.¹⁶³
- Investor demand for wholesale debt decreased slightly in Q1 2018, driven mainly by a 9.4% fall in demand from non-UK investors. Lenders expect demand for wholesale debt from all investors to decrease further in Q2 2018.
- For wholesale debt funding, the proportion raised through commercial papers increased by 3.6% in Q1 2018 and is expected to rise by 16.4% in the next quarter. Funding from short-term repo/securities lending increased by 6.1% but is expected a slower increase of 3.9% in the next quarter.

Asset Quality

- The total write-offs of sterling denominated loans rose from GBP 816mn in Q3 2017 to GBP 928mn in Q4 2017, attributed in part to credit-card write-offs to individuals, which decreased from GBP 361mn to GBP 359mn. Write-offs to private non-financial corporations increased from GBP 159mn to GBP 218mn while write-offs to non-residents decreased sharply from GBP 51mn to GBP 1mn.¹⁶⁴
- Write-offs on loans denominated in foreign currency decreased from GBP 50mn in Q3 2017 to GBP 271mn in Q4 2017, driven by a 3.8 fold increase in the write-offs on loans to non-residents, which constituted the largest share of the total write-offs.

¹⁵²Apr 27th, 2018 Gross domestic product, preliminary estimate: January to March 2018, ONS, http://www.ons.gov.uk

¹⁵³Apr 17th, 2018 UK labour market: April 2018, ONS, http://www.ons.gov.uk

¹⁵⁴Apr 16th, 2018 Consumer spending decline continues as March rounds off worst quarter in over five years, Visa, http://visa.co.uk

¹⁵⁵ May 10th, 2018 UK trade: March 2018, ONS, http://www.ons.gov.uk

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Appendices

The appendices provide readers with a comprehensive overview of various outputs that are produced by RMI-CRI's operational PD system. While the PD system provides default forecasts at horizons ranging from one month to five years, here only RMI-CRI 1-year PDs are reported. In addition to the PD produced by the RMI-CRI system, important macroeconomic, corporate credit and sovereign risk indicators are provided. These summarize the credit situation at a glance, as well as provide detailed data for reference purposes.

Appendix A and Appendix B give RMI-CRI 1-year aggregate PD where the aggregations are by region, economy and sector. In these sections, the RMI-CRI 1-year aggregate PD is based on the median PD of active listed firms. These are given as month-end data, and are based on RMI's default forecast model calibrated on May 15, 2018, using data up to March 31, 2018. For a detailed description of RMI-CRI's default forecast model, the Technical Report is available on our website.

Appendix A provides 1-year aggregate PD by economy and sector. For each economy, the graph on the left shows the time series of 1-year aggregate PD for all exchange listed firms within the economy (thick blue, left axis), and the time series of the number of firms with PD (thin orange, right axis). The table on the right provides the median and standard deviation of PDs for firms within ten industry sectors at the end of Q4 2017 and Q1 2018. Note that the statistics are for firms that have a PD at both dates so that consistent comparisons can be made. The median and standard deviation of the difference of individual PD is also given. The industry sectors are based on the Level I Bloomberg Industry Classification.

Appendix B gives 1-year aggregate PD by the seven regions of Asia-Pacific developed, Asia-Pacific emerging, North America, Latin America, Eastern Europe, Western Europe and Africa & the Middle East. The 12 graphs in each region show the time series of RMI-CRI 1-year aggregate PD for all exchange listed firms in the region, all non-financial firms in the region, and firms in each of the ten industry sectors in the region. Each graph shows the PD in thick blue on the left axis and the number of firms with PD in thin orange on the right axis.

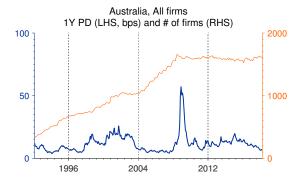
Appendix C provides common macroeconomic, corporate credit and sovereign risk indicators for each economy along with the RMI-CRI 1-year aggregate PD for financial and non-financial firms. The graphs on the left give historical context to the values, and the table on the right gives the data from the previous five quarters. For variables that are more frequent than quarterly, the last value in the quarter is used. But if a variable is available at a monthly frequency and the end of March data was not available at the time this report was compiled, the previous month's data is given with an asterisk.

Appendix D gives a more detailed description of the data in Appendix C

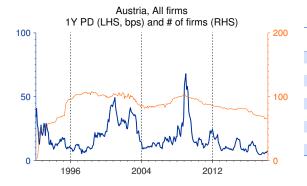
A PD by economies



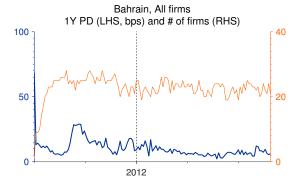
Argentina		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	14	9.3	18.2	11.6	17.3	0.7	2.5
Basic Materials	7	62.6	182.5	52.0	199.7	0.8	38.1
Communications	4	7.1	223.9	6.1	158.4	-2.7	65.6
Consumer Cyclical	6	37.3	135.2	39.5	44.4	-0.6	93.5
Consumer Non-cyclical	17	14.3	78.3	17.4	48.5	0.4	37.0
Diversified	2	20.5	14.3	19.3	4.3	-1.2	10.0
Energy	4	38.0	55.3	38.7	62.0	0.9	7.6
Industrial	7	12.7	18.7	15.3	12.9	3.9	13.0
Technology	1	3.2	-	4.0	-	0.8	-
Utilities	11	13.6	18.7	15.0	28.5	1.9	12.9



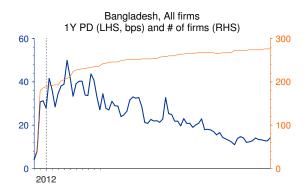
Australia		2017Q4		2018Q1		Q1	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	173	1.1	18.3	1.8	20.5	0.1	7.5
Basic Materials	553	7.2	57.3	7.5	70.5	0.0	31.6
Communications	105	13.8	38.2	14.2	42.3	1.0	28.5
Consumer Cyclical	88	2.8	30.6	4.7	31.5	0.1	30.7
Consumer Non-cyclical	254	5.0	95.8	5.4	69.4	0.2	35.8
Diversified	6	1.8	20.6	2.5	15.2	-0.1	5.7
Energy	162	14.2	125.1	14.3	157.5	0.0	80.9
Industrial	116	6.7	51.2	8.7	49.3	0.3	17.2
Technology	122	10.1	87.5	9.4	95.3	0.5	26.8
Utilities	12	5.2	36.8	7.4	41.6	0.1	22.2



Austria		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	21	5.1	15.5	4.1	15.5	-0.1	2.6
Basic Materials	4	1.7	5.1	2.6	3.6	0.3	1.8
Communications	1	1.8	-	2.3	-	0.5	-
Consumer Cyclical	10	10.2	64.6	9.6	64.4	1.5	5.2
Consumer Non-cyclical	5	20.5	17.4	20.2	10.3	-2.2	9.4
Energy	3	4.2	6.4	8.4	5.0	-0.2	3.0
Industrial	16	7.4	24.0	9.3	39.5	0.2	28.7
Technology	4	14.5	19.7	24.8	24.1	8.5	5.8
Utilities	2	1.1	1.0	2.1	0.2	1.0	0.7



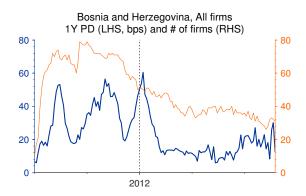
Bahrain		201	704	201	8∩1	Q1-	-04
Daniani	,,						
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	11	17.2	29.9	13.4	19.8	-0.1	13.6
Basic Materials	1	4.7	-	3.4	-	-1.3	_
Communications	1	4.5	-	4.4	-	-0.1	-
Consumer Cyclical	4	0.2	1.8	0.2	2.7	-0.0	0.9
Consumer Non-cyclical	1	49.1	-	38.3	-	-10.8	-
Industrial	1	63.0	-	71.5	-	8.5	_



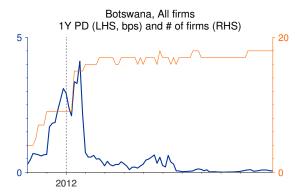
Bangladesh		2017Q4		2018Q1		Q1-	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	99	16.7	25.4	22.9	33.6	5.2	12.2
Basic Materials	17	9.6	28.5	5.9	20.7	-0.0	14.1
Communications	7	2.1	5.6	2.4	5.3	0.3	0.5
Consumer Cyclical	63	21.6	42.2	23.6	38.5	0.2	16.6
Consumer Non-cyclical	42	7.9	27.0	7.4	26.9	0.0	7.4
Diversified	1	38.2	-	32.5	-	-5.7	-
Energy	5	48.6	32.6	23.9	38.0	-8.0	16.2
Industrial	32	12.2	24.5	12.8	30.0	0.3	8.5
Technology	1	2.9	-	4.8	-	1.8	-
Utilities	7	2.5	17.9	5.3	17.7	0.6	4.5



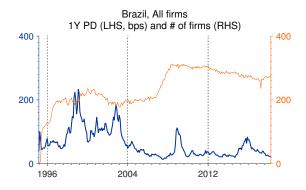
Belgium		2017Q4		2018Q1		Q1	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	0.5	11.6	0.3	10.9	-0.0	1.8
Basic Materials	8	2.7	14.0	2.9	16.4	-0.0	6.9
Communications	6	7.7	98.9	3.5	40.1	0.6	59.4
Consumer Cyclical	7	4.5	6.6	7.3	13.6	3.4	7.8
Consumer Non-cyclical	31	7.2	27.5	10.1	34.2	0.5	17.9
Diversified	6	0.2	1.5	0.2	1.3	-0.0	0.4
Energy	2	36.2	10.6	37.9	6.2	1.7	4.5
Industrial	24	8.5	50.9	9.9	33.2	0.2	20.8
Technology	5	2.5	5.6	3.9	8.0	0.2	6.1
Utilities	2	1.7	1.2	2.7	2.2	1.0	1.0



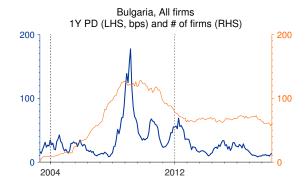
	201	2017Q4		3Q1	Q1-Q4	
#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
2	25.4	3.7	22.1	15.2	-3.3	11.6
5	11.2	19.8	10.8	113.3	-0.4	94.5
2	0.5	0.1	0.5	0.4	0.0	0.5
1	7.8	-	12.5	-	4.7	-
6	15.4	17.4	13.0	16.4	-0.8	2.0
4	12.5	20.9	13.0	23.0	-0.0	17.0
3	8.6	62.4	20.0	40.8	3.9	22.5
7	37.3	50.1	29.9	97.1	0.2	60.5
	2 5 2 1 6 4	# Median 2 25.4 5 11.2 2 0.5 1 7.8 6 15.4 4 12.5 3 8.6	# Median St.Dev. 2 25.4 3.7 5 11.2 19.8 2 0.5 0.1 1 7.8 - 6 15.4 17.4 4 12.5 20.9 3 8.6 62.4	# Median St.Dev. Median 2 25.4 3.7 22.1 5 11.2 19.8 10.8 2 0.5 0.1 0.5 1 7.8 - 12.5 6 15.4 17.4 13.0 4 12.5 20.9 13.0 3 8.6 62.4 20.0	# Median St.Dev. Median St.Dev. 2 25.4 3.7 22.1 15.2 5 11.2 19.8 10.8 113.3 2 0.5 0.1 0.5 0.4 1 7.8 - 12.5 - 6 6 15.4 17.4 13.0 16.4 4 12.5 20.9 13.0 23.0 3 8.6 62.4 20.0 40.8	# Median St.Dev. Median St.Dev. Median 2 25.4 3.7 22.1 15.2 -3.3 5 11.2 19.8 10.8 113.3 -0.4 2 0.5 0.1 0.5 0.4 0.0 1 7.8 - 12.5 - 4.7 6 15.4 17.4 13.0 16.4 -0.8 4 12.5 20.9 13.0 23.0 -0.0 3 8.6 62.4 20.0 40.8 3.9



Botswana		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	10	0.2	5.9	0.1	5.2	-0.0	0.7
Consumer Cyclical	4	0.0	0.1	0.0	0.1	0.0	0.0
Consumer Non-cyclical	2	2.8	4.0	0.1	0.1	-2.8	3.9
Energy	1	0.0	-	0.0	-	-0.0	_
Industrial	1	1.1	-	1.2	-	0.1	-



Brazil		2017Q4		201	2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	59	14.3	43.0	12.2	38.3	-2.3	18.7	
Basic Materials	21	47.2	278.0	31.1	271.5	-8.8	36.9	
Communications	8	115.2	229.2	81.8	213.1	0.1	76.7	
Consumer Cyclical	47	22.5	343.1	21.4	322.5	0.8	116.3	
Consumer Non-cyclical	48	31.1	184.9	37.7	227.0	1.3	67.8	
Diversified	9	17.6	103.2	18.3	118.3	-0.0	91.8	
Energy	12	30.9	258.0	29.5	112.2	-0.3	244.7	
Industrial	26	31.8	665.7	28.7	681.9	-0.8	207.1	
Technology	7	27.3	686.2	22.4	201.1	-0.4	487.5	
Utilities	29	24.7	62.7	18.1	54.4	-4.3	31.0	



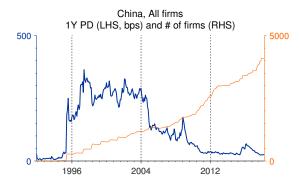
Bulgaria		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	14	7.3	6.7	12.2	9.4	2.4	4.0
Basic Materials	3	9.5	1.5	8.1	4.2	-2.8	5.4
Communications	2	40.1	49.7	45.0	60.2	5.0	10.5
Consumer Cyclical	2	19.6	19.5	11.6	4.3	-8.0	15.3
Consumer Non-cyclical	11	27.2	442.2	28.4	58.6	-0.1	430.1
Diversified	9	20.2	50.3	19.7	26.0	0.1	34.6
Energy	2	131.3	151.3	256.8	333.7	125.5	182.4
Industrial	15	7.4	17.1	7.3	17.4	0.7	3.9
Utilities	1	11.2	-	11.5	-	0.3	-



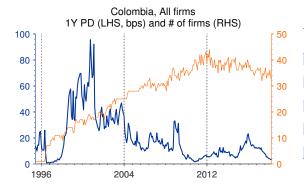
Canada		201	2017Q4		2018Q1		·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	142	0.2	24.4	0.4	26.5	0.0	12.4
Basic Materials	255	10.8	320.6	12.3	130.8	-0.2	243.0
Communications	45	13.6	371.3	15.3	378.7	0.0	200.0
Consumer Cyclical	61	0.9	63.8	1.3	60.6	0.1	38.5
Consumer Non-cyclical	124	4.1	177.7	7.3	678.1	0.2	545.1
Diversified	5	53.9	325.9	46.1	1045.4	0.5	739.9
Energy	129	17.8	262.3	21.3	300.8	0.5	193.8
Industrial	68	2.3	111.5	2.9	173.5	0.0	129.7
Technology	48	12.8	166.5	22.4	212.2	0.0	133.9
Utilities	16	0.3	34.6	0.2	54.2	0.0	22.4



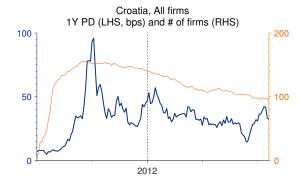
Chile		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	0.6	3.7	0.9	3.6	0.1	2.4
Basic Materials	16	3.5	31.4	3.8	69.7	0.0	43.4
Communications	3	16.2	7.0	16.1	10.8	0.4	4.7
Consumer Cyclical	12	11.8	41.2	13.0	29.0	0.1	25.8
Consumer Non-cyclical	31	4.1	25.3	4.9	39.4	0.0	20.5
Diversified	7	10.4	13.7	9.9	16.5	1.8	3.3
Energy	2	6.9	9.7	5.1	7.2	-1.8	2.5
Industrial	23	6.8	19.4	7.2	19.7	0.3	5.2
Technology	1	2.4	-	1.7	-	-0.6	-
Utilities	16	2.8	16.7	2.5	17.9	0.1	5.5



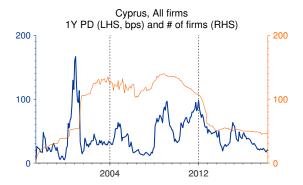
China		201	7Q4	201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	306	34.4	91.9	37.6	90.7	1.1	22.3
Basic Materials	440	28.8	100.5	30.3	94.7	0.3	30.8
Communications	231	16.3	76.1	18.8	105.9	0.2	40.4
Consumer Cyclical	683	26.5	98.5	27.2	129.3	0.1	46.1
Consumer Non-cyclical	665	10.6	150.3	10.3	98.8	-0.0	62.9
Diversified	27	35.5	71.7	38.0	69.0	0.2	11.8
Energy	118	34.3	79.3	36.7	81.5	1.5	30.4
Industrial	1224	28.5	146.3	28.9	124.1	0.4	41.0
Technology	276	18.2	77.6	17.9	100.6	-0.1	32.6
Utilities	96	43.7	77.3	46.1	82.7	0.4	20.5



Colombia		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	9	2.9	3.1	2.3	3.4	-0.2	0.9
Basic Materials	2	6.7	7.1	8.2	10.5	1.5	3.4
Communications	1	2.3	-	4.6	-	2.4	-
Consumer Cyclical	2	55.0	1.5	65.6	2.9	10.5	4.3
Consumer Non-cyclical	1	0.0	-	0.0	-	-0.0	-
Diversified	1	76.9	-	79.2	-	2.3	-
Energy	4	5.7	4.2	6.0	5.6	1.2	1.8
Industrial	8	5.6	8.3	4.8	9.0	-0.1	4.8
Utilities	3	2.8	4.2	1.0	1.4	-0.0	4.2



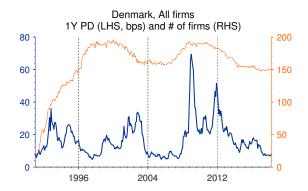
Croatia		201	2017Q4		2018Q1		·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	11	19.5	20.7	11.1	16.7	-4.5	9.3
Basic Materials	2	143.9	61.1	530.7	601.9	386.8	540.8
Communications	4	48.5	87.2	63.6	72.3	0.7	33.4
Consumer Cyclical	33	20.4	109.3	19.3	86.4	-0.3	40.4
Consumer Non-cyclical	24	84.4	963.5	58.7	456.7	-6.4	596.7
Diversified	1	56.2	-	61.1	-	4.9	_
Energy	2	1.4	1.5	0.6	0.8	-0.8	0.6
Industrial	17	70.4	458.4	51.8	296.6	-5.6	181.9



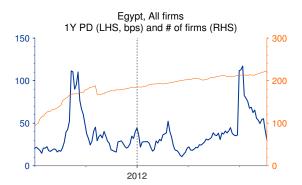
Cyprus		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	18	19.0	63.4	19.6	37.7	-0.1	32.0
Basic Materials	4	26.5	21.5	24.2	23.3	-5.8	4.9
Consumer Cyclical	9	19.4	23.6	31.4	40.8	5.0	21.2
Consumer Non-cyclical	7	25.8	17.8	18.0	17.7	0.3	20.6
Energy	3	206.7	353.2	26.0	58.5	-81.7	369.9
Industrial	3	3.4	8.0	3.4	15.6	0.1	7.6
Technology	2	15.2	8.9	43.3	51.0	28.1	42.1



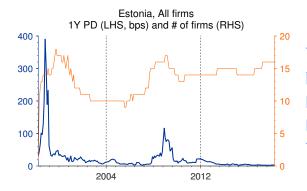
Czech Republic		201	7Q4	2018Q1		Q1·	-Q4
0=000	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	3	3.6	19.7	3.5	9.7	-1.5	10.0
Communications	1	1.5	-	1.0	-	-0.5	-
Consumer Cyclical	2	19.1	19.5	23.7	18.8	4.6	0.7
Consumer Non-cyclical	2	2.5	2.2	3.2	1.7	0.7	0.5
Diversified	1	14.3	-	11.0	-	-3.3	-
Energy	2	10.1	9.4	13.0	13.3	2.9	3.9
Industrial	1	7.4	-	8.3	-	0.9	-
Utilities	1	5.9	-	4.2	-	-1.7	-



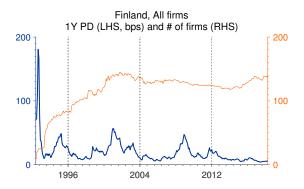
Denmark		2017Q4		2018	BQ1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	41	4.4	13.3	6.6	15.3	0.7	5.9
Basic Materials	1	0.1	-	0.1	-	0.0	-
Communications	7	6.7	14.7	8.3	17.7	0.3	10.0
Consumer Cyclical	16	19.2	46.1	21.9	46.0	-0.4	17.0
Consumer Non-cyclical	36	5.4	33.6	6.9	156.9	0.1	136.2
Diversified	1	195.7	-	14.4	-	-181.3	-
Energy	2	16.8	14.6	16.9	17.7	0.1	3.1
Industrial	33	11.0	136.6	12.1	55.7	0.1	132.3
Technology	10	9.3	64.0	8.8	44.8	-1.3	23.7
Utilities	1	0.7	-	1.7	-	1.0	_



Egypt		201	2017Q4		8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	70	67.3	54.3	21.8	29.1	-35.8	31.5
Basic Materials	24	43.9	47.8	31.6	58.4	-6.4	25.3
Communications	7	72.6	63.7	94.9	87.1	-19.3	94.2
Consumer Cyclical	24	46.2	45.9	33.0	48.4	-9.8	24.1
Consumer Non-cyclical	50	54.6	54.3	34.3	59.3	-9.3	38.5
Diversified	2	101.4	133.8	61.6	82.8	-39.8	51.0
Energy	1	133.3	-	93.5	-	-39.8	-
Industrial	38	58.0	66.0	40.2	73.7	-8.0	37.6
Technology	2	21.6	26.1	28.6	36.7	7.0	10.6
Utilities	1	57.0	-	90.0	-	33.0	-



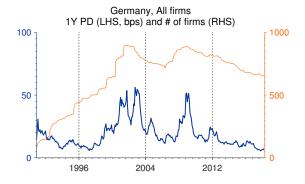
Estonia		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	6.9	4.7	5.3	1.7	-2.7	4.4
Communications	1	1.0	-	1.2	_	0.2	-
Consumer Cyclical	5	1.0	23.0	0.5	23.7	-0.0	3.4
Consumer Non-cyclical	1	20.9	-	15.8	-	-5.1	-
Industrial	4	1.5	6.3	2.4	3.9	-0.4	3.0
Utilities	1	2.0	-	2.0	_	0.0	-



Finland		2017Q4		201	2018Q1		·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	20	2.6	3.8	2.2	15.3	0.0	16.0
Basic Materials	6	5.6	9.9	5.6	16.2	-0.3	10.4
Communications	15	4.0	33.6	3.3	21.3	-0.3	14.0
Consumer Cyclical	14	6.3	15.1	11.1	17.6	0.0	7.0
Consumer Non-cyclical	27	5.6	54.4	7.1	147.1	0.4	93.8
Energy	2	57.6	80.1	53.2	74.3	-4.5	5.8
Industrial	34	5.7	124.4	6.7	38.8	0.3	104.3
Technology	17	9.5	20.4	10.5	18.9	0.0	15.1
Utilities	1	1.3	_	1.6	-	0.3	-



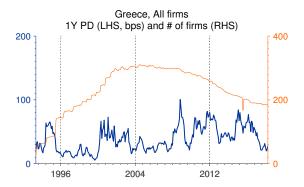
France		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	91	1.4	10.3	1.4	10.0	0.2	2.8
Basic Materials	20	11.8	76.4	13.3	80.2	0.1	11.0
Communications	57	14.2	72.6	12.8	43.9	0.7	33.9
Consumer Cyclical	85	9.1	27.8	9.3	32.2	1.3	19.9
Consumer Non-cyclical	141	9.6	28.3	9.9	29.1	0.5	10.0
Diversified	6	3.2	74.9	3.9	62.9	0.6	18.2
Energy	15	11.3	50.3	11.0	22.4	0.2	50.1
Industrial	110	7.1	47.1	8.3	44.0	0.4	21.2
Technology	73	7.2	36.3	8.4	47.8	0.0	22.2
Utilities	11	8.7	9.3	5.4	26.6	0.3	22.0



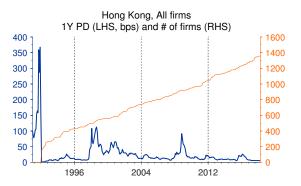
Germany		201	2017Q4		2018Q1		·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	164	3.6	30.2	3.9	31.5	0.2	26.7
Basic Materials	29	6.4	50.0	7.0	60.4	0.5	37.8
Communications	64	11.5	108.9	12.5	62.1	1.2	78.2
Consumer Cyclical	77	5.7	36.0	8.2	132.8	0.9	121.8
Consumer Non-cyclical	94	7.4	52.1	8.7	49.2	0.4	27.8
Diversified	5	34.0	24.2	32.8	56.2	0.1	36.1
Energy	17	24.6	95.4	25.9	139.7	0.7	50.2
Industrial	117	7.3	155.3	9.2	172.8	1.7	69.2
Technology	67	8.0	244.9	9.3	193.6	0.9	53.4
Utilities	11	8.8	72.3	7.8	35.1	-0.1	38.3



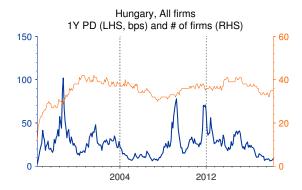
Ghana		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	7	11.5	19.1	7.4	6.5	-3.3	18.1
Basic Materials	1	4.3	-	2.9	-	-1.4	-
Consumer Cyclical	1	91.2	-	55.2	-	-36.0	-
Consumer Non-cyclical	6	2.7	229.4	1.9	294.6	-0.3	86.7
Energy	2	7.8	7.1	5.4	7.0	-2.3	0.1



Greece		201	2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	21	10.6	31.0	6.7	37.7	0.4	10.0	
Basic Materials	10	30.5	76.5	18.9	153.1	-0.8	83.5	
Communications	9	56.8	61.4	76.7	131.9	5.9	105.6	
Consumer Cyclical	37	31.2	68.3	33.0	93.5	0.3	64.6	
Consumer Non-cyclical	36	21.7	37.2	21.5	42.5	0.4	17.6	
Diversified	1	7.8	-	11.7	-	4.0	-	
Energy	5	5.6	16.7	7.5	20.0	1.6	4.0	
Industrial	49	61.2	288.8	64.7	208.8	2.1	200.3	
Technology	11	11.6	22.2	16.6	23.2	0.9	10.3	
Utilities	5	1.3	33.2	2.3	26.7	0.1	6.5	



Hong Kong		201	7Q4	201	8Q1	Q1-	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	315	6.3	24.4	6.8	19.5	0.3	17.5
Basic Materials	55	16.4	59.4	14.5	77.3	0.8	25.8
Communications	83	5.0	38.0	5.7	39.9	0.2	22.4
Consumer Cyclical	297	4.4	29.0	5.1	25.2	0.2	16.7
Consumer Non-cyclical	187	4.5	39.7	5.2	33.4	0.1	25.9
Diversified	33	6.3	25.1	4.8	31.3	0.1	12.2
Energy	48	11.0	257.2	19.7	192.5	0.6	69.8
Industrial	252	7.1	78.2	7.4	66.9	0.3	44.3
Technology	59	7.2	67.3	10.1	44.0	0.3	27.5
Utilities	20	4.5	9.2	5.6	14.0	1.6	6.3



Hungary		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	5.1	5.7	7.0	7.0	1.8	3.4
Communications	3	14.6	9.6	8.8	16.8	-0.9	9.1
Consumer Cyclical	2	31.1	35.0	45.1	51.0	14.0	15.9
Consumer Non-cyclical	6	23.9	78.6	20.3	125.1	1.1	47.9
Diversified	1	14.3	-	40.0	-	25.8	-
Energy	3	6.7	11.9	8.7	16.7	3.4	5.1
Industrial	4	11.4	10.7	19.0	8.1	7.2	8.4
Technology	1	77.0	-	64.7	-	-12.3	-
Utilities	3	1.8	3.1	2.1	4.7	0.3	1.6



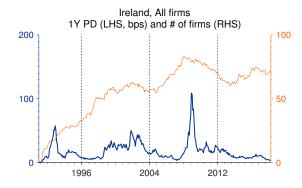
Iceland		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	6	3.9	1.4	2.4	1.6	-0.8	0.6
Communications	2	5.3	1.8	13.1	13.5	7.9	15.3
Consumer Cyclical	2	30.3	31.3	14.6	14.3	-15.8	17.0
Consumer Non-cyclical	2	11.4	5.6	7.3	2.9	-4.1	2.7
Energy	2	23.7	6.8	11.7	5.4	-12.0	12.2
Industrial	2	6.0	2.3	4.8	4.7	-1.2	2.4
Technology	1	11.1	-	13.8	-	2.7	-



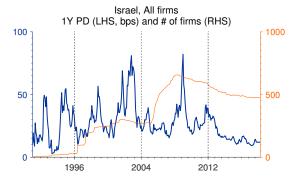
India		201	2017Q4		8Q1	Q1-	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	281	0.5	8.0	0.5	12.9	0.1	5.3
Basic Materials	273	30.8	326.8	39.0	356.4	3.0	139.9
Communications	89	24.5	430.5	29.7	509.1	0.6	194.7
Consumer Cyclical	419	36.1	628.9	36.6	545.5	1.1	168.6
Consumer Non-cyclical	350	19.1	232.2	21.5	252.2	0.2	84.4
Diversified	21	76.7	328.4	95.5	390.8	11.4	134.8
Energy	44	38.9	391.2	31.6	341.4	0.6	64.2
Industrial	483	32.4	303.3	37.2	380.1	1.4	136.8
Technology	104	18.0	256.0	18.7	260.7	0.1	63.3
Utilities	32	144.3	491.9	144.9	643.4	13.2	187.7



Indonesia		2017Q4		2018	8Q1	Q1-Q4		
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	



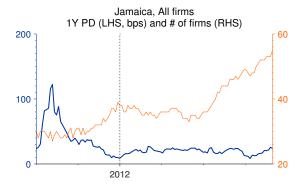
Ireland		201	2017Q4		8Q1	Q1-	·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	8	0.3	9.2	0.4	5.9	0.0	3.4
Basic Materials	11	19.0	21.4	15.4	40.1	0.1	28.0
Communications	3	27.7	70.2	26.8	97.4	-0.9	27.5
Consumer Cyclical	7	2.2	1.7	1.9	3.1	0.0	2.5
Consumer Non-cyclical	27	5.1	184.6	4.3	146.8	0.0	57.5
Energy	7	75.4	197.3	115.2	105.7	14.9	144.8
Industrial	6	3.1	4.1	2.8	1.6	-0.1	3.2
Technology	2	1.0	1.4	1.2	1.7	0.2	0.3



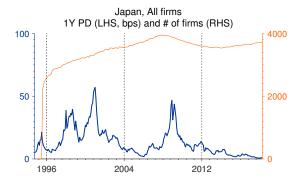
Israel		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	121	7.7	26.1	7.0	24.3	0.0	4.7
Basic Materials	14	10.2	36.6	10.1	42.7	-0.3	12.3
Communications	37	11.0	187.6	15.3	321.3	-0.6	141.1
Consumer Cyclical	49	26.3	72.3	25.3	540.3	-0.0	532.8
Consumer Non-cyclical	95	16.2	94.4	17.2	65.1	0.5	43.8
Diversified	9	15.7	19.1	10.6	19.6	-2.2	6.6
Energy	31	28.1	45.8	23.3	38.1	-0.6	18.6
Industrial	81	14.4	145.1	12.9	82.7	0.0	65.0
Technology	38	6.3	156.3	8.2	148.3	0.1	38.4



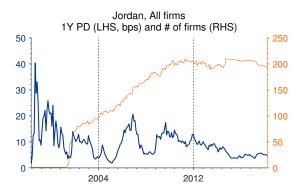
Italy	Italy		2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	60	7.9	33.9	7.7	18.4	0.1	28.9
Basic Materials	4	7.9	6.4	7.3	6.4	-0.3	0.5
Communications	39	22.6	28.1	23.4	32.5	1.3	20.3
Consumer Cyclical	52	12.1	32.0	11.8	26.5	0.2	16.0
Consumer Non-cyclical	39	6.9	89.7	7.7	28.3	0.1	87.2
Diversified	2	26.2	9.0	33.7	19.3	7.5	10.3
Energy	18	16.5	46.3	22.9	54.7	2.3	20.6
Industrial	47	11.4	75.7	8.6	56.9	0.5	37.7
Technology	16	15.2	13.4	9.7	18.7	-0.2	12.2
Utilities	13	2.7	6.5	4.1	16.1	0.9	16.8



Jamaica	Jamaica		2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	17	15.0	7.9	17.2	24.6	0.9	23.6
Basic Materials	2	18.6	9.1	35.1	5.6	16.5	3.5
Communications	2	136.8	72.4	112.6	60.3	-24.2	12.1
Consumer Cyclical	7	12.3	21.3	15.7	26.0	6.9	17.9
Consumer Non-cyclical	15	41.9	44.1	35.4	40.5	-2.1	12.2
Diversified	3	37.6	24.1	74.5	201.2	17.6	196.5
Industrial	5	20.4	15.5	38.3	30.7	18.9	18.2
Technology	1	14.4	-	23.8	_	9.4	-



Japan		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	359	2.0	14.3	2.7	17.0	0.5	5.4
Basic Materials	233	1.0	4.0	1.9	5.6	0.6	2.2
Communications	291	0.7	6.2	0.9	7.4	0.1	3.4
Consumer Cyclical	861	0.7	38.7	1.2	42.7	0.3	5.4
Consumer Non-cyclical	632	0.3	3.5	0.4	4.3	0.1	1.9
Diversified	2	20.0	26.8	19.4	26.0	-0.6	0.7
Energy	18	2.5	5.4	3.3	9.6	0.3	7.6
Industrial	964	0.8	4.3	1.4	5.7	0.4	2.8
Technology	320	0.6	6.8	0.8	7.3	0.1	2.1
Utilities	21	1.4	5.1	2.0	7.6	0.2	2.9



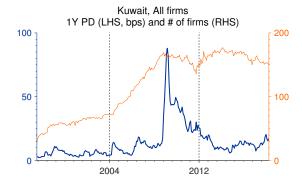
Jordan		201	7Q4	201	8Q1	Q1	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	102	2.1	6.8	1.8	6.5	-0.1	2.1
Basic Materials	17	19.3	44.3	12.9	43.9	-0.1	10.5
Communications	2	83.5	81.9	84.5	111.9	1.1	29.9
Consumer Cyclical	16	11.9	72.7	10.6	67.8	-0.8	9.2
Consumer Non-cyclical	27	10.3	37.5	8.5	42.6	-0.1	13.5
Diversified	2	240.9	337.8	260.8	366.4	19.9	28.6
Energy	2	20.2	27.9	17.1	23.6	-3.1	4.3
Industrial	21	18.7	54.7	12.9	64.2	0.2	20.3
Technology	1	212.6	-	57.5	-	-155.1	-
Utilities	2	46.2	29.4	45.6	33.5	-0.5	4.0



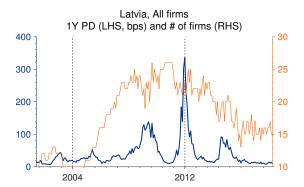
Kazakhstan		201	7Q4	201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	56.5	47.2	37.0	14.8	-24.3	35.6
Basic Materials	1	24.2	-	29.1	-	4.9	-
Communications	2	8.4	1.1	7.8	3.8	-0.6	2.8
Consumer Non-cyclical	1	3.2	-	2.2	-	-1.0	-
Energy	2	1.6	1.1	1.3	0.2	-0.4	0.9
Utilities	1	1.9	-	1.2	-	-0.7	-



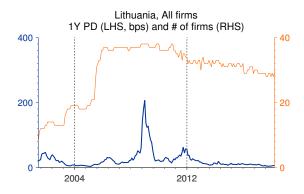
Kenya		201	7Q4	2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	20	9.1	18.8	7.6	21.8	-1.1	6.4
Basic Materials	3	13.4	90.8	15.3	161.0	2.0	70.1
Communications	5	27.7	19.5	33.2	33.0	5.2	16.9
Consumer Cyclical	7	94.7	46.3	122.8	69.5	20.5	50.9
Consumer Non-cyclical	11	14.6	287.9	9.4	343.7	-0.6	57.7
Diversified	4	41.4	70.1	52.5	56.9	-0.7	25.4
Energy	2	26.7	14.3	16.9	13.6	-9.8	0.7
Industrial	5	87.0	94.3	59.3	94.3	3.9	22.4
Utilities	1	205.7	-	287.9	-	82.2	-



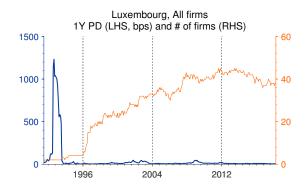
Kuwait		201	7Q4	2018	BQ1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	87	15.4	24.3	13.5	20.6	-1.0	13.1
Basic Materials	3	4.9	8.3	2.4	9.6	-0.3	1.8
Communications	6	37.2	64.8	33.8	116.2	-3.4	58.7
Consumer Cyclical	13	50.8	78.8	81.8	76.9	0.0	40.2
Consumer Non-cyclical	9	21.3	50.8	17.5	62.1	-0.9	12.0
Diversified	4	28.0	15.6	30.4	27.8	9.7	19.6
Energy	6	98.3	83.7	105.1	63.5	-3.6	28.7
Industrial	19	40.4	66.7	45.5	73.6	2.7	16.5
Technology	1	27.7	-	31.4	-	3.7	-



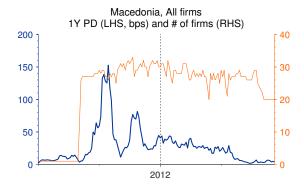
Latvia		201	2017Q4		2018Q1		·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Communications	2	3.1	3.6	2.8	0.7	-0.3	2.8
Consumer Cyclical	2	61.8	33.0	67.6	34.5	5.8	1.4
Consumer Non-cyclical	5	8.8	6.2	10.0	5.8	-0.5	2.5
Industrial	3	9.5	46.0	9.5	49.7	1.3	3.8
Utilities	1	13.6	-	10.3	-	-3.2	-



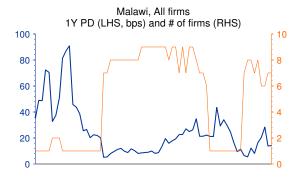
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Lithuania		201	2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	6	0.6	5.9	0.6	2.8	0.0	3.2	
Basic Materials	1	1.5	-	2.9	_	1.4	_	
Communications	1	0.0	-	0.0	-	-0.0	-	
Consumer Cyclical	5	50.5	38.5	59.6	48.2	9.1	10.0	
Consumer Non-cyclical	7	9.9	23.3	9.0	24.5	2.6	5.6	
Energy	1	0.9	-	0.9	-	0.0	_	
Industrial	2	35.2	22.3	32.8	15.1	-2.4	7.2	
Utilities	5	1.2	15.0	1.1	21.6	-0.1	7.0	



Luxembourg		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	11	1.1	28.8	1.1	71.4	0.0	44.4
Basic Materials	5	11.0	7.7	8.7	7.9	-0.4	1.7
Communications	4	37.7	466.3	27.7	208.4	-15.8	258.6
Consumer Cyclical	2	14.5	17.3	15.9	18.7	1.3	1.5
Consumer Non-cyclical	4	1.4	10.5	5.8	11.0	2.6	2.8
Industrial	7	5.9	1125.6	5.2	880.3	-0.5	245.4
Technology	3	0.8	2.8	0.7	2.4	-0.0	0.4
Utilities	1	84.3	-	63.1	-	-21.2	-



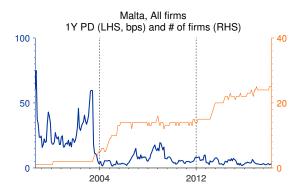
	2017Q4		2018	3Q1	Q1-Q4	
#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
6	8.7	12.8	8.4	12.6	-1.6	4.0
2	14.7	10.0	18.0	19.9	3.3	9.8
1	1.1	-	1.0	-	-0.1	-
2	4.7	6.1	2.7	3.7	-2.0	2.4
5	2.2	11.5	2.0	5.1	-0.8	6.3
1	29.1	_	12.7	_	-16.3	-
3	10.3	21.2	4.5	21.0	-2.6	2.7
	6 2 1 2 5 1	# Median 6 8.7 2 14.7 1 1.1 2 4.7 5 2.2 1 29.1	# Median St.Dev. 6 8.7 12.8 2 14.7 10.0 1 1.1 — 2 4.7 6.1 5 2.2 11.5 1 29.1 —	# Median St.Dev. Median 6 8.7 12.8 8.4 2 14.7 10.0 18.0 1 1.1 - 1.0 2 4.7 6.1 2.7 5 2.2 11.5 2.0 1 29.1 - 12.7	# Median St.Dev. Median St.Dev. 6 8.7 12.8 8.4 12.6 2 14.7 10.0 18.0 19.9 1 1.1 - 1.0 2 4.7 6.1 2.7 3.7 5 2.2 11.5 2.0 5.1 1 29.1 - 12.7 -	# Median St.Dev. Median St.Dev. Median 6 8.7 12.8 8.4 12.6 -1.6 2 14.7 10.0 18.0 19.9 3.3 1 1.1.1 - 1.00.1 2 4.7 6.1 2.7 3.7 -2.0 5 2.2 11.5 2.0 5.1 -0.8 1 29.1 - 12.7 - 16.3



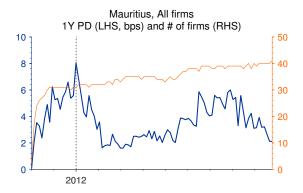
Malawi		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	19.7	17.5	28.3	88.8	0.9	94.8
Communications	1	21.5	-	8.0	-	-13.5	-
Consumer Non-cyclical	1	19.4	-	14.3	-	-5.1	-



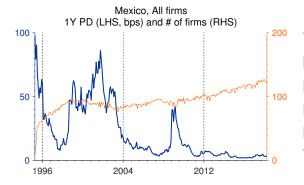
Malaysia		201	7Q4	201	8Q1	Q1-Q4		
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	133	2.2	8.0	3.3	28.7	0.3	22.8	
Basic Materials	65	18.5	444.2	24.8	666.0	2.6	227.2	
Communications	37	10.2	44.0	18.9	67.3	1.4	35.6	
Consumer Cyclical	119	11.5	52.8	14.8	108.9	1.0	86.8	
Consumer Non-cyclical	146	3.2	93.0	4.4	110.1	0.2	41.1	
Diversified	23	11.7	122.2	21.4	538.4	1.5	424.0	
Energy	30	44.6	309.4	71.0	241.4	4.6	166.4	
Industrial	280	14.3	56.6	19.6	139.8	2.2	107.6	
Technology	63	16.1	106.3	18.3	147.9	1.4	51.4	
Utilities	6	10.1	13.3	15.3	18.3	5.2	5.7	



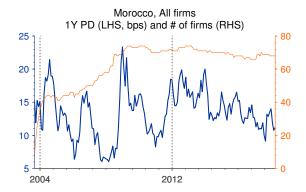
	2017Q4		2018Q1		Q1-Q4	
#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
12	2.9	3.0	2.6	4.6	0.1	2.4
4	12.9	12.9	13.7	11.0	2.8	9.3
4	3.5	3.9	3.6	2.4	-0.2	1.7
2	0.2	0.2	0.2	0.3	0.1	0.1
1	14.8	-	19.0	-	4.2	-
1	0.0	-	0.0	-	0.0	-
	12 4 4	# Median 12 2.9 4 12.9 4 3.5 2 0.2 1 14.8	# Median St.Dev. 12 2.9 3.0 4 12.9 12.9 4 3.5 3.9 2 0.2 0.2 1 14.8 —	# Median St.Dev. Median 12 2.9 3.0 2.6 4 12.9 12.9 13.7 4 3.5 3.9 3.6 2 0.2 0.2 0.2 1 14.8 - 19.0	# Median St.Dev. Median St.Dev. 12 2.9 3.0 2.6 4.6 4 12.9 12.9 13.7 11.0 4 3.5 3.9 3.6 2.4 2 0.2 0.2 0.3 1 14.8 - 19.0 -	# Median St.Dev. Median St.Dev. Median 12 2.9 3.0 2.6 4.6 0.1 4 12.9 12.9 13.7 11.0 2.8 4 3.5 3.9 3.6 2.4 -0.2 2 0.2 0.2 0.3 0.1 1 14.8 - 19.0 - 4.2



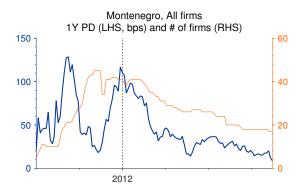
Mauritius		2017Q4		2018	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	17	2.5	9.8	1.5	9.7	-0.0	7.8
Basic Materials	2	16.2	20.4	10.7	12.1	-5.6	8.3
Consumer Cyclical	8	3.0	39.7	2.3	9.2	-0.1	31.2
Consumer Non-cyclical	6	4.3	15.3	4.4	17.3	0.6	2.4
Diversified	3	5.4	4.7	6.1	3.8	-0.0	2.5
Energy	1	0.0	_	0.0	-	-0.0	-
Industrial	3	4.6	19.6	2.3	18.1	-2.3	2.0



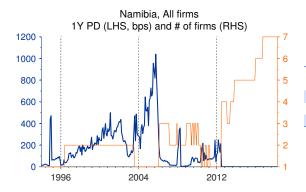
Mexico		2017Q4		201	2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	34	1.9	5.5	1.2	4.7	-0.0	2.2
Basic Materials	11	9.9	18.8	9.0	18.0	-0.6	3.0
Communications	8	25.6	27.9	23.3	33.9	0.1	16.3
Consumer Cyclical	26	5.7	44.2	3.9	57.8	-0.1	18.2
Consumer Non-cyclical	16	1.7	4.8	3.1	8.6	0.0	9.0
Diversified	5	2.0	42.6	1.6	54.1	-0.2	12.5
Industrial	22	8.8	225.4	4.8	372.0	0.0	161.4
Utilities	2	16.3	22.2	3.4	3.8	-13.0	18.4



Morocco		201	7Q4	201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	19	10.5	10.7	10.3	9.8	-1.2	2.3
Basic Materials	9	20.8	32.1	11.5	33.5	-0.7	4.8
Communications	1	0.1	-	0.0	-	-0.1	-
Consumer Cyclical	7	34.9	31.2	28.9	32.9	-1.4	2.8
Consumer Non-cyclical	11	8.4	10.5	8.0	9.9	-1.0	2.0
Diversified	1	7.1	-	5.2	-	-1.9	-
Energy	1	1.6	-	0.8	-	-0.8	-
Industrial	11	42.7	102.9	55.1	113.3	-1.4	16.4
Technology	5	19.7	41.4	15.5	71.4	-2.0	30.0
Utilities	3	10.7	37.3	11.3	40.7	0.6	3.4



Montenegro		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Communications	1	18.1	-	8.2	-	-9.9	_
Consumer Cyclical	4	19.4	17.5	10.0	8.7	-9.4	8.8
Consumer Non-cyclical	8	19.3	42.4	9.3	24.0	-7.5	18.7
Energy	1	21.8	-	7.5	-	-14.3	-
Industrial	1	36.7	-	21.9	-	-14.8	-
Utilities	2	13.6	2.1	9.5	5.0	-4.1	7.1



Namibia		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	3	0.0	0.4	0.0	0.5	0.0	0.1
Consumer Non-cyclical	3	0.0	4.3	0.0	4.7	0.0	0.5
Diversified	1	15.6	-	19.2	-	3.6	-



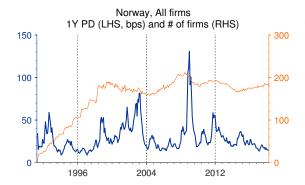
Netherlands		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	26	2.4	13.2	4.1	13.1	0.1	6.1
Basic Materials	6	1.2	15.9	1.2	18.9	0.6	3.1
Communications	9	15.8	77.9	14.3	66.1	1.2	18.7
Consumer Cyclical	13	11.6	43.3	11.2	42.9	8.0	22.3
Consumer Non-cyclical	31	3.2	44.7	3.4	39.7	0.1	8.2
Energy	8	8.0	20.4	11.1	26.9	1.0	11.3
Industrial	22	8.2	113.1	9.0	155.1	1.1	49.1
Technology	15	4.2	65.1	4.0	81.9	0.0	17.9



New Zealand		2017Q4		2018	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	22	0.2	33.3	0.6	26.3	0.0	7.5
Basic Materials	1	1.6	-	1.4	-	-0.2	-
Communications	9	2.9	39.5	3.3	45.6	0.1	10.1
Consumer Cyclical	17	0.8	7.8	0.8	7.7	0.0	4.4
Consumer Non-cyclical	41	0.8	8.9	1.0	13.0	0.1	6.6
Diversified	1	7.4	-	15.6	-	8.2	-
Energy	7	0.3	5.4	0.4	8.0	0.1	3.2
Industrial	14	3.3	55.2	4.5	40.9	0.1	42.8
Technology	13	2.7	10.4	4.6	26.0	0.9	20.4
Utilities	6	0.1	0.1	0.1	0.1	0.0	0.0



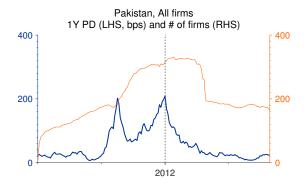
Nigeria		2017Q4		2018	8Q1	Q1-Q4	
-	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	51	30.5	90.2	57.6	85.5	4.4	47.1
Basic Materials	10	18.5	93.1	18.1	249.9	-2.0	195.0
Communications	5	54.0	38.4	41.3	41.2	-0.1	18.0
Consumer Cyclical	14	70.8	203.6	56.3	194.9	-4.4	17.9
Consumer Non-cyclical	33	21.4	125.2	25.5	184.7	-0.0	100.4
Energy	9	94.6	166.9	48.0	161.1	-27.9	31.4
Industrial	20	28.6	253.3	27.9	201.5	-5.5	56.2
Technology	2	90.3	51.9	96.1	68.0	5.8	16.1



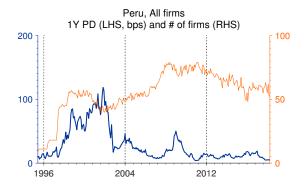
Norway		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	47	7.1	16.2	7.9	11.2	-0.5	8.0
Basic Materials	5	4.3	3.6	6.9	5.7	2.7	3.4
Communications	8	21.7	20.1	26.5	18.4	2.9	12.5
Consumer Cyclical	7	8.8	72.1	14.6	53.9	-0.1	19.7
Consumer Non-cyclical	27	14.1	49.0	13.1	30.1	1.2	28.7
Diversified	1	7.6	-	13.8	-	6.2	-
Energy	27	45.8	101.0	36.1	91.9	-6.6	47.6
Industrial	47	31.3	187.9	33.5	174.2	-2.2	23.9
Technology	12	29.6	53.3	29.6	55.7	-0.4	23.7
Utilities	1	13.4	-	9.0	-	-4.4	-



Oman		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	27	11.3	11.5	9.4	8.7	-2.8	4.1
Basic Materials	6	7.1	15.3	2.2	13.8	-0.0	7.2
Communications	2	9.6	7.7	39.4	49.3	29.9	41.6
Consumer Non-cyclical	13	4.1	38.5	4.0	13.2	0.0	26.5
Diversified	1	0.0	-	0.0	-	-0.0	-
Energy	5	19.2	147.4	17.7	108.9	-1.5	38.6
Industrial	13	24.9	27.3	5.9	33.7	0.1	20.0
Utilities	9	7.0	14.5	11.4	20.4	0.4	10.9



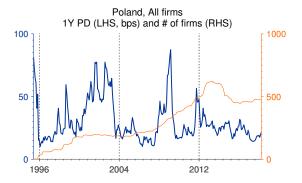
Pakistan		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	62.3	69.1	42.0	51.8	-10.0	27.8
Basic Materials	20	30.5	249.4	20.7	165.4	-6.1	85.0
Communications	5	122.1	238.3	82.7	275.1	0.8	65.7
Consumer Cyclical	27	41.5	212.5	34.4	154.6	-0.5	63.3
Consumer Non-cyclical	28	7.2	43.6	5.4	31.5	-0.1	21.9
Energy	10	40.5	42.6	33.4	45.9	0.0	20.8
Industrial	25	13.8	18.9	12.0	16.2	-0.3	6.1
Technology	2	7.8	10.2	8.6	11.7	0.8	1.6
Utilities	8	29.6	61.1	28.9	60.9	0.2	4.6



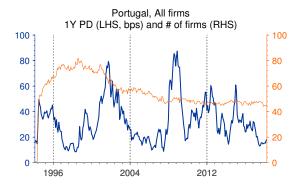
Peru		201	7Q4	2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	10	2.2	2.6	2.3	2.1	-0.2	1.1
Basic Materials	17	5.1	6.9	5.0	15.4	-0.3	14.6
Communications	1	12.3	-	18.4	-	6.1	-
Consumer Cyclical	2	9.8	13.1	8.3	11.0	-1.5	2.1
Consumer Non-cyclical	8	8.1	57.6	7.0	67.0	-1.1	20.0
Diversified	2	67.0	50.1	60.6	50.9	-6.4	0.8
Energy	2	40.5	54.2	36.9	50.8	-3.6	3.4
Industrial	3	7.5	6.4	6.8	8.1	-0.6	1.8
Utilities	4	2.7	3.8	2.5	3.4	-1.1	1.0



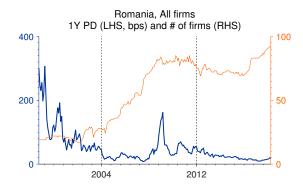
Philippines		201	7Q4	2018	8Q1	Q1-	·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	80	3.1	5.2	4.5	6.4	1.3	2.9
Basic Materials	26	7.7	33.9	7.3	37.5	-0.0	8.0
Communications	17	6.4	17.0	5.0	21.0	0.0	4.6
Consumer Cyclical	31	8.0	33.2	9.0	39.8	0.3	11.8
Consumer Non-cyclical	32	11.5	31.4	13.1	46.5	1.3	23.7
Diversified	16	2.9	48.8	3.7	52.4	0.5	14.4
Energy	13	5.4	20.1	5.6	20.0	0.2	15.5
Industrial	16	9.5	42.5	13.0	52.9	2.7	11.3
Technology	3	37.5	9.3	53.5	16.2	19.5	10.5
Utilities	14	9.6	14.3	11.7	16.1	2.1	6.1



Poland		201	7Q4	7Q4 2018		Q1	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	94	13.9	35.4	12.3	35.6	0.4	15.8
Basic Materials	26	11.3	50.2	14.5	65.1	1.2	16.5
Communications	39	17.6	423.6	17.5	458.0	1.2	97.0
Consumer Cyclical	60	19.4	461.7	20.9	315.0	8.0	359.3
Consumer Non-cyclical	63	21.3	231.8	24.5	160.2	2.5	88.2
Energy	15	46.5	214.8	32.7	285.7	8.2	76.3
Industrial	116	27.8	294.0	32.5	393.2	2.2	156.8
Technology	44	17.7	137.5	17.0	284.6	1.3	167.8
Utilities	9	24.6	34.4	40.9	32.3	22.7	14.8



Portugal		201	7Q4	201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	12.8	9.9	14.8	12.3	4.0	3.7
Basic Materials	6	3.2	28.0	3.1	24.5	-0.0	3.5
Communications	7	15.4	30.1	14.4	46.4	0.6	28.0
Consumer Cyclical	6	79.4	46.6	74.1	57.8	1.4	42.4
Consumer Non-cyclical	7	28.9	280.1	24.8	84.2	-0.3	196.9
Diversified	2	23.6	24.6	24.7	26.0	1.1	1.4
Energy	1	0.5	-	0.6	-	0.2	-
Industrial	7	15.8	46.6	38.1	82.0	-0.8	86.9
Technology	3	46.4	149.4	50.7	142.8	2.6	6.9
Utilities	2	4.6	0.2	6.1	2.5	1.5	2.7



Romania		201	2017Q4		2018Q1		04
nomania						Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	5.0	9.5	4.3	12.8	-0.2	9.5
Basic Materials	11	28.1	47.0	30.9	50.9	0.8	19.8
Communications	2	2.8	0.3	3.8	1.8	0.9	1.6
Consumer Cyclical	13	10.2	12.8	9.4	28.3	1.0	16.9
Consumer Non-cyclical	14	22.1	54.0	25.3	65.4	0.7	19.0
Energy	8	11.8	68.6	12.6	75.9	0.7	9.8
Industrial	25	26.7	69.1	33.1	63.7	-0.9	24.5
Utilities	4	2.2	1.7	1.5	5.6	-0.1	4.1



Russia		201	7Q4	2018Q1		Q1	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	23	30.6	24.5	23.4	16.4	-6.3	14.5
Basic Materials	33	20.9	72.8	19.1	76.3	-1.2	35.9
Communications	12	35.5	56.0	21.9	48.6	-6.4	13.9
Consumer Cyclical	18	72.1	43.1	55.9	61.2	-9.4	61.9
Consumer Non-cyclical	22	29.4	51.6	41.4	43.0	4.9	31.3
Diversified	2	146.8	114.1	138.6	106.5	-8.3	7.7
Energy	21	30.1	163.6	21.3	109.3	-5.9	57.1
Industrial	23	42.2	731.0	36.4	335.4	-9.9	551.0
Technology	3	18.2	39.1	18.3	4.0	-4.1	36.7
Utilities	54	90.4	131.3	70.2	94.9	-10.9	55.3



Rwanda		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	0.8	1.2	1.2	1.6	0.3	0.5
Consumer Non-cyclical	1	11.1	_	12.6	_	1.5	-



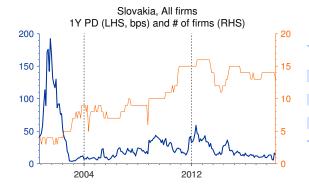
Saudi Arabia		201	7Q4	'Q4 2018		Q1-	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	60	0.0	0.4	0.0	0.3	-0.0	0.2
Basic Materials	19	7.8	127.0	5.4	32.1	-1.7	96.2
Communications	7	56.1	73.7	49.3	76.1	-6.8	24.1
Consumer Cyclical	23	6.1	20.3	4.9	14.4	-1.1	8.1
Consumer Non-cyclical	25	3.5	37.2	1.8	38.4	-1.7	3.1
Diversified	4	17.9	25.9	12.1	7.0	-8.3	22.2
Energy	2	32.0	14.3	15.8	2.4	-16.2	16.7
Industrial	34	3.2	13.0	1.9	11.5	-0.3	3.2
Technology	1	8.9	-	8.5	-	-0.4	-
Utilities	1	124.8	-	95.8	-	-28.9	_



Serbia		2017	2017Q4		8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	6	24.2	11.7	26.8	14.1	2.6	3.6
Basic Materials	4	6.6	44.6	7.7	43.5	0.0	1.6
Consumer Cyclical	2	18.0	21.2	23.4	30.9	5.4	9.7
Consumer Non-cyclical	7	44.4	25.6	43.5	57.9	2.4	35.1
Diversified	2	283.4	344.9	241.0	249.3	-42.5	95.6
Energy	1	2.8	-	3.4	-	0.6	-
Industrial	9	38.3	46.8	48.3	49.4	10.0	12.5



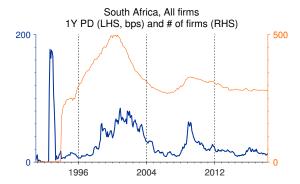
	201	2017Q4		2018Q1		Q4
#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
119	0.9	14.0	1.1	20.0	0.0	9.1
24	12.7	82.6	14.1	71.4	0.3	29.3
24	22.6	67.9	26.0	63.6	2.4	38.8
85	9.4	42.3	12.1	58.5	0.2	21.8
73	4.9	36.2	5.3	45.1	-0.0	18.3
10	3.1	19.7	3.3	21.3	0.0	5.4
26	30.3	113.9	41.8	136.0	6.8	75.5
174	17.2	55.1	22.4	61.9	8.0	38.2
25	3.9	36.7	4.5	50.0	0.2	22.3
3	1.8	85.7	2.6	198.3	8.0	112.6
	119 24 24 85 73 10 26 174 25	# Median 119 0.9 24 12.7 24 22.6 85 9.4 73 4.9 10 3.1 26 30.3 174 17.2 25 3.9	# Median St.Dev. 119 0.9 14.0 24 12.7 82.6 24 22.6 67.9 85 9.4 42.3 73 4.9 36.2 10 3.1 19.7 26 30.3 113.9 174 17.2 55.1 25 3.9 36.7	# Median St.Dev. Median 119 0.9 14.0 1.1 24 12.7 82.6 14.1 24 22.6 67.9 26.0 85 9.4 42.3 12.1 73 4.9 36.2 5.3 10 3.1 19.7 3.3 26 30.3 113.9 41.8 174 17.2 55.1 22.4 25 3.9 36.7 4.5	# Median St.Dev. Median St.Dev. 119 0.9 14.0 1.1 20.0 24 12.7 82.6 14.1 71.4 24 22.6 67.9 26.0 63.6 85 9.4 42.3 12.1 58.5 73 4.9 36.2 5.3 45.1 10 3.1 19.7 3.3 21.3 26 30.3 113.9 41.8 136.0 174 17.2 55.1 22.4 61.9 25 3.9 36.7 4.5 50.0	# Median St.Dev. Median St.Dev. Median 119 0.9 14.0 1.1 20.0 0.0 24 12.7 82.6 14.1 71.4 0.3 24 22.6 67.9 26.0 63.6 2.4 85 9.4 42.3 12.1 58.5 0.2 73 4.9 36.2 5.3 45.1 -0.0 10 3.1 19.7 3.3 21.3 0.0 26 30.3 113.9 41.8 136.0 6.8 174 17.2 55.1 22.4 61.9 0.8 25 3.9 36.7 4.5 50.0 0.2



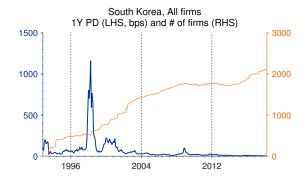
Slovakia		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	6	4.7	4.2	11.4	11.8	1.3	11.2
Basic Materials	1	127.4	_	122.1	-	-5.3	-
Consumer Cyclical	2	0.2	0.2	0.3	0.5	0.2	0.2
Consumer Non-cyclical	2	10.5	8.3	11.3	7.9	0.8	0.4
Energy	1	19.2	-	25.8	-	6.6	-
Industrial	1	91.2	_	143.4	_	52.3	-



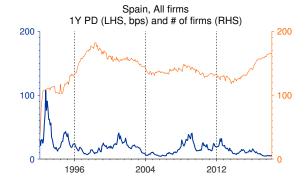
Slovenia		2017Q4		201	8Q1	Q1-Q4		
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	6	4.0	16.0	7.5	85.2	4.0	71.7	
Basic Materials	3	9.9	11.7	8.9	7.1	-1.0	4.9	
Communications	1	5.3	-	5.2	-	-0.1	-	
Consumer Cyclical	5	22.5	46.8	24.5	51.8	4.0	7.6	
Consumer Non-cyclical	8	11.5	85.5	13.2	84.9	0.3	7.8	
Diversified	1	104.4	-	113.6	-	9.1	-	
Energy	1	2.0	-	3.3	-	1.3	-	
Industrial	3	27.8	24.6	26.9	22.3	-0.8	2.9	
Technology	1	20.2	-	19.2	-	-1.1	-	



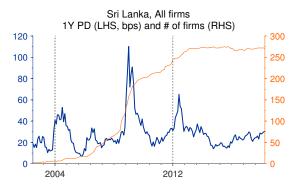
South Africa		2017Q4		201	8Q1	Q1-	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	86	4.2	24.4	4.3	26.7	0.6	9.7	
Basic Materials	34	18.8	159.7	22.1	149.4	0.2	55.4	
Communications	13	11.0	45.3	17.4	50.6	3.6	19.6	
Consumer Cyclical	33	15.8	241.0	13.0	318.1	0.0	87.5	
Consumer Non-cyclical	40	13.8	133.0	13.3	134.3	0.6	22.0	
Diversified	9	12.5	34.7	11.6	31.7	0.1	7.2	
Energy	8	30.1	371.2	27.9	127.3	-0.6	267.9	
Industrial	42	47.6	236.2	39.3	216.1	-0.7	118.3	
Technology	10	16.9	21.3	21.2	80.0	0.6	68.8	



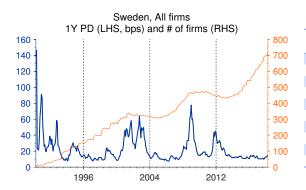
South Korea		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	87	12.8	24.3	13.2	23.2	0.0	10.3
Basic Materials	188	2.6	23.8	2.6	23.9	-0.0	12.0
Communications	202	2.9	12.5	2.7	12.0	0.1	8.4
Consumer Cyclical	320	5.3	33.6	5.3	17.9	0.0	28.4
Consumer Non-cyclical	377	1.5	32.2	1.6	28.1	0.0	7.9
Diversified	35	0.0	3.6	0.0	5.5	0.0	2.9
Energy	16	4.1	29.5	4.1	19.2	0.2	12.1
Industrial	576	5.4	48.7	4.9	65.4	-0.0	37.1
Technology	274	2.2	31.3	2.9	34.0	0.0	12.6
Utilities	18	8.0	15.2	10.9	26.6	3.1	21.2



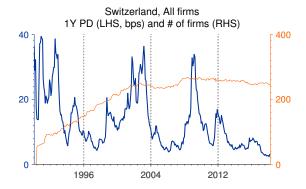
Spain		2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	33	3.1	9.3	2.5	7.7	0.0	3.0
Basic Materials	9	4.5	14.6	4.8	53.7	0.1	42.6
Communications	18	7.9	22.1	14.4	22.3	1.1	14.6
Consumer Cyclical	17	5.2	33.2	4.7	36.3	0.1	14.3
Consumer Non-cyclical	36	5.6	56.9	6.7	42.5	0.1	18.1
Energy	5	36.3	39.4	3.3	51.9	0.1	20.9
Industrial	32	9.2	63.2	9.9	120.3	1.0	61.3
Technology	7	2.0	14.2	7.8	15.0	1.0	11.8
Utilities	7	3.2	5.3	2.5	1.8	0.4	4.0



Sri Lanka		201	7Q4	201	8Q1	Q1-	·Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	90	40.0	38.3	45.8	43.7	4.4	20.3
Basic Materials	14	40.7	84.4	42.0	61.9	8.0	30.1
Communications	4	7.6	20.4	8.6	21.0	2.4	1.4
Consumer Cyclical	62	24.2	106.0	28.4	104.2	0.4	27.0
Consumer Non-cyclical	54	16.7	55.1	21.5	71.0	2.4	24.5
Diversified	13	42.1	79.2	46.2	95.9	0.1	50.1
Energy	3	12.8	8.8	11.6	7.2	-1.2	1.8
Industrial	24	24.1	238.0	27.3	181.2	1.2	110.8
Technology	2	17.0	4.5	18.6	5.7	1.6	1.2
Utilities	5	11.1	20.5	14.8	15.6	0.0	9.7



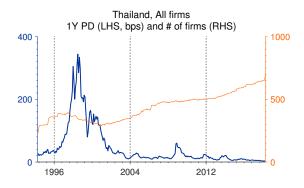
Sweden		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	95	3.9	68.1	4.6	11.2	0.0	63.4
Basic Materials	25	12.3	84.4	27.1	63.8	0.5	34.6
Communications	66	30.1	78.0	35.1	132.2	0.3	99.3
Consumer Cyclical	80	12.7	55.6	16.2	37.6	0.8	44.1
Consumer Non-cyclical	199	11.7	53.7	16.0	57.0	0.4	48.7
Diversified	5	19.6	77.9	18.2	117.1	0.1	39.4
Energy	19	28.9	56.1	35.1	76.1	6.6	28.9
Industrial	138	15.0	195.4	16.1	147.3	0.5	168.5
Technology	65	17.8	86.5	21.1	145.5	1.4	131.1
Utilities	1	6.3	_	8.5	_	2.2	-



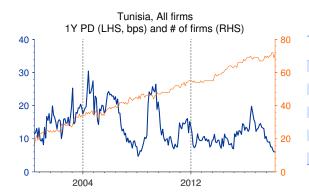
Switzerland		201	2017Q4		2018Q1		-Q4
Switzerianu							
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	69	1.0	6.6	1.6	5.8	0.2	2.5
Basic Materials	14	2.0	15.2	3.0	29.1	1.0	14.5
Communications	11	3.0	10.3	5.2	14.5	1.5	8.8
Consumer Cyclical	19	5.3	78.5	7.2	79.7	0.7	12.3
Consumer Non-cyclical	45	4.8	104.2	3.5	239.0	0.1	202.0
Diversified	3	6.6	27.8	3.4	22.5	-3.2	5.4
Energy	5	146.8	88.0	149.3	222.7	0.8	199.4
Industrial	61	2.8	50.3	3.7	55.6	0.5	17.0
Technology	11	11.3	41.0	9.8	63.8	0.3	33.8
Utilities	5	2.8	31.5	3.3	23.0	-0.2	8.8



Taiwan		201	2017Q4		2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	83	0.3	2.5	0.3	2.7	-0.0	0.7
Basic Materials	80	0.2	2.6	0.2	3.1	0.0	1.0
Communications	43	0.5	6.4	0.6	6.5	0.0	0.5
Consumer Cyclical	152	0.3	6.4	0.3	6.3	-0.0	2.9
Consumer Non-cyclical	62	0.0	1.4	0.0	1.1	0.0	0.4
Diversified	1	0.1	-	0.0	-	-0.1	-
Energy	8	2.1	2.8	3.1	3.3	0.8	0.7
Industrial	314	0.7	11.4	0.8	13.9	0.0	3.2
Technology	152	0.7	3.3	0.6	4.2	0.0	2.8
Utilities	6	0.0	0.0	0.0	0.0	-0.0	0.0



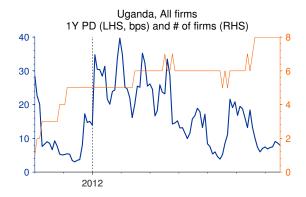
Thailand		2017Q4		201	2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	118	1.3	7.5	1.2	4.2	-0.0	4.4	
Basic Materials	57	6.9	79.3	5.6	86.2	-0.6	14.3	
Communications	47	8.8	62.5	12.8	87.7	0.4	32.7	
Consumer Cyclical	134	4.0	27.0	4.6	45.3	0.0	32.0	
Consumer Non-cyclical	98	2.7	34.5	2.3	49.7	-0.0	19.4	
Diversified	6	1.7	58.9	2.9	59.6	0.4	1.3	
Energy	21	5.5	21.7	7.7	15.6	0.0	14.8	
Industrial	140	7.3	36.4	5.7	54.4	-0.0	29.9	
Technology	13	8.7	411.6	3.4	178.6	-0.2	272.8	
Utilities	17	1.4	19.3	1.7	24.8	0.1	10.1	



Tunisia		2017Q4		2018	8Q1	Q1-	-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	24	7.2	23.8	6.1	18.9	-2.0	6.9
Basic Materials	4	3.9	7.3	3.1	12.7	0.1	5.7
Communications	4	55.1	37.0	35.6	27.1	-17.1	10.9
Consumer Cyclical	12	5.4	64.1	4.8	70.0	-0.2	6.0
Consumer Non-cyclical	10	10.8	94.4	13.5	99.1	-0.1	12.3
Diversified	1	2.8	-	2.6	-	-0.2	_
Energy	1	0.6	-	0.3	-	-0.3	-
Industrial	13	13.7	47.2	16.8	30.2	-0.4	25.8
Technology	2	116.7	140.3	74.9	97.3	-41.8	43.0



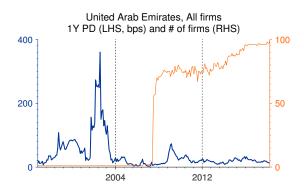
Turkey		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	103	15.7	29.3	20.8	44.9	1.5	24.4
Basic Materials	36	14.6	18.5	14.3	22.7	0.8	10.0
Communications	13	22.4	20.3	22.5	19.2	3.8	6.5
Consumer Cyclical	93	33.7	313.1	37.0	130.4	3.7	240.7
Consumer Non-cyclical	54	23.0	41.8	28.2	47.1	2.5	21.2
Diversified	11	49.0	118.6	65.2	189.7	10.4	77.0
Energy	5	12.6	26.2	20.6	23.1	6.6	7.7
Industrial	69	14.0	39.9	15.7	50.6	2.2	19.0
Technology	5	6.0	20.5	5.9	37.3	0.9	16.9
Utilities	8	29.3	40.7	34.3	59.3	1.5	29.0



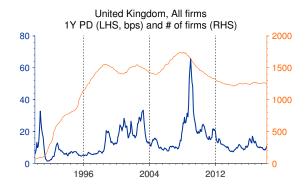
Uganda		2017Q4		201	8Q1	Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	7.5	4.0	7.9	4.2	1.0	3.5
Communications	1	0.0	-	0.0	-	0.0	-
Consumer Non-cyclical	1	0.4	-	0.2	-	-0.2	-
Industrial	1	12.5	-	12.5	-	-0.0	-
Utilities	1	30.1	-	13.8	-	-16.3	-



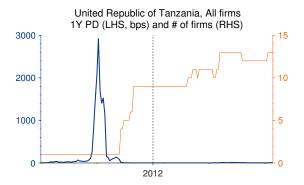
Ukraine		201	2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	1	80.8	-	72.6	-	-8.2	-	
Consumer Non-cyclical	7	16.4	40.7	20.1	56.4	1.0	19.2	
Diversified	1	11.7	-	16.1	-	4.4	-	
Energy	1	269.8	-	375.5	-	105.8	-	
Industrial	3	3.2	33.3	2.1	40.0	-0.1	6.8	
Utilities	1	22.6	-	11.8	_	-10.8	-	



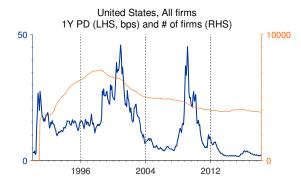
United Arab Emirates		201	7Q4	201	2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	51	8.1	13.0	8.1	13.6	0.1	4.3	
Communications	3	0.8	89.3	1.0	147.8	0.2	58.5	
Consumer Cyclical	5	36.5	64.8	34.9	132.3	1.6	70.0	
Consumer Non-cyclical	14	50.5	76.2	36.5	43.8	-1.6	43.0	
Energy	5	25.6	156.9	17.8	72.3	-0.5	87.1	
Industrial	18	27.9	64.6	41.4	45.3	-3.4	33.3	
Utilities	1	223.5	-	98.4	-	-125.1	-	



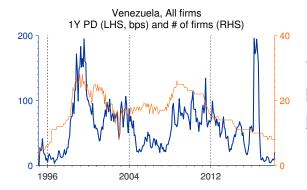
United Kingdom		201	2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	248	1.6	16.4	2.1	14.1	0.1	8.1	
Basic Materials	93	24.6	97.7	24.2	112.0	0.2	56.2	
Communications	104	18.6	269.5	18.4	121.7	0.5	220.9	
Consumer Cyclical	163	8.4	262.3	12.5	269.4	1.3	72.6	
Consumer Non-cyclical	254	7.0	62.0	10.7	142.7	0.4	116.2	
Diversified	7	48.3	88.7	37.4	77.0	-0.0	68.1	
Energy	97	35.5	366.7	35.0	229.3	-0.3	193.5	
Industrial	171	13.4	71.2	16.2	101.1	0.4	46.8	
Technology	97	9.8	71.5	11.0	162.6	0.3	135.3	
Utilities	13	4.8	138.5	7.9	785.0	1.3	665.0	



United Republic of Tanzania		2017Q4		201	2018Q1		-Q4
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	17.8	16.8	19.1	13.1	0.2	6.1
Basic Materials	1	0.0	_	0.0	_	0.0	_
Communications	1	25.3	-	60.0	-	34.7	-
Consumer Non-cyclical	2	0.3	0.1	0.5	0.5	0.2	0.4
Energy	2	11.9	16.4	6.7	9.1	-5.2	7.3
Industrial	3	4.8	45.4	4.8	48.8	0.0	3.5



United States		2017Q4		201	8Q1	Q1-Q4		
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	901	0.7	29.7	0.8	42.3	0.0	15.2	
Basic Materials	131	2.9	85.7	3.7	95.8	0.0	35.0	
Communications	252	5.9	296.1	6.2	264.0	0.0	192.7	
Consumer Cyclical	447	3.0	354.1	3.9	216.2	0.0	202.4	
Consumer Non-cyclical	905	7.6	296.1	7.6	210.7	-0.0	243.0	
Diversified	13	0.0	44.9	0.0	153.5	0.0	121.4	
Energy	283	13.6	472.3	13.2	568.6	0.1	193.8	
Industrial	470	1.6	119.1	1.8	342.1	0.0	302.8	
Technology	320	1.4	138.7	1.8	132.9	0.0	135.6	
Utilities	81	0.1	16.8	0.1	12.4	0.0	8.6	



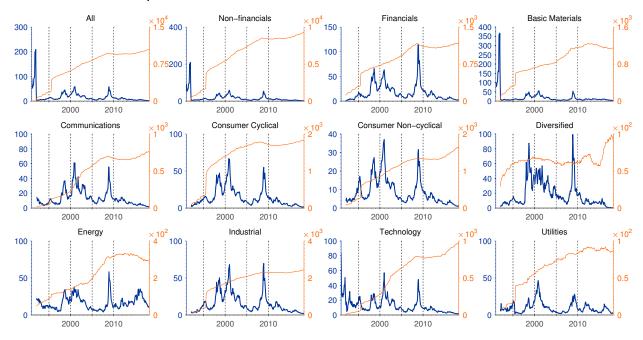
Venezuela		2017Q4		201	8Q1	Q1-Q4		
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	5	5.1	9.4	7.1	36.6	-1.2	40.6	
Basic Materials	2	121.9	120.3	183.2	211.4	61.4	91.0	
Industrial	1	5.1	_	4.0	_	-1.0	_	



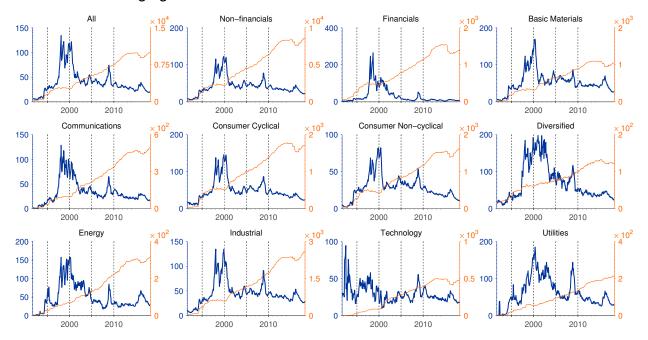
Vietnam		201	2017Q4		2018Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.	
Financials	95	8.2	19.1	8.7	21.1	-0.3	10.4	
Basic Materials	72	25.4	81.6	30.5	129.2	1.6	59.1	
Communications	21	48.5	60.5	59.0	84.7	-0.1	48.4	
Consumer Cyclical	70	36.4	60.8	44.0	87.7	1.5	44.6	
Consumer Non-cyclical	102	24.8	72.7	26.7	84.9	0.0	32.5	
Diversified	14	26.0	55.9	26.4	75.4	4.6	23.1	
Energy	25	61.9	102.6	62.0	104.9	0.3	34.2	
Industrial	266	51.1	83.0	52.3	89.7	1.5	58.1	
Technology	6	11.3	31.1	15.2	35.8	4.8	18.2	
Utilities	20	10.0	32.0	13.4	25.3	0.7	16.9	

B PD by regions

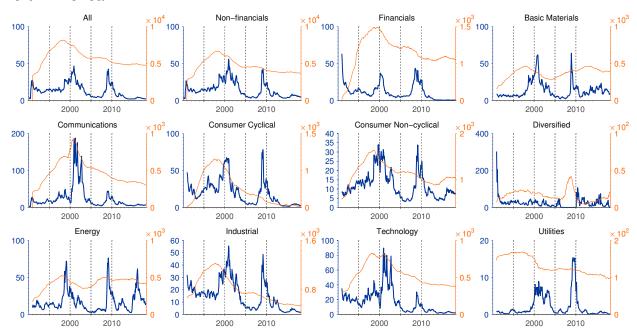
Asia Pacific - developed economies



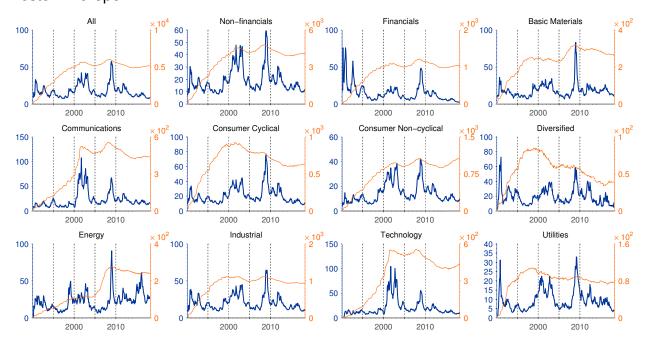
Asia Pacific - emerging economies



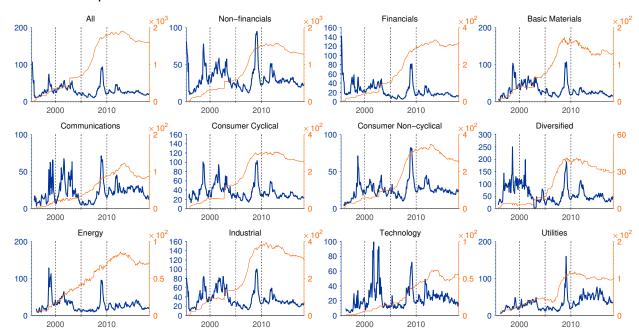
North America



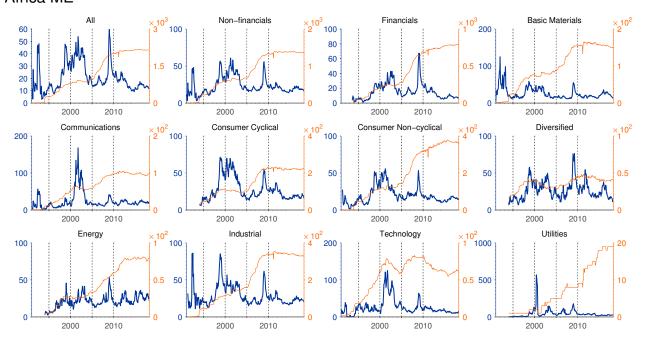
Western Europe



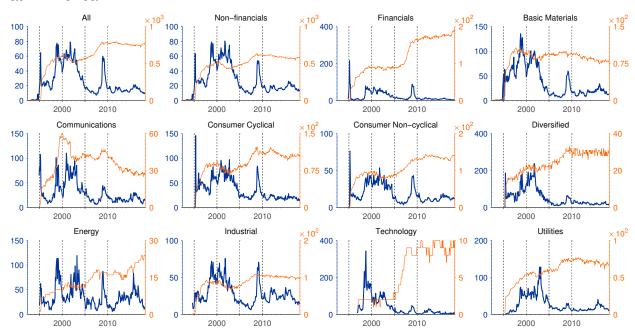
Eastern Europe



Africa ME

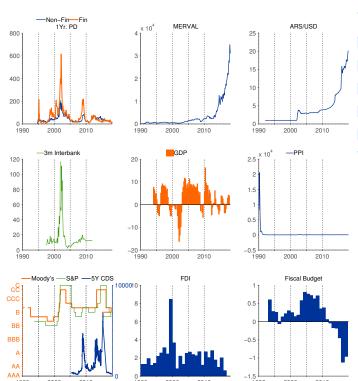


Latin America

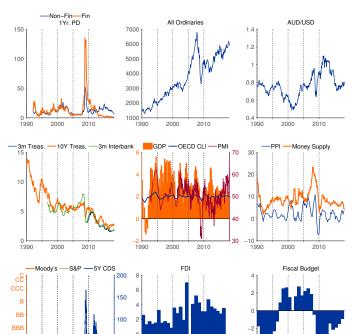


C Macroeconomic Indicators

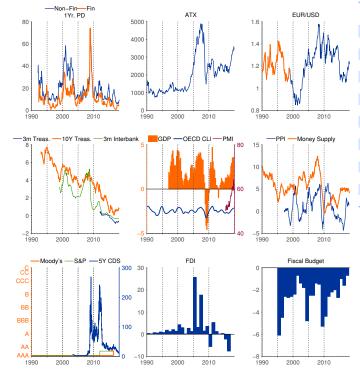
Descriptions of the data contained in this section are provided in Appendix D.



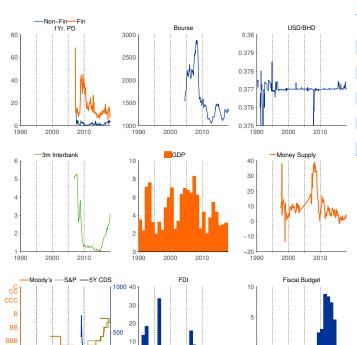
Argentina		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	17.16	18.26	20.20	14.32	17.42
1Yr. PD, Fin.	17.33	28.69	16.18	9.26	11.56
MERVAL	20265	21913	26078	30066	31115
ARS/USD	15.39	16.63	17.32	18.62	20.14
GDP (YoY%)	0.4	2.9	4.2	3.9	-
PPI (YoY%)	-	-	-	17.9	29.9
Sov. Rating, Moody's	B2	B2	B2	B2	B2
Sov. Rating, S&P	B+	B+	B+	B+	B+
5Y CDS (bps)	364.20	323.12	283.87	232.25	272.14
Fiscal Budget (%GDP)	-	-	-	-0.96	-



Australia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	10.37	12.18	10.44	7.61	7.95
1Yr. PD, Fin.	1.94	1.54	1.52	1.07	1.75
All Ordinaries	5904	5764	5745	6167	5869
AUD/USD	0.76	0.77	0.78	0.78	0.77
3m Treas. Yield (%)	1.55	1.63	1.71	1.74	2.03
10Y Treas. Yield (%)	2.70	2.60	2.84	2.63	2.60
3m Interbank (%)	1.79	1.71	1.71	1.78	2.02
GDP (YoY%)	1.9	2.0	2.9	2.4	_
OECD CLI	100.36	100.40	100.28	99.98	99.63*
PMI	57.5	55.0	54.2	56.2	63.1
PPI (YoY%)	3.5	3.7	2.0	3.5	-
Money Supply (YoY%)	6.7	7.8	6.8	4.5	3.8*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	25.51	21.93	23.10	17.60*	14.48
Fiscal Budget (%GDP)	-	-	-	-0.91	-



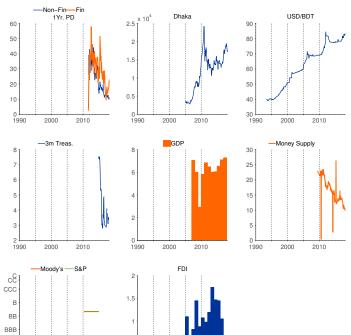
Austria		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.53	5.58	6.04	7.33	9.20
1Yr. PD, Fin.	0.74	2.31	4.46	5.12	3.85
ATX	2829	3107	3316	3420	3429
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.82	-0.66	-0.73	-0.70	-0.69
10Y Treas. Yield (%)	0.54	0.71	0.63	0.58	0.70
3m Interbank (%)	-0.33	-0.33	-0.33	-0.33	-0.33
GDP (YoY%)	2.6	2.9	3.5	3.6	-
OECD CLI	100.43	100.84	101.15	101.37	101.36*
PMI	56.8	60.7	59.4	64.3	58.0
PPI (YoY%)	2.5	1.3	1.8	1.5	1.4*
Money Supply (YoY%)	5.2	5.0	5.2	4.6	4.1*
Sov. Rating, Moody's	Aa1	Aa1	Aa1	Aa1	Aa1
Sov. Rating, S&P	AA+	AA+	AA+	AA+	AA+
5Y CDS (bps)	22.5	20.1	18.5	13.1	12.1
Fiscal Budget (%GDP)	-	-	-	-0.70	-



Bahrain		20)17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	3.09	3.51	0.88	4.10	3.89
1Yr. PD, Fin.	12.21	5.58	13.91	14.85	10.22
Bourse	1356	1310	1283	1332	1318
USD/BHD	0.38	0.38	0.38	0.38	0.38
3m Interbank (%)	2.30	2.40	2.45	2.73	3.05
GDP (YoY%)	_	_	_	3.15	_
Money Supply (YoY%)	1.63	1.42	1.66	4.15	2.36*
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	B+	B+	B+	B+	B+

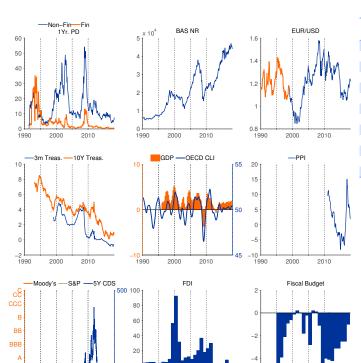
AA AAA 1990

2000



1990

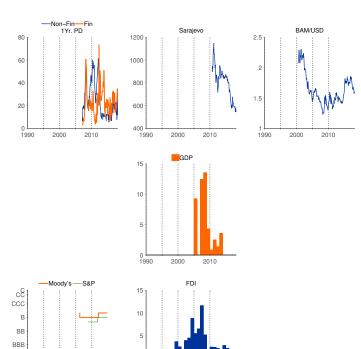
Bangladesh		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.03	13.00	12.08	11.11	11.03
1Yr. PD, Fin.	9.52	18.03	13.90	16.67	22.89
Dhaka	17738	17517	18882	19268	17215
USD/BDT	80.25	80.64	82.31	82.69	83.22
3m Treas. Yield (%)	2.89*	4.09	3.80	3.54	3.35*
GDP (YoY%)	-	-	-	7.3	-
Money Supply (YoY%)	13.1	10.9	10.4	10.7	9.8*
Sov. Rating, Moody's	Ba3	Ba3	Ba3	Ba3	Ba3
Sov. Rating, S&P	BB-	BB-	BB-	BB-	BB-



2000

Belgium		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.99	4.17	4.76	5.55	7.50
1Yr. PD, Fin.	0.46	0.32	0.49	0.57	0.33
BAS NR	44607.4	43715.0	45780.7	45177.2	44075.4
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.66	-0.65	-0.64	-0.77	-0.61
10Y Treas. Yield (%)	0.85	0.80	0.73	0.64	0.77
GDP (YoY%)	1.8	1.5	1.6	1.9	-
OECD CLI	100.14	99.99	100.20	100.40	100.30*
PPI (YoY%)	12.6	6.2	6.4	4.1	2.0*
Sov. Rating, Moody's	Aa3	Aa3	Aa3	Aa3	Aa3
Sov. Rating, S&P	AA	AA	AA	AA	AA
5Y CDS (bps)	27.05	19.56	18.38	13.55	14.05
Fiscal Budget (%GDP)	-	-	-	-1.00	-

AAA 1990

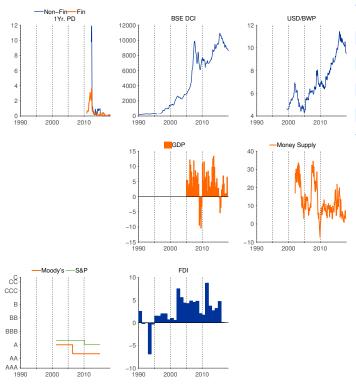


-5 1990

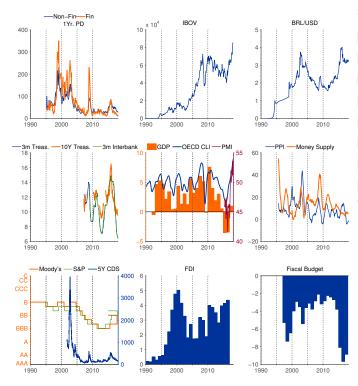
2000

2010

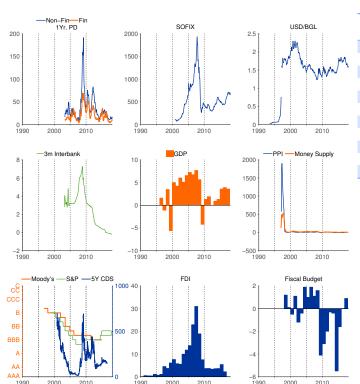
Bosnia and Herzegovina		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	19.05	20.06	22.83	7.66	11.63		
1Yr. PD, Fin.	30.66	21.66	14.88*	25.40	27.65		
Sarajevo	631	597	592	545	545		
BAM/USD	1.83	1.71	1.65	1.63	1.59		
Sov. Rating, Moody's	B3	B3	B3	В3	B3		
Sov. Rating, S&P	В	В	В	В	В		



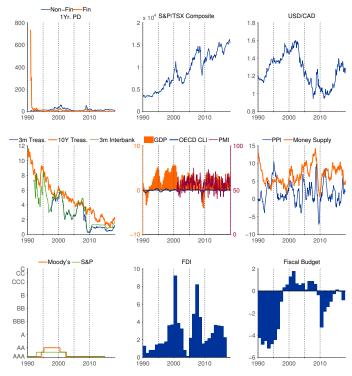
Botswana		2017				
	Q1	Q2	Q3	Q4	Q1	
1Yr. PD, Non-Fin. (bps)	0.02	0.03	0.00	0.00	0.00	
1Yr. PD, Fin.	0.06	0.11	0.11	0.19	0.10	
BSE DCI	9225	9244	8930	8860	8590	
USD/BWP	10.41	10.23	10.30	9.83	9.56	
GDP (YoY%)	0.9	1.0	1.1	6.5	_	
Money Supply (YoY%)	1.6	0.8	3.4	2.7	_	
Sov. Rating, Moody's	Aa3	Aa3	Aa3	Aa3	Aa3	
Sov. Rating, S&P	Α	Α	Α	Α	Α	



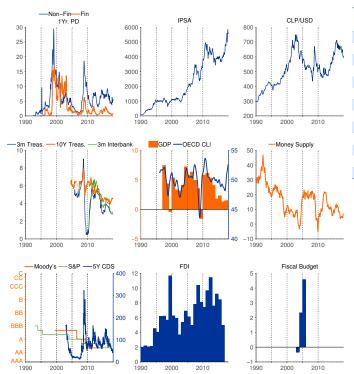
Brazil		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	43.44	45.78	33.34	32.17	28.36
1Yr. PD, Fin.	21.02	25.59	15.75	13.76	12.17
IBOV	64984.1	62900.0	74293.5	76402.1	85365.6
BRL/USD	3.12	3.31	3.16	3.31	3.31
3m Treas. Yield (%)	10.90	9.38	7.42	6.76	6.49
10Y Treas. Yield (%)	10.06	10.54	9.73	10.26	9.49
3m Interbank (%)	11.00	9.42	7.53	6.78	6.31
GDP (YoY%)	-	-	-	1.0	-
OECD CLI	100.53	101.17	102.17	103.26	103.92*
PMI	49.6	50.5	50.9	52.4	53.4
PPI (YoY%)	4.9	-3.2	-3.9	-2.5	-1.2
Money Supply (YoY%)	3.8	6.2	6.6	4.7	5.8*
Sov. Rating, Moody's	Ba2	Ba2	Ba2	Ba2	Ba2
Sov. Rating, S&P	BB-	BB-	BB-	BB-	BB-
5Y CDS (bps)	226.44	242.29	195.91	161.97	164.20
Fiscal Budget (%GDP)	_	_	_	-8.87	_



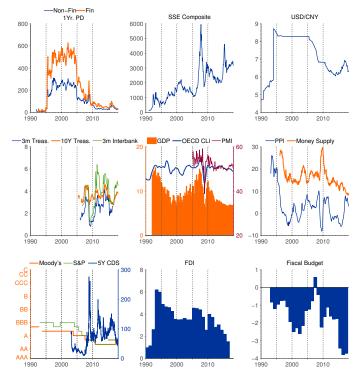
Bulgaria		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	11.32	10.64	17.66	14.32	14.63
1Yr. PD, Fin.	4.91	6.77	5.21	7.28	11.87
SOFIX	634	703	688	677	649
USD/BGL	1.84	1.71	1.66	1.63	1.59
3m Interbank (%)	-0.10	-0.08	-0.08	-0.18	-0.19
GDP (YoY%)	-	_	-	3.6	_
PPI (YoY%)	2.1	2.7	6.0	5.1	4.4*
Money Supply (YoY%)	8.5	7.0	8.2	7.7	8.1*
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-
Fiscal Budget (%GDP)	_	_	-	0.90	_



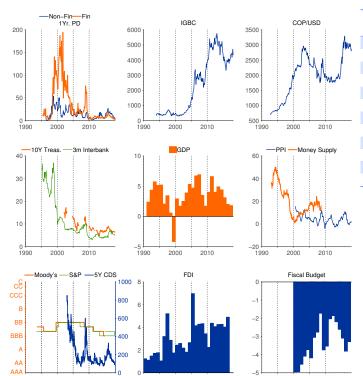
Canada		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.84	13.32	11.71	8.22	8.83
1Yr. PD, Fin.	0.35	0.37	0.31	0.24	0.41
S&P/TSX Composite	15548	15182	15635	16209	15367
USD/CAD	1.33	1.30	1.25	1.26	1.29
3m Treas. Yield (%)	0.55	0.71	1.00	1.06	1.15
10Y Treas. Yield (%)	1.63	1.76	2.10	2.04	2.09
3m Interbank (%)	0.94	1.07	1.42	1.54	1.73
GDP (YoY%)	2.3	3.7	3.0	2.9	_
OECD CLI	100.21	100.25	100.33	100.47	100.48*
PMI	67.6	63.9	68.6	49.3	64.7
PPI (YoY%)	5.2	3.2	1.4	2.3	1.9*
Money Supply (YoY%)	7.9	6.2	4.1	4.7	5.2*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
Fiscal Budget (%GDP)	-	-	-	-0.82	-



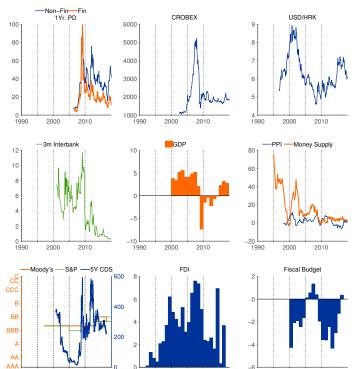
Chile		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.21	4.79	4.34	5.76	5.46
1Yr. PD, Fin.	0.70	0.91	0.38	0.55	0.87
IPSA	4783.4	4747.2	5341.9	5564.6	5542.2
CLP/USD	660.3	663.8	639.0	615.4	603.9
3m Treas. Yield (%)	3.09	3.09	3.09*	-	-
10Y Treas. Yield (%)	4.20	4.01	4.32	4.62	4.49
3m Interbank (%)	3.43	2.97	2.78	3.04	2.81
GDP (YoY%)	-	-	-	1.5	-
OECD CLI	98.24	99.72	101.15	101.96	102.62*
Money Supply (YoY%)	4.97	4.79	5.28	4.62	6.81
Sov. Rating, Moody's	Aa3	Aa3	Aa3	Aa3	Aa3
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	72.16	65.85	58.78	48.90	51.06



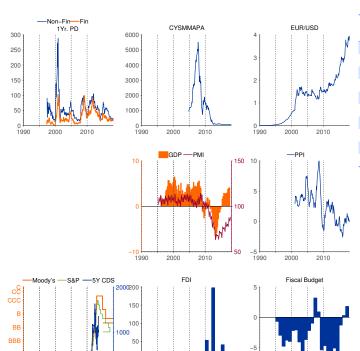
China		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	32.43	29.25	23.48	23.68	23.99
1Yr. PD, Fin.	43.18	39.69	34.84	34.45	37.62
SSE Composite	3223	3192	3349	3307	3169
USD/CNY	6.89	6.78	6.65	6.51	6.28
10Y Treas. Yield (%)	3.29	3.57	3.62	3.90	3.75
3m Interbank (%)	4.39	4.50	4.36	4.91	4.46
GDP (YoY%)	6.9	6.9	6.8	6.8	6.8
OECD CLI	99.96	99.80	99.39	98.96	98.93*
PMI	51.8	51.7	52.4	51.6	51.5
PPI (YoY%)	7.60	5.50	6.90	4.90	3.10
Money Supply (YoY%)	10.10	9.10	9.00	8.10	8.20
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	81.99	69.43	62.00	50.09	63.80
Fiscal Budget (%GDP)	-	-	-	-3.72	-



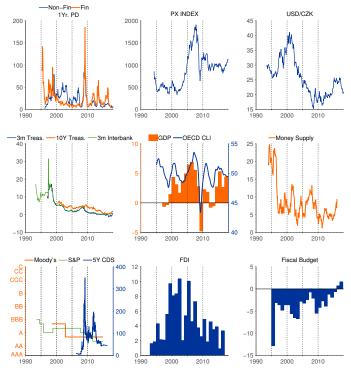
Colombia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.30	11.40	7.80	6.44	4.63
1Yr. PD, Fin.	5.98	7.82	3.67	2.90	2.19
IGBC	4097	4363	4413	4493	4340
COP/USD	2874	3043	2939	2987	2795
10Y Treas. Yield (%)	6.65	6.42	6.57	6.48	6.51
3m Interbank (%)	6.23	5.85	5.45	5.34	5.04
GDP (YoY%)	_	_	_	1.8	_
PPI (YoY%)	0.55	-0.84	1.18	1.86	1.65
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-
5Y CDS (bps)	134.0	136.1	122.2	104.7	106.7
Fiscal Budget (%GDP)	_	_	_	-3.29	_



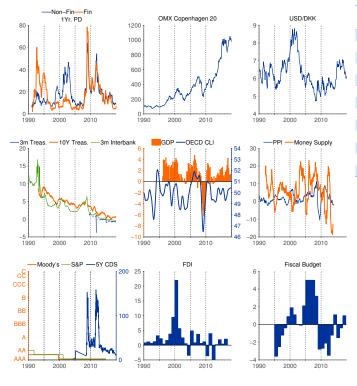
Croatia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	25.31	37.02	41.43	53.85	44.41
1Yr. PD, Fin.	9.88	13.81	21.18	19.47	11.06
CROBEX	1989	1866	1811	1843	1805
USD/HRK	6.99	6.49	6.34	6.19	6.03
3m Interbank (%)	0.33	0.36	0.36	0.30	0.25
GDP (YoY%)	-	-	-	2.8	_
PPI (YoY%)	1.2	0.3	1.9	1.7	1.3
Money Supply (YoY%)	3.8	2.9	3.3	2.1	3.8*
Sov. Rating, Moody's	Ba2	Ba2	Ba2	Ba2	Ba2
Sov. Rating, S&P	BB+	BB+	BB+	BB+	BB+



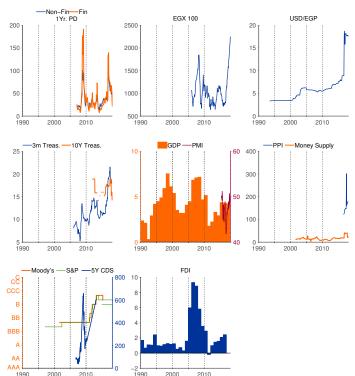
Cyprus		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	31.30	20.29	25.86	20.39	22.41
1Yr. PD, Fin.	20.41	19.23	14.97	18.95	19.56
CYSMMAPA	68.1	76.7	74.1	69.5	66.9
EUR/USD	3.64	3.52	3.56	3.80	3.96
GDP (YoY%)	3.80	4.00	4.10	_	-
PMI	77.4	87.4	83.5	88.4	-
PPI (YoY%)	0.1	1.3	0.8	0.1	-0.1*
Sov. Rating, Moody's	Ba3	Ba3	Ba3	Ba3	Ba3
Sov. Rating, S&P	BB+	BB+	BB+	BB+	BB+
Fiscal Budget (%GDP)	_	_	_	1.80	_



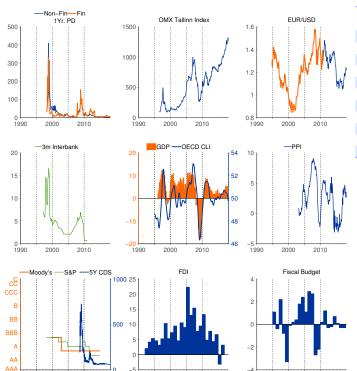
Czech Republic		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.83	4.64	7.61	5.59	6.33
1Yr. PD, Fin.	8.51	4.43	3.92	3.60	3.48
PX INDEX	981	980	1045	1078	1124
USD/CZK	25.38	22.86	22.00	21.29	20.56
3m Treas. Yield (%)	-0.89	-0.41	-0.67	0.32	0.46
10Y Treas. Yield (%)	1.00	0.96	1.24	1.61	1.85
3m Interbank (%)	0.28	0.30	0.47	0.76	0.90
GDP (YoY%)	-	-	-	4.4	-
OECD CLI	99.72	99.58	99.48	99.47	99.46*
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	AA-	AA-	AA-	AA-	AA-
Fiscal Budget (%GDP)	-	-	-	1.60	-



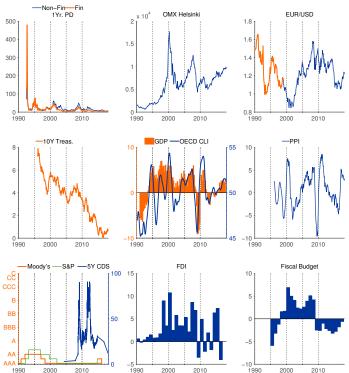
Denmark		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.99	9.14	8.02	9.30	8.88
1Yr. PD, Fin.	5.20	4.53	4.73	4.36	6.59
OMX Copenhagen 20	915.5	988.1	1024.1	1024.2	976.6
USD/DKK	6.98	6.51	6.30	6.21	6.05
3m Treas. Yield (%)	-0.69	-0.68	-0.68	-0.84	-0.68
10Y Treas. Yield (%)	0.60	0.67	0.55	0.48	0.55
3m Interbank (%)	-0.26	-0.24	-0.31	-0.31	-0.30
GDP (YoY%)	4.2	2.4	1.1	1.3	_
OECD CLI	100.26	100.34	100.39	100.42	100.39*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	17.04	18.35	15.39	12.86	11.47
Fiscal Budget (%GDP)	_	-	_	1.00	_



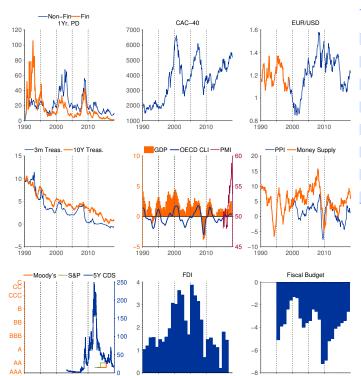
Egypt		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	77.55	62.65	58.15	54.04	34.67
1Yr. PD, Fin.	81.43	72.66	54.42	67.28	21.63
EGX 100	1327.7	1509.2	1723.8	1971.8	2238.3
USD/EGP	18.17	18.13	17.64	17.81	17.65
3m Treas. Yield (%)	19.38	20.38	18.46	18.77	18.00
10Y Treas. Yield (%)	17.40	17.40	18.00	15.25	14.18
GDP (YoY%)	-	-	-	4.2	-
PMI	45.9	47.2	47.4	48.3	49.2
PPI (YoY%)	145.4	146.7	167.0	176.1	181.3*
Money Supply (YoY%)	38.0	39.3	39.7	20.9	25.4*
Sov. Rating, Moody's	B3	B3	B3	B3	В3
Sov. Rating, S&P	В	В	В	В	В



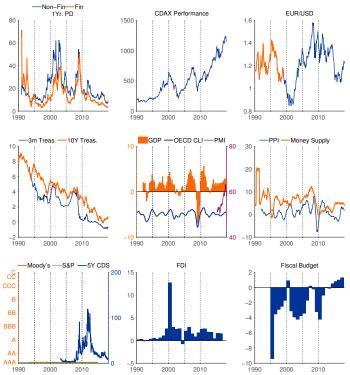
Estonia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.11	2.25	2.10	1.46	1.59
1Yr. PD, Fin.	7.44	6.08	4.69	6.91	5.28
OMX Tallinn Index	1122	1137	1226	1242	1269
EUR/USD	1.07	1.14	1.18	1.20	1.23
GDP (YoY%)	3.9	5.3	4.5	5.3	-
OECD CLI	100.57	100.49	100.44	100.17	99.78*
PPI (YoY%)	3.1	3.3	4.5	2.7	2.9
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	AA-	AA-	AA-	AA-	AA-
5Y CDS (bps)	-	-	-	-	58.2
Fiscal Budget (%GDP)	-	-	-	-0.30	-



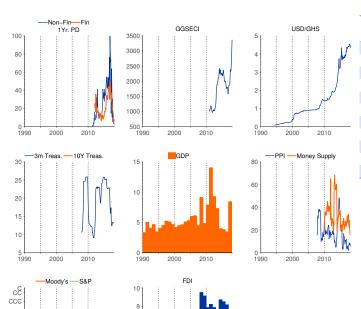
Finland		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.89	4.78	5.61	6.40	7.01
1Yr. PD, Fin.	2.52	2.15	2.43	2.17	2.24
OMX Helsinki	9165	9568	9652	9472	9590
EUR/USD	1.07	1.14	1.18	1.20	1.23
10Y Treas. Yield (%)	0.45	0.50	0.62	0.60	0.60
GDP (YoY%)	2.8	3.1	2.2	2.4	-
OECD CLI	101.39	101.53	101.56	101.40	101.20*
PPI (YoY%)	4.7	3.3	4.0	3.0	3.1
Sov. Rating, Moody's	Aa1	Aa1	Aa1	Aa1	Aa1
Sov. Rating, S&P	AA+	AA+	AA+	AA+	AA+
5Y CDS (bps)	-	-	-	-	11.9
Fiscal Budget (%GDP)	-	-	-	-0.60	_



France		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.00	6.69	7.26	8.85	9.72
1Yr. PD, Fin.	1.07	1.01	1.05	1.27	1.39
CAC-40	5123	5121	5330	5313	5167
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.57	-0.60	-0.59	-0.78	-0.58
10Y Treas. Yield (%)	0.97	0.81	0.74	0.79	0.72
GDP (YoY%)	1.2	1.9	2.3	2.5	-
OECD CLI	100.27	100.41	100.44	100.35	100.19*
PMI	53.3	54.8	56.1	58.8	53.7
PPI (YoY%)	2.9	1.5	2.1	2.1	1.5*
Money Supply (YoY%)	6.6	7.9	9.3	8.3	5.8
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	AA	AA	AA	AA	AA
5Y CDS (bps)	50.37	21.81	20.42	17.35	17.34
Fiscal Budget (%GDP)	-	-	-	-2.60	-



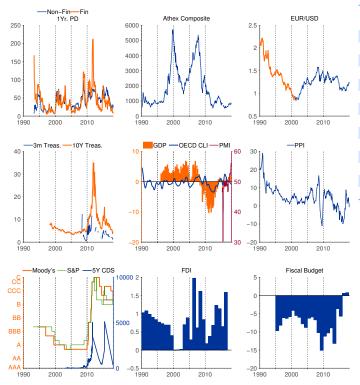
Germany		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.31	7.18	7.18	7.71	9.27
1Yr. PD, Fin.	4.51	4.34	3.36	3.70	3.92
CDAX Performance	1121	1132	1190	1210	1145
EUR/USD	1	1	1	1	1
3m Treas. Yield (%)	-0.82	-0.82	-0.70	-0.69	-0.75
10Y Treas. Yield (%)	0.33	0.47	0.46	0.43	0.50
GDP (YoY%)	2.1	2.3	2.7	2.9	-
OECD CLI	100.14	100.52	100.89	100.92	100.67*
PMI	58.3	59.6	60.6	63.3	58.2
PPI (YoY%)	3.1	2.4	3.1	2.4	1.9
Money Supply (YoY%)	5.2	5.0	5.2	4.6	3.7
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	17.1	15.5	12.5	9.5	10.5
Fiscal Budget (%GDP)	-	-	-	1.30	-



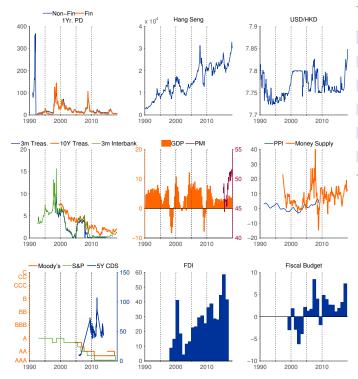
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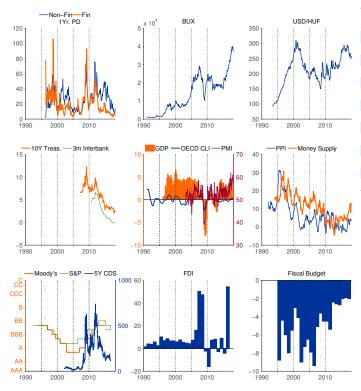
Ghana		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	14.60	41.52	5.34	3.72	2.89
1Yr. PD, Fin.	36.96	33.67	17.56	11.55	7.41
GGSECI	1865	1965	2326	2580	3367
USD/GHS	4.32	4.41	4.41	4.50	4.34
3m Treas. Yield (%)	17.39	12.32	13.15	13.31	13.32
10Y Treas. Yield (%)	-	19.00*	-	-	-
GDP (YoY%)	-	-	-	8.4	-
PPI (YoY%)	6.0	3.2	7.5	8.7	5.5*
Money Supply (YoY%)	32.5	33.0	22.4	19.8	15.8*
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	B-	B-	B-	B-	B-



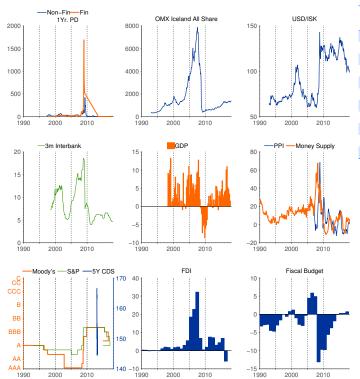
Greece		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	36.85	24.68	26.20	28.80	29.73
1Yr. PD, Fin.	32.97	13.75	19.24	10.57	6.72
Athex Composite	666.1	823.7	755.6	802.4	780.5
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	2.43*	-	2.02	1.93	1.30
10Y Treas. Yield (%)	6.99	5.42	5.66	4.12	4.32
GDP (YoY%)	0.4	1.5	1.4	1.9	-
OECD CLI	99.94	100.11	99.77	99.40	99.10*
PMI	46.7	50.5	52.8	53.1	55.0
PPI (YoY%)	6.1	1.3	4.1	1.7	-0.7*
Sov. Rating, Moody's	B3	B3	В3	B3	B3
Sov. Rating, S&P	В	В	В	В	В
5Y CDS (bps)	-	-	-	_	317.43
Fiscal Budget (%GDP)	_	_	_	0.80	_



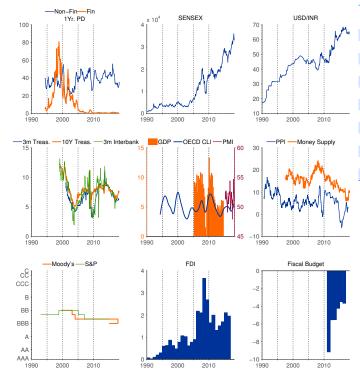
Hong Kong		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.39	6.28	5.92	5.62	6.42
1Yr. PD, Fin.	5.74	6.31	5.53	6.34	6.73
Hang Seng	24112	25765	27554	29919	30093
USD/HKD	7.77	7.81	7.81	7.81	7.85
10Y Treas. Yield (%)	1.67	1.49	1.71	1.83	1.99
3m Interbank (%)	0.94	0.78	0.78	1.31	1.21
GDP (YoY%)	4.3	3.9	3.7	3.4	_
PMI	49.9	51.1	51.2	51.5	50.6
Money Supply (YoY%)	13.70	15.90	13.20	11.60	12.20*
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	AA+	AA+	AA+	AA+	AA+
Fiscal Budget (%GDP)	_	-	_	7.46	_



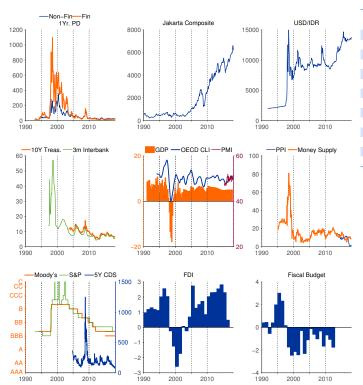
Hungary		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.47	13.85	13.70	7.47	13.64
1Yr. PD, Fin.	5.57	3.01	6.23	5.11	7.03
BUX	31634	35205	37291	39377	37259
USD/HUF	289.83	270.29	263.74	258.91	253.55
10Y Treas. Yield (%)	3.25	3.08	2.62	2.03	2.39
3m Interbank (%)	0.05	0.01	-0.11	-0.12	-0.13
GDP (YoY%)	4.30	3.30	3.90	4.40	-
OECD CLI	100.18	100.42	100.63	100.56	100.46*
PMI	55.9	56.9	59.3	60.5	57.0
PPI (YoY%)	4.2	1.5	4.1	3.9	3.9*
Money Supply (YoY%)	7.55	9.89	12.75	7.84	13.47*
Sov. Rating, Moody's	Ba1	Ba1	Ba1	Ba1	Ba1
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-
Fiscal Budget (%GDP)	-	-	-	-2.00	-



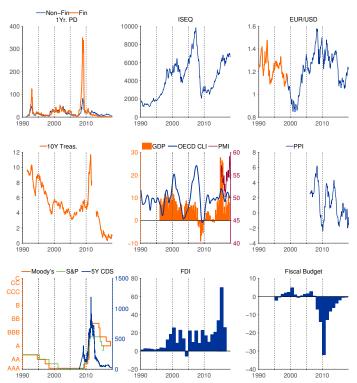
Iceland		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	8.26	4.15	10.91	9.25	8.11			
1Yr. PD, Fin.	1.45	1.65	4.88	3.86	2.45			
OMX Iceland All Share	1291	1347	1286	1290	1361			
USD/ISK	113.49	101.81	106.11	103.56	98.61			
3m Interbank (%)	5.50	4.90	4.90	4.65	4.65			
GDP (YoY%)	5.2	4.7	3.4	1.5	-			
PPI (YoY%)	-7.10	-10.20	-1.40	2.40	4.20*			
Money Supply (YoY%)	7.55	5.18	7.48	5.03	0.57			
Sov. Rating, Moody's	A3	A3	A3	A3	A3			
Sov. Rating, S&P	Α	Α	Α	Α	Α			
Fiscal Budget (%GDP)	-	-	-	0.72	-			



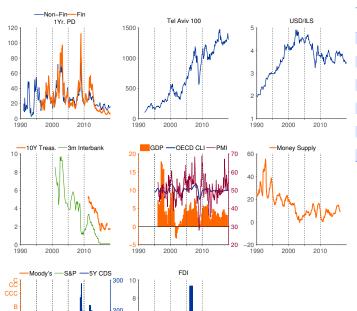
India		20)17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	34.46	33.19	33.74	29.08	33.19
1Yr. PD, Fin.	0.74	0.57	0.65	0.46	0.51
SENSEX	29621	30922	31284	34057	32969
USD/INR	64.85	64.58	65.28	63.87	65.18
3m Treas. Yield (%)	5.78	6.29	6.08	6.20	6.11
10Y Treas. Yield (%)	6.68	6.51	6.66	7.33	7.40
3m Interbank (%)	6.14	6.47	6.38	6.42	-
OECD CLI	99.27	99.44	99.77	100.17	100.45*
PMI	52.5	50.9	51.2	54.7	51.0
PPI (YoY%)	5.1	0.9	2.6	-	-
Money Supply (YoY%)	6.9	7.4	6.0	10.5	9.6
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-



Indonesia		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	24.37	28.74	26.49	24.67	22.15			
1Yr. PD, Fin.	18.66	17.61	18.31	18.13	17.37			
Jakarta Composite	5568	5830	5901	6356	6189			
USD/IDR	13322.00	13348.00	13472.00	13555.00	13728.00			
10Y Treas. Yield (%)	7.04	6.83	6.50	6.32	6.67			
3m Interbank (%)	6.87	7.01	5.20	5.48	5.36			
GDP (YoY%)	5.1	5.0	5.1	5.1	-			
OECD CLI	100.25	100.98	101.02	100.13	99.42*			
PMI	50.5	49.5	50.4	49.3	50.7			
PPI (YoY%)	6.8	2.5	0.5	1.3	1.6			
Money Supply (YoY%)	10.0	10.3	10.9	8.3	8.3*			
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2			
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-			
5Y CDS (bps)	127.55	117.41	104.39	85.25	102.01			

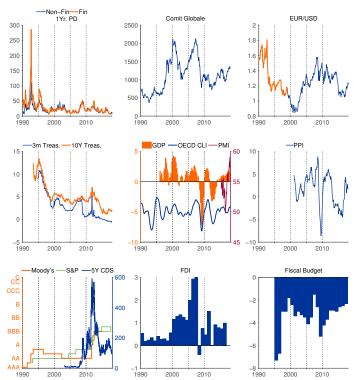


Ireland		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	10.35	7.18	5.41	5.12	4.33
1Yr. PD, Fin.	1.91	1.16	0.58	0.30	0.98
ISEQ	6659	6828	6882	7038	6594
EUR/USD	1.07	1.14	1.18	1.20	1.23
10Y Treas. Yield (%)	1.00	0.90	0.74	0.67	0.91
GDP (YoY%)	5.8	6.8	10.9	7.8	-
OECD CLI	101.20	101.10	100.59	100.12	99.81*
PMI	53.6	56.0	55.4	59.1	54.1
PPI (YoY%)	0.4	-0.8	0.5	-1.9	-1.6
Sov. Rating, Moody's	A2	A2	A2	A2	A2
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	50.86	39.71*	31.72*	25.25*	19.99
Fiscal Budget (%GDP)	-	-	-	-0.30	-

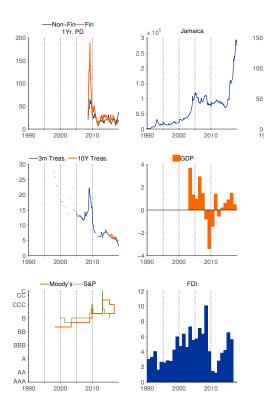


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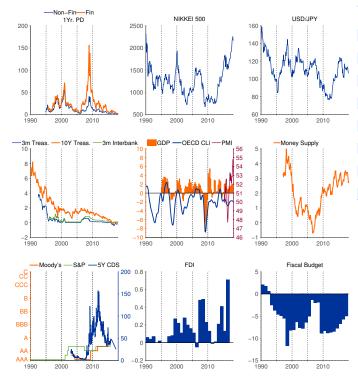
Israel		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	11.16	13.14	16.26	15.37	15.75
1Yr. PD, Fin.	5.93	7.90	8.36	7.73	6.97
Tel Aviv 100	1252	1289	1292	1364	1310
USD/ILS	3.62	3.50	3.54	3.48	3.49
10Y Treas. Yield (%)	2.36	2.13*	1.76	1.70	1.65
3m Interbank (%)	0.10	0.10	0.10	0.10	0.10
GDP (YoY%)	3.8	3.1	3.2	3.0	-
OECD CLI	100.02	99.83	99.86	100.29	100.44*
PMI	54.8	50.3	57.2	53.4	54.7
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	A+	A+	A+	A+	A+



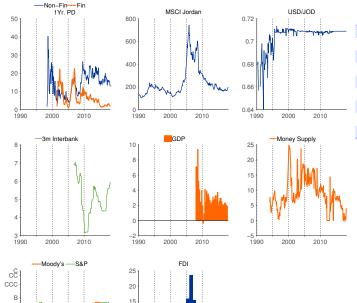
Italy		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.47	8.80	8.71	12.37	11.64
1Yr. PD, Fin.	8.58	7.46	7.23	7.89	7.96
Comit Globale	1208	1219	1319	1297	1308
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.33	-0.38	-0.41	-0.60	-0.43
10Y Treas. Yield (%)	2.32	2.16	2.11	2.02	1.79
GDP (YoY%)	1.3	1.6	1.8	1.6	-
OECD CLI	99.84	100.06	100.56	100.80	100.67*
PMI	55.7	55.2	56.3	57.4	55.1
PPI (YoY%)	3.3	2.5	1.6	2.2	1.8*
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2
Sov. Rating, S&P	BBB	BBB	BBB	BBB	BBB
5Y CDS (bps)	170.09	145.62	138.29	117.37	102.31
Fiscal Budget (%GDP)	-	-	-	-2.30	-



Jamaica		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.04	18.12	21.94	29.06	35.31
1Yr. PD, Fin.	7.95	10.35	11.01	15.99	17.16
Jamaica	223834	235043	262729	288382	294533
JMD/USD	128.13	128.34	129.55	124.58	126.22
3m Treas. Yield (%)	6.13	5.77	4.98	4.18	2.98
10Y Treas. Yield (%)	5.38	5.00	4.78	4.96	5.20
GDP (YoY%)	-	-	-	0.5	-
Sov. Rating, Moody's	B3	B3	B3	B3	B3
Sov. Rating, S&P	В	В	В	В	В



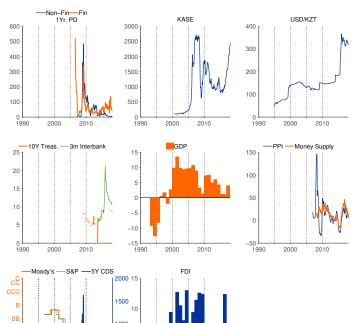
					2018			
Japan		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	1.52	1.16	0.70	0.64	1.07			
1Yr. PD, Fin.	5.40	3.86	2.45	1.96	2.69			
NIKKEI 500	1760	1910	2007	2208	2165			
USD/JPY	111.39	112.39	112.51	112.69	106.28			
3m Treas. Yield (%)	-0.20	-0.09	-0.17	-0.16	-0.16			
10Y Treas. Yield (%)	0.07	0.09	0.07	0.05	0.05			
3m Interbank (%)	0.06	0.06	0.06	0.07	0.07			
GDP (YoY%)	1.3	1.6	1.9	2.1	_			
OECD CLI	100.07	100.13	100.13	100.10	100.03*			
PMI	52.4	52.4	52.9	54.0	53.1			
Money Supply (YoY%)	3.50	3.30	3.40	3.10	2.80			
Sov. Rating, Moody's	A1	A1	A1	A1	A1			
Sov. Rating, S&P	A+	A+	A+	A+	A+			
5Y CDS (bps)	-	-	25.17*	-	-			
Fiscal Budget (%GDP)	-	-	-	-4.98	-			



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AA AAA 1990

Jordan		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	14.18	15.06	16.20	15.60	12.73
1Yr. PD, Fin.	1.72	2.57	3.30	2.14	1.80
MSCI Jordan	182	172	167	179	199
USD/JOD	0.71	0.71	0.71	0.71	0.71
3m Interbank (%)	5.32	5.59	5.59	5.76	5.95
GDP (YoY%)	2.3	2.3	2.0	1.9	_
Money Supply (YoY%)	-0.16	2.38	-0.31	0.25	4.09*
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	B+	B+	B+	B+	B+



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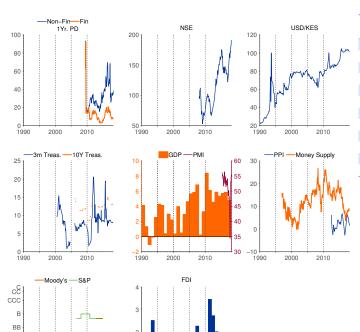
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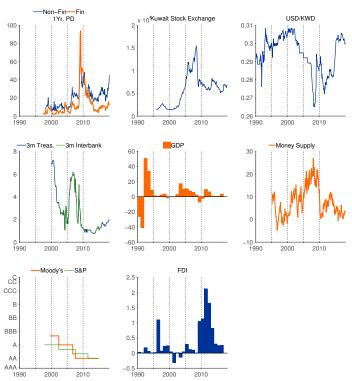
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Kazakhstan		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.61	4.62	5.44	3.23	2.21
1Yr. PD, Fin.	73.62	78.54	135.56	56.53	41.35
KASE	1554	1660	2049	2163	2437
USD/KZT	313.65	322.18	340.68	332.85	318.73
10Y Treas. Yield (%)	9.40	-	-	8.97*	8.52
3m Interbank (%)	12.00	11.50	11.25	11.25	10.50
GDP (YoY%)	-	-	-	4.0	-
PPI (YoY%)	26.7	9.6	9.5	17.6	13.5
Money Supply (YoY%)	30.89	27.57	26.15	7.54	4.90
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-

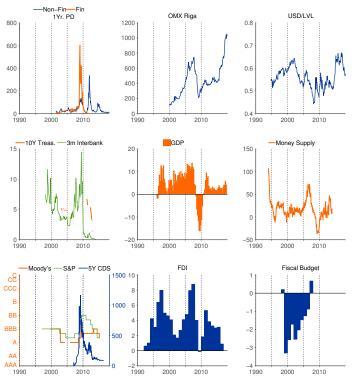


Kenya		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	68.47	25.65	34.92	33.06	35.87			
1Yr. PD, Fin.	14.58	9.80	7.77	9.15	7.58			
NSE	131	153	162	171	191			
USD/KES	102.95	103.75	103.10	103.18	101.25			
3m Treas. Yield (%)	8.76	8.28	8.13	8.08	8.00			
10Y Treas. Yield (%)	-	-	13.07	13.09	12.91			
GDP (YoY%)	-	-	-	4.8	-			
PMI	48.5	47.3	40.9	53.0	55.7			
PPI (YoY%)	3.4	6.4	5.4	3.2	1.5			
Money Supply (YoY%)	6.41	6.03	7.71	8.91	8.00*			
Sov. Rating, Moody's	B1	B1	B1	B1	B1			
Sov. Rating, S&P	B+	B+	B+	B+	B+			
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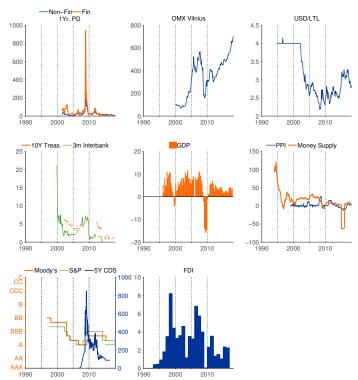
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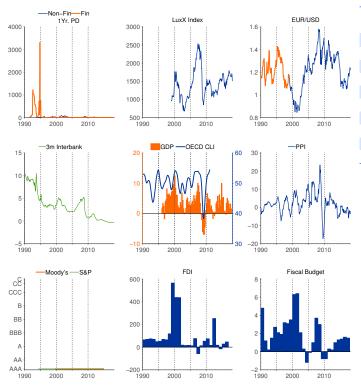
Kuwait		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	22.38	23.53	30.95	32.45	44.87
1Yr. PD, Fin.	8.95	9.58	10.48	15.73	13.54
Kuwait Stock Exchange	7029	6763	6680	6408	6633
USD/KWD	0.30	0.30	0.30	0.30	0.30
3m Treas. Yield (%)	1.56	1.75	1.75	1.88	2.00
Money Supply (YoY%)	0.66	0.31	2.38	3.81	3.37*
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	AA	AA	AA	AA	AA



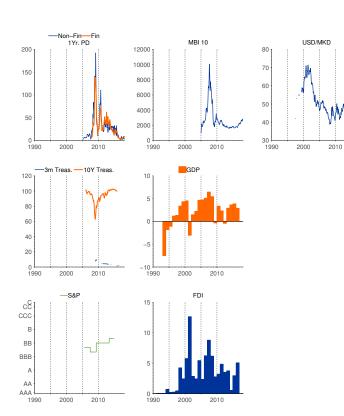
Latvia		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	11.12	8.69	7.65	14.13	10.32		
OMX Riga	770	970	999	996	1046		
USD/LVL	0.66	0.62	0.59	0.59	0.57		
GDP (YoY%)	4.1	4.0	5.8	4.2	_		
Sov. Rating, Moody's	A3	A3	АЗ	A3	A3		
Sov. Rating, S&P	A-	A-	A-	A-	A-		



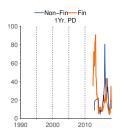
Lithuania		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.84	8.37	8.69	9.03	9.01
1Yr. PD, Fin.	1.19	1.03	0.48	0.56	0.57
OMX Vilnius	565	597	642	653	702
USD/LTL	3.24	3.02	2.92	2.88	2.80
10Y Treas. Yield (%)	-	1.15	1.18*	1.10*	1.16*
GDP (YoY%)	4.1	4.1	3.2	3.9	_
PPI (YoY%)	8.2	1.3	3.9	3.5	1.1
Money Supply (YoY%)	8.00	8.00	7.50	5.90	6.80*
Sov. Rating, Moody's	A3	АЗ	A3	A3	A3
Sov. Rating, S&P	Α	Α	Α	Α	Α

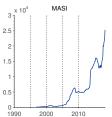


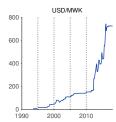
Luxembourg		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.38	8.12	5.32	7.25	5.84
1Yr. PD, Fin.	1.14	1.40	1.56	1.72	1.14
LuxX Index	1795	1711	1652	1638	1506
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Interbank (%)	-0.33	-0.33	-0.33	-0.33	-0.33
GDP (YoY%)	3.2	1.4	3.1	1.6	_
PPI (YoY%)	0.2	-1.8	-3.1	-1.9	-2.0*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
Fiscal Budget (%GDP)	_	-	-	1.50	-



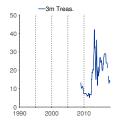
Macedonia	2017				2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.60	3.60	3.12	5.55	3.30
1Yr. PD, Fin.	3.88	5.30	7.00	8.73	8.37
MBI 10	2251	2282	2689	2539	2766
USD/MKD	57.78	53.84	52.08	51.25	50.01
GDP (YoY%)	_	-	-	0.0	_
Sov. Rating, S&P	BB-	BB-	BB-	BB-	BB-

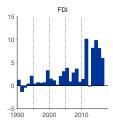


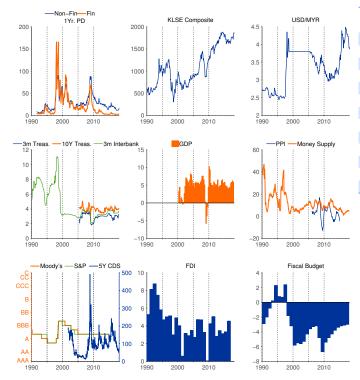




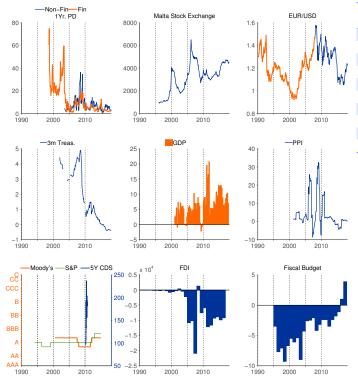
Malawi		2017				
	Q1	Q2	Q3	Q4	Q1	
1Yr. PD, Non-Fin. (bps)	24.81	11.36	12.19	20.45	11.12	
1Yr. PD, Fin.	-	-	12.17	19.73	18.42	
MASI	14578	15773	19920	21598	25287	
USD/MWK	725.23	725.19	725.50	725.52	726.50	
3m Treas. Yield (%)	23.93	21.30*	14.50	14.50	14.00	





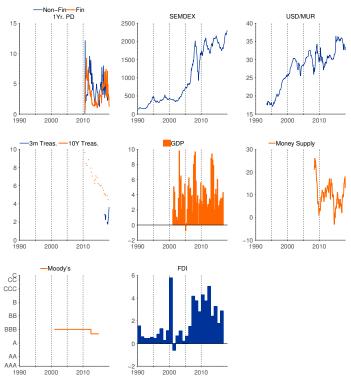


Malaysia	2017				2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.43	11.34	11.80	11.75	16.29
1Yr. PD, Fin.	1.91	2.16	2.33	2.29	3.29
KLSE Composite	1740	1764	1756	1797	1863
USD/MYR	4.43	4.29	4.22	4.05	3.86
3m Treas. Yield (%)	3.15	3.07	2.93	2.86	3.19
10Y Treas. Yield (%)	4.15	3.93	3.93	3.91	3.95
3m Interbank (%)	3.43	3.43	3.43	3.44	3.69
GDP (YoY%)	5.6	5.8	6.2	5.9	_
Money Supply (YoY%)	4.50	4.30	5.00	4.70	4.90*
Sov. Rating, Moody's	A3	А3	А3	А3	А3
Sov. Rating, S&P	A-	A-	A-	A-	A-
5Y CDS (bps)	105.21	85.45	68.99	58.37	73.09
Fiscal Budget (%GDP)	-	-	-	-3.00	-

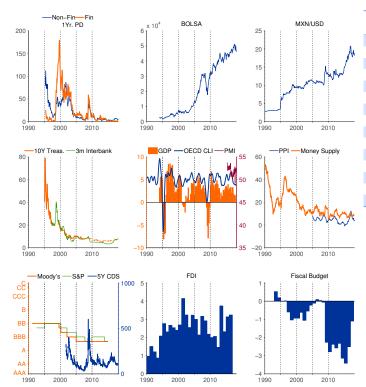


Malta		2017			
	Q1	Q2	Q3	Q4	2018 Q1
1Yr. PD, Non-Fin. (bps)	6.42	4.21	3.88	3.51	3.33
1Yr. PD, Fin.	2.09	1.97	2.13	2.93	2.64
Malta Stock Exchange	4718	4697	4694	4509	4474
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.35	-0.34	-0.36	-0.38	-0.35
GDP (YoY%)	8.7	10.0	10.4	7.0	-
PPI (YoY%)	0.6	0.6	0.8	0.6	-0.1*
Sov. Rating, Moody's	A3	А3	А3	A3	A3
Sov. Rating, S&P	BBB+	BBB+	BBB+	BBB+	BBB+
Fiscal Budget (%GDP)	_	-	_	3.90	_

2010



Mauritius	2017				2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.60	4.43	3.15	3.31	2.33
1Yr. PD, Fin.	7.40	2.78	2.87	2.53	1.23
SEMDEX	1933	2123	2230	2202	2288
USD/MUR	35.82	34.48	33.92	33.57	33.45
3m Treas. Yield (%)	2.50	-	1.76	2.45	3.64
10Y Treas. Yield (%)	4.95*	-	4.89*	4.47*	-
Money Supply (YoY%)	9.00	9.00	15.00	16.00	13.00*
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1



Mexico		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.12	6.99	6.52	4.22	4.36
1Yr. PD, Fin.	0.99	0.85	0.81	1.87	1.19
BOLSA	48542	49857	50346	49354	46125
MXN/USD	18.72	18.12	18.25	19.66	18.18
10Y Treas. Yield (%)	7.40	6.97	6.79	7.53	7.64*
3m Interbank (%)	6.93	7.40	7.38	7.67	7.87
GDP (YoY%)	3.2	1.9	1.5	1.5	-
OECD CLI	99.30	99.05	98.91	98.87	98.64*
PMI	51.5	52.3	52.8	51.7	52.4
PPI (YoY%)	10.7	6.5	5.0	5.2	4.4
Money Supply (YoY%)	9.10	7.80	8.60	9.40	8.10*
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1
Sov. Rating, S&P	BBB+	BBB+	BBB+	BBB+	BBB+
5Y CDS (bps)	130.28	112.63	110.31	106.11	109.35
Fiscal Budget (%GDP)	-	-	-	-1.10	-

BBB

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2010

2000

2010

2018

11.50

10.26

27191

9.20

5.10*

Ba1

BBB-

Q1

Q4

17.03

10.52

25864

9.33

4.1

5.50

Ba1

BBB-

2017

Q3

13.20

10.21

25358

9.42

3.8

5.40

Ba1

BBB-

Q2

12.81

10.28

25205

9.64

4.2

4.70

Ba1

BBB-

Q1

13.80

6.68

23883

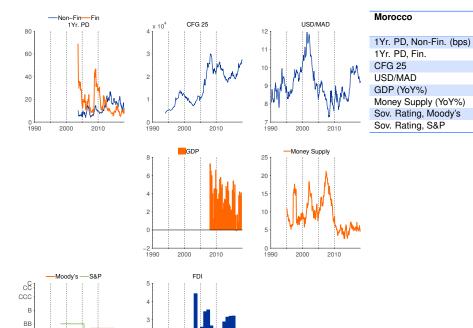
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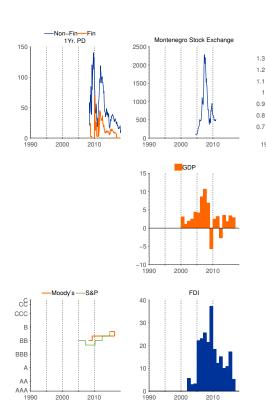
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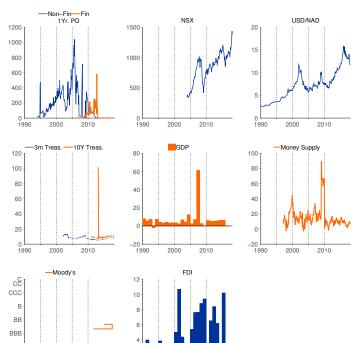
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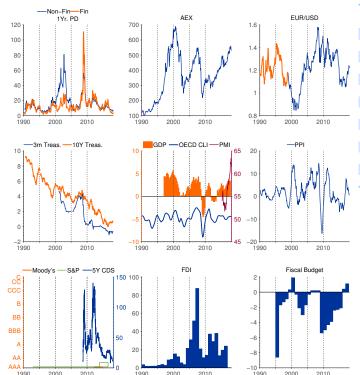




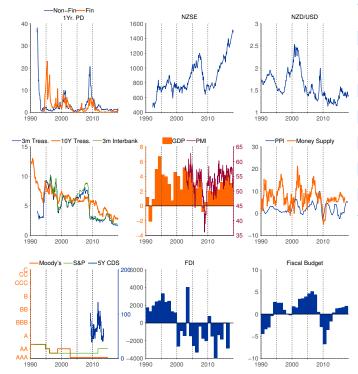
Montenegro		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	20.23	15.08	15.68	18.07	8.58
1Yr. PD, Fin.	0.00	0.00	0.00	0.00	_
EUR/USD	0.94	0.88	0.85	0.83	0.81
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	B+	B+	B+	B+	B+



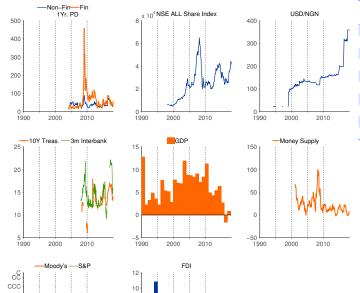
Namibia		2017				
	Q1	Q2	Q3	Q4	Q1	
1Yr. PD, Non-Fin. (bps)	0.28	0.37	0.28	3.74	4.13	
1Yr. PD, Fin.	0.04	0.00	0.00	0.00	0.01	
NSX	1067	1014	1128	1300	1378	
USD/NAD	13.41	13.07	13.56	12.38	11.84	
3m Treas. Yield (%)	8.87	7.74	7.52	7.70	7.87	
10Y Treas. Yield (%)	10.41	10.49	10.43*	11.07	9.75	
Money Supply (YoY%)	1.54	6.63	9.23	9.53	6.50*	
Sov. Rating, Moody's	Ba1	Ba1	Ba1	Ba1	Ba1	



Netherlands		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.29	8.01	7.55	6.78	7.00
1Yr. PD, Fin.	6.24	4.83	4.77	2.42	4.07
AEX	517	507	537	545	530
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.78	-0.64	-0.71	-0.84	-0.62
10Y Treas. Yield (%)	0.58	0.66	0.58	0.53	0.64
GDP (YoY%)	2.7	3.8	3.3	3.4	-
OECD CLI	100.43	100.50	100.54	100.59	100.53*
PMI	57.8	58.6	60.0	62.2	61.5
PPI (YoY%)	7.0	2.9	3.9	1.8	0.4*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	21.31	19.54	17.21	13.27	11.11
Fiscal Budget (%GDP)	-	-	-	1.10	-



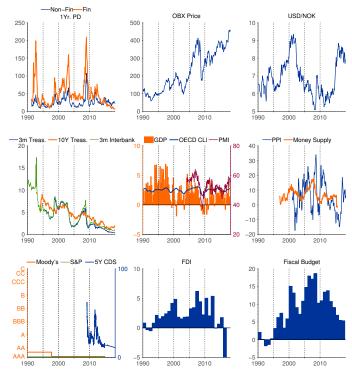
Q1	Q2			2018
	QZ	Q3	Q4	Q1
1.34	1.45	1.25	0.85	1.47
0.31	0.16	0.45	0.24	0.85
322	1392	1429	1511	1482
1.43	1.36	1.39	1.41	1.38
1.77	1.84	1.77	1.60	1.65
3.19	2.98	2.97	2.72	2.72
2.00	1.99	1.96	1.88	1.96
-	_	-	3.0	_
57.9	56.1	57.8	51.2	52.2
4.1	5.2	5.3	4.7	_
.40*	-	-	-	-
Aaa	Aaa	Aaa	Aaa	Aaa
AA	AA	AA	AA	AA
_	_	_	1.79	_
	0.31 322 1.43 1.77 3.19 2.00 - 57.9 4.1 6.40* Aaa	0.31 0.16 322 1392 1.43 1.36 1.77 1.84 3.19 2.98 2.00 1.99 57.9 56.1 4.1 5.2 4.40* - Aaa Aaa	0.31	0.31



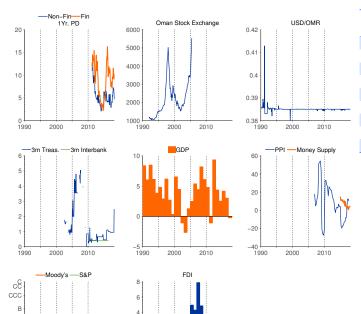
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	2018			
Q1	Q2	Q3	Q4	Q1
54.48	48.24	50.79	31.27	36.60
46.03	34.76	50.69	32.23	57.65
25516	33117	35440	38243	41505
314.29	322.25	358.99	359.99	360.00
16.29	16.19	15.90	13.21	13.60
20.93	21.61	21.21	15.39	16.01
-	-	-	0.8	-
8.96	-0.44	-0.27	1.74	8.14*
B2	B2	B2	B2	B2
B+	B+	B+	B+	B+
	46.03 25516 314.29 16.29 20.93 - 8.96 B2	Q1 Q2 54.48 48.24 46.03 34.76 25516 33117 314.29 322.25 16.29 16.19 20.93 21.61 — — 8.96 -0.44 B2 B2	54.48 48.24 50.79 46.03 34.76 50.69 25516 33117 35440 314.29 322.25 358.99 16.29 16.19 15.90 20.93 21.61 21.21 - - - 8.96 -0.44 -0.27 B2 B2 B2	Q1 Q2 Q3 Q4 54.48 48.24 50.79 31.27 46.03 34.76 50.69 32.23 25516 33117 35440 38243 314.29 322.25 358.99 359.99 16.29 16.19 15.91 13.21 20.93 21.61 21.21 15.39 - - 0.8 8.96 -0.44 -0.27 1.74 B2 B2 B2



Norway		20	17	2017				
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	19.54	25.53	26.03	23.81	22.50			
1Yr. PD, Fin.	10.00	11.59	8.78	7.12	7.72			
OBX Price	396	390	444	456	451			
USD/NOK	8.60	8.35	7.96	8.20	7.84			
3m Treas. Yield (%)	0.41	0.35	0.36	0.35	0.50			
10Y Treas. Yield (%)	1.64	1.65	1.59	1.59	1.85			
3m Interbank (%)	0.97	0.83	0.81	0.81	1.17			
GDP (YoY%)	0.7	2.0	3.6	1.4	-			
OECD CLI	100.31	100.30	100.54	100.94	101.04*			
PMI	55.3	55.9	52.0	58.0	55.0			
PPI (YoY%)	16.1	3.2	8.7	7.3	6.4			
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa			
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA			
5Y CDS (bps)	-	-	-	-	10.71			
Fiscal Budget (%GDP)	-	-	-	5.37	-			

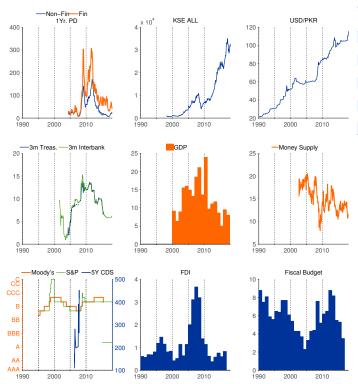


BB BBB

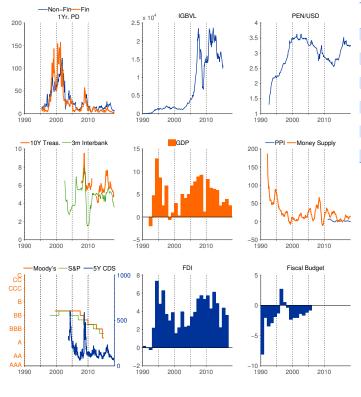
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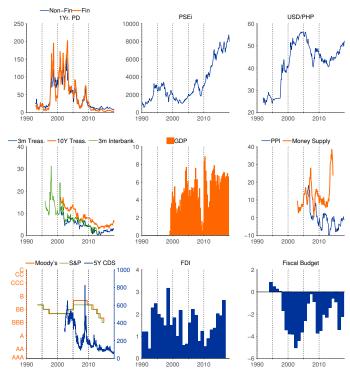
Oman		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.86	4.28	5.33	6.89	4.74
1Yr. PD, Fin.	8.02	7.74	9.34	11.30	9.11
USD/OMR	0.39	0.39	0.38	0.38	0.38
3m Treas. Yield (%)	0.95	0.95	0.95	0.95	2.48
GDP (YoY%)	_	_	-	-0.3	-
PPI (YoY%)	12.4	12.5	10.2	_	_
Money Supply (YoY%)	3.06	3.77	3.66	4.18	3.53*
Sov. Rating, Moody's	Baa3	Baa3	Baa3	Baa3	Baa3
Sov. Rating, S&P	BB	BB	BB	BB	BB



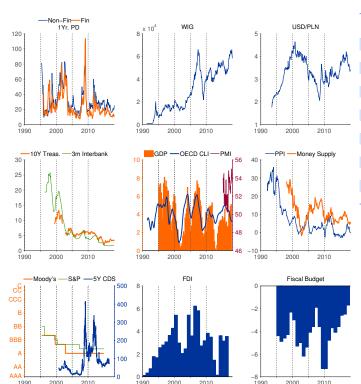
Pakistan		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.45	12.40	18.33	24.32	22.58
1Yr. PD, Fin.	31.59	40.55	48.81	62.34	42.01
KSE ALL	32985	32494	30396	29774	32727
USD/PKR	104.85	104.91	105.42	110.45	115.58
3m Interbank (%)	5.87	5.89	5.90	5.91	6.25
GDP (YoY%)	-	-	-	8.0	-
Money Supply (YoY%)	13.60	13.70	12.70	10.70	11.30*
Sov. Rating, Moody's	B3	B3	B3	B3	B3
Sov. Rating, S&P	A-	A-	A-	A-	A-



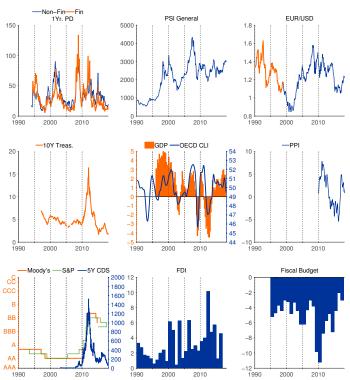
Peru		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	15.10	10.97	7.33	5.95	5.42
1Yr. PD, Fin.	4.27	3.25	2.30	2.23	1.96
PEN/USD	3.25	3.25	3.27	3.24	3.23
10Y Treas. Yield (%)	5.77	5.54	5.29	5.17	4.83
3m Interbank (%)	5.20	5.05	4.68	4.16	3.55
GDP (YoY%)	_	_	_	2.5	_
PPI (YoY%)	1.8	1.4	0.8	-0.6	0.3
Money Supply (YoY%)	14.50	12.50	10.30	13.00	13.00
Sov. Rating, Moody's	A3	A3	A3	A3	A3
Sov. Rating, S&P	BBB+	BBB+	BBB+	BBB+	BBB+
5Y CDS (bps)	102.15	85.54	83.23	71.96	81.63



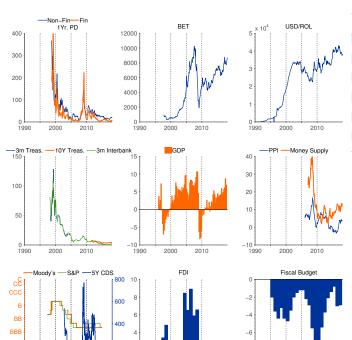
Philippines			2018		
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	10.37	9.19	8.23	7.97	8.31
1Yr. PD, Fin.	4.28	2.66	2.75	3.05	4.52
PSEi	7312	7843	8171	8558	7980
USD/PHP	50.20	50.47	50.87	49.85	52.20
3m Treas. Yield (%)	2.96	2.81	2.02	2.50	3.09
10Y Treas. Yield (%)	5.08	5.06	4.61	5.70	6.00
GDP (YoY%)	6.4	6.7	7.0	6.6	-
PPI (YoY%)	-0.4	-2.0	-0.7	-1.2	-1.1*
Sov. Rating, Moody's	Baa2	Baa2	Baa2	Baa2	Baa2
Sov. Rating, S&P	BBB	BBB	BBB	BBB	BBB
5Y CDS (bps)	81.80	77.37	65.14	67.28	74.09
Fiscal Budget (%GDP)	-	-	-	-2.22	-



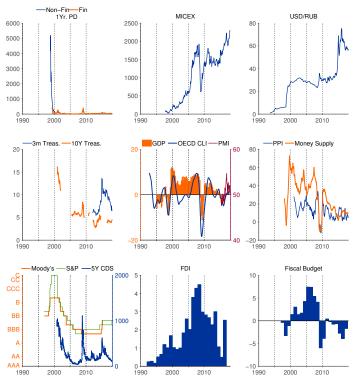
Poland		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	17.29	16.11	19.68	20.98	24.85
1Yr. PD, Fin.	10.70	10.60	12.82	13.89	11.81
WIG	57911	61018	64290	63746	58377
USD/PLN	3.97	3.70	3.65	3.48	3.42
10Y Treas. Yield (%)	3.49	3.32	3.37	3.30	3.17
3m Interbank (%)	1.63	1.63	1.63	1.62	1.60
GDP (YoY%)	4.1	4.0	4.9	5.1	-
OECD CLI	100.30	99.78	99.42	99.24	99.20*
PMI	53.5	53.1	53.7	55.0	53.7
PPI (YoY%)	4.8	1.8	3.2	0.3	0.3
Money Supply (YoY%)	7.80	5.00	5.40	4.60	5.80
Sov. Rating, Moody's	A2	A2	A2	A2	A2
Sov. Rating, S&P	A-	A-	A-	A-	A-
Fiscal Budget (%GDP)	_	_	_	-1.70	_



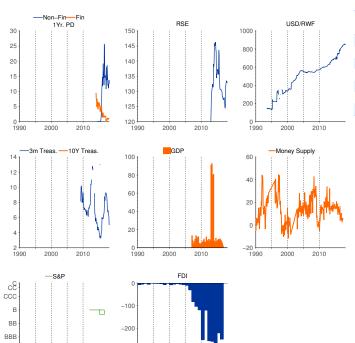
Portugal		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	22.78	16.98	17.58	15.41	19.86
1Yr. PD, Fin.	11.12	11.58	11.06	12.80	14.80
PSI General	2725	2826	2996	2970	3008
EUR/USD	1.07	1.14	1.18	1.20	1.23
10Y Treas. Yield (%)	3.98	3.03	2.39	1.94	1.61
GDP (YoY%)	2.9	3.0	2.4	2.4	-
OECD CLI	100.23	100.89	100.94	100.06	99.46*
PPI (YoY%)	4.9	2.7	2.7	2.2	0.8
Sov. Rating, Moody's	Ba1	Ba1	Ba1	Ba1	Ba1
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-
5Y CDS (bps)	238.70	196.40	127.88	80.64	63.21
Fiscal Budget (%GDP)	-	-	-	-3.00	_



Romania		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	12.60	14.92	18.15	21.11	20.65		
1Yr. PD, Fin.	3.55	2.91	6.24	4.99	4.41		
BET	8069	7855	7878	7754	8714		
USD/ROL	42751.51	39947.20	38894.02	38970.50	37768.50		
10Y Treas. Yield (%)	3.86	3.92	4.09	4.31	4.46		
3m Interbank (%)	0.66	0.65	1.35	1.86	1.90		
GDP (YoY%)	5.7	6.1	8.8	6.9	-		
PPI (YoY%)	3.8	2.1	4.3	3.4	3.9*		
Money Supply (YoY%)	12.06	8.85	12.20	11.61	13.37*		
Sov. Rating, Moody's	Baa3	Baa3	Baa3	Baa3	Baa3		
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-		
Fiscal Budget (%GDP)	-	-	-	-2.90	-		



Russia		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	40.22	55.49	53.57	46.70	38.66		
1Yr. PD, Fin.	25.07	31.77	32.34	30.88	23.37		
MICEX	1996	1880	2077	2110	2286		
USD/RUB	56.26	58.94	57.49	57.63	57.13		
3m Treas. Yield (%)	9.50	8.46	7.81	6.55	6.39		
10Y Treas. Yield (%)	4.17	4.28	4.04	3.87	4.53		
GDP (YoY%)	0.5	2.5	1.8	-	-		
OECD CLI	100.37	100.21	100.44	100.90	101.06*		
PMI	52.4	50.3	51.9	52.0	50.6		
PPI (YoY%)	11.3	2.9	6.8	8.4	4.8		
Money Supply (YoY%)	11.10	10.50	9.50	10.50	9.30*		
Sov. Rating, Moody's	Ba1	Ba1	Ba1	Ba1	Ba1		
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-		
5Y CDS (bps)	166.70	169.23	142.08	127.58	123.53		
Fiscal Budget (%GDP)	-	-	-	-1.72	-		

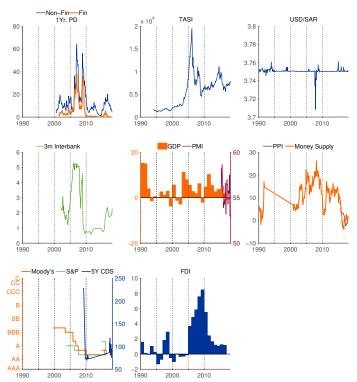


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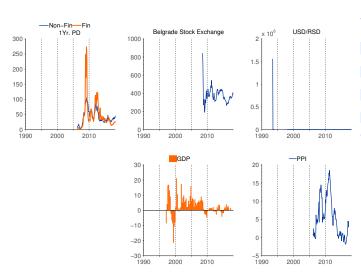
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Rwanda		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	10.82	13.83	13.83	11.08	12.61		
1Yr. PD, Fin.	0.33	0.52	1.01	0.83	1.17		
RSE	128	125	132	133	133		
USD/RWF	825.00	841.15	846.30	854.00	855.00		
3m Treas. Yield (%)	9.23	8.72	6.91	6.59	4.99		
Money Supply (YoY%)	5.90	6.30*	_	_	_		
Sov. Rating, S&P	В	В	В	В	В		

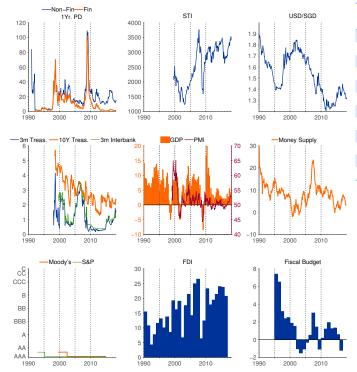


Saudi Arabia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.07	9.78	6.49	6.04	4.35
1Yr. PD, Fin.	0.32	0.27	0.10	0.04	0.02
TASI	7002	7426	7283	7226	7871
USD/SAR	3.75	3.75	3.75	3.75	3.75
3m Interbank (%)	1.74	1.78	1.79	1.90	2.27
GDP (YoY%)	_	-	_	-0.7	_
PMI	56.4	54.3	55.5	57.3	52.8
PPI (YoY%)	-2.4	-2.0	-1.1	0.4	_
Money Supply (YoY%)	0.00	2.60	1.00	0.20	2.00*
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	A-	A-	A-	A-	A-
5Y CDS (bps)	_	118.18	85.54	91.94	84.56

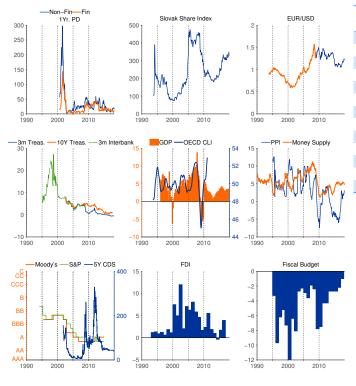


Serbia		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	33.00	34.77	34.74	35.83	45.30
1Yr. PD, Fin.	16.55	17.08	21.28	24.23	26.80
Belgrade Stock Exchange	368	344	349	380	395
USD/RSD	115.97	105.39	100.87	98.49	95.91
GDP (YoY%)	1.2	1.3	-	-	-
PPI (YoY%)	2.9	4.5*	-	-	-
Sov. Rating, Moody's	Ba3	Ba3	Ba3	Ba3	Ba3
Sov. Rating, S&P	BB	BB	BB	BB	BB

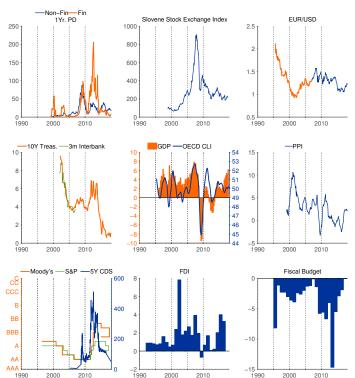
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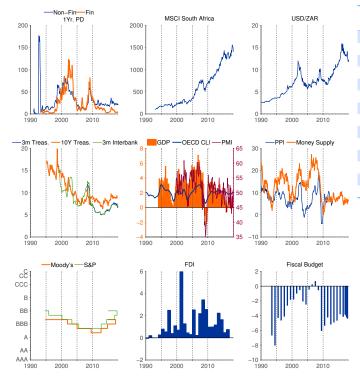
Singapore		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	15.82	14.60	14.48	12.71	14.97
1Yr. PD, Fin.	1.25	1.06	0.88	0.95	1.30
STI	3175	3226	3220	3403	3428
USD/SGD	1.40	1.38	1.36	1.34	1.31
3m Treas. Yield (%)	0.93	0.98	1.19	1.79	1.63
10Y Treas. Yield (%)	2.25	2.09	2.15	2.00	2.29
3m Interbank (%)	0.95	1.00	1.12	1.50	1.45
GDP (YoY%)	2.5	2.8	5.5	3.6	4.3
PMI	51.2	50.9	52.0	52.8	53.0
Money Supply (YoY%)	7.20	7.00	5.30	3.20	3.60*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA



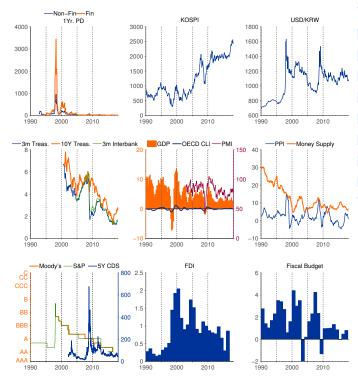
Slovakia		20)17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.88	11.79	19.04	17.77	16.84
1Yr. PD, Fin.	10.79	8.30	10.50	4.71	11.40
Slovak Share Index	305	329	317	326	330
EUR/USD	1.07	1.14	1.18	1.20	1.23
3m Treas. Yield (%)	-0.59	-0.52	-0.47	-0.64	-0.57
10Y Treas. Yield (%)	1.09	1.02	0.86	0.82*	_
GDP (YoY%)	3.1	3.4	3.5	3.5	_
PPI (YoY%)	3.0	1.4	2.1	2.0	3.1*
Money Supply (YoY%)	5.10	5.30	5.50	5.20	4.70*
Sov. Rating, Moody's	A2	A2	A2	A2	A2
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	-	43.46	-	43.76*	37.90
Fiscal Budget (%GDP)	_	-	-	-1.00	_



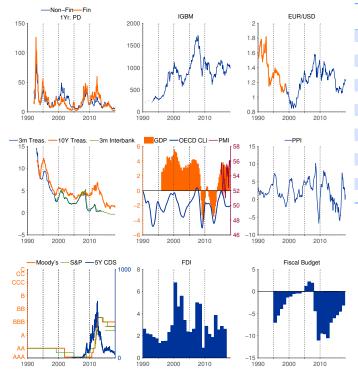
Slovenia		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	18.66	22.55	24.33	20.23	19.18
1Yr. PD, Fin.	9.98	5.42	3.60	3.98	7.49
Slovene Stock Exchange Index	196	218	218	214*	-
EUR/USD	1.07	1.14	1.18	1.20	1.23
10Y Treas. Yield (%)	0.99	0.86	0.98	0.69	1.14*
GDP (YoY%)	4.9	5.4	5.1	6.2	-
OECD CLI	100.12	100.04	100.03	100.23	100.07
PPI (YoY%)	1.9	2.2	2.3	2.2	2.2
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	-	-	65.87	-	49.88
Fiscal Budget (%GDP)	-	-	-	0.00	_



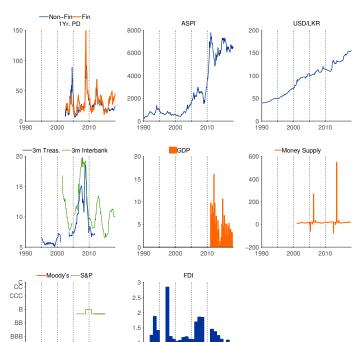
South Africa		20)17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	22.14	22.17	23.47	21.01	20.73
1Yr. PD, Fin.	4.00	4.86	3.22	4.17	4.42
MSCI South Africa	1295	1305	1386	1537	1402
USD/ZAR	13.41	13.07	13.56	12.38	11.84
3m Treas. Yield (%)	7.42	7.58	7.24	7.10	6.71
10Y Treas. Yield (%)	8.89	8.93	8.76	8.72	-
3m Interbank (%)	7.36	7.34	6.99	7.16	6.87
GDP (YoY%)	1.0	1.3	8.0	1.5	_
OECD CLI	99.33	99.42	99.80	100.05	100.11*
PMI	52.2	46.7	44.9	44.9	46.9
Money Supply (YoY%)	5.59	6.09	7.13	6.42	6.89*
Sov. Rating, Moody's	Baa3	Baa3	Baa3	Baa3	Baa3
Sov. Rating, S&P	BB	BB	BB	BB	BB
Fiscal Budget (%GDP)	-3.82	-3.95	-4.21	-4.38	_



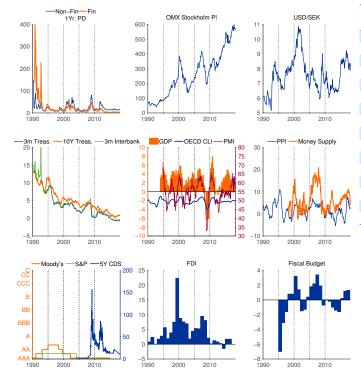
South Korea		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.04	3.82	4.08	3.23	3.24
1Yr. PD, Fin.	12.65	8.35	11.08	12.79	13.23
KOSPI	2160	2392	2394	2467	2446
USD/KRW	1118.45	1144.14	1145.44	1067.40	1063.63
3m Treas. Yield (%)	1.30	1.30	1.28	1.51	1.52
10Y Treas. Yield (%)	2.19	2.21	2.37	2.47	2.62
3m Interbank (%)	1.42	1.38	1.37	1.70	1.65
GDP (YoY%)	3.0	2.9	3.8	2.8	-
OECD CLI	100.87	100.83	100.45	99.97	99.76*
PMI	81.0	84.0	83.0	82.0	82.0
PPI (YoY%)	4.3	2.8	3.8	2.2	1.4
Money Supply (YoY%)	7.30	6.70	5.90	6.10	6.80*
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	AA	AA	AA	AA	AA
5Y CDS (bps)	50.77	52.68	73.94	52.23	54.92
Fiscal Budget (%GDP)	-	-	-	0.80	-



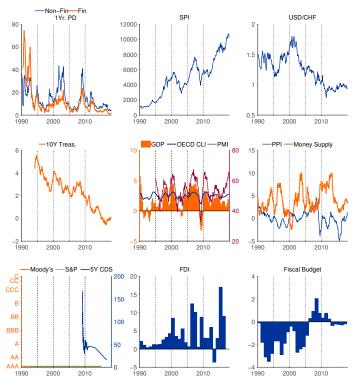
Spain		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	6.23	5.64	7.20	5.86	6.55		
1Yr. PD, Fin.	3.44	2.99	2.44	3.00	2.18		
IGBM	1055	1052	1048	1015	976		
EUR/USD	1.07	1.14	1.18	1.20	1.23		
10Y Treas. Yield (%)	1.67	1.54	1.60	1.57	1.16		
3m Interbank (%)	-0.33	-0.33	-0.33	-0.33	-0.32		
GDP (YoY%)	3.0	3.1	3.1	3.1	-		
OECD CLI	99.86	99.83	99.82	99.89	99.86*		
PMI	53.9	54.7	54.3	55.8	54.8		
PPI (YoY%)	5.8	3.2	3.5	1.7	1.3*		
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1		
Sov. Rating, S&P	A-	A-	A-	A-	A-		
5Y CDS (bps)	77.96	64.99	63.55	55.76	40.90		
Fiscal Budget (%GDP)	_	_	_	-3.10	_		



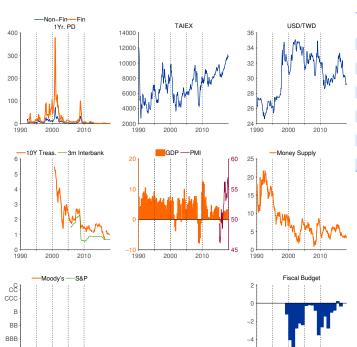
Sri Lanka		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	21.64	20.80	17.31	21.39	25.24			
1Yr. PD, Fin.	49.76	33.43	37.59	39.30	45.84			
ASPI	6062	6747	6438	6369	6477			
USD/LKR	152.13	153.36	153.08	153.50	155.70			
3m Interbank (%)	11.26	11.30	10.20	10.05	10.08			
GDP (YoY%)	3.8	4.0	3.3	3.2	-			
Money Supply (YoY%)	21.20	22.50	20.90	17.50	-			
Sov. Rating, Moody's	B1	B1	B1	B1	B1			
Sov. Rating, S&P	B+	B+	B+	B+	B+			



Sweden		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	14.13	13.52	11.62	14.80	18.19
1Yr. PD, Fin.	3.84	2.66	2.98	3.91	4.46
OMX Stockholm PI	563	577	586	569	560
USD/SEK	8.97	8.43	8.15	8.18	8.34
3m Treas. Yield (%)	-0.64	-0.70	-0.70	-0.73	-0.70
10Y Treas. Yield (%)	0.60	0.66	0.92	0.78	0.69
3m Interbank (%)	-0.44	-0.50	-0.47	-0.47	-0.36
GDP (YoY%)	1.9	2.6	2.9	3.3	_
OECD CLI	99.90	100.03	99.95	99.71	99.45*
PMI	65.3	62.3	63.7	60.4	55.9
PPI (YoY%)	6.5	4.9	4.3	2.2	2.8*
Money Supply (YoY%)	10.35	11.17	10.17	7.99	6.28*
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	-	-	-	-	10.55
Fiscal Budget (%GDP)	-	-	-	1.30	-



Switzerland		20	vitzerland 2017						
	Q1	Q2	Q3	Q4	Q1				
1Yr. PD, Non-Fin. (bps)	4.36	4.53	4.85	4.27	4.53				
1Yr. PD, Fin.	1.90	1.17	1.27	1.04	1.63				
SPI	9638	10128	10447	10752	10190				
USD/CHF	1.00	0.96	0.97	0.97	0.95				
10Y Treas. Yield (%)	-0.09	-0.02	-0.02	-0.15	0.03				
GDP (YoY%)	0.5	0.7	1.2	1.9	-				
OECD CLI	100.10	100.51	100.89	100.98	100.89*				
PMI	57.5	60.0	62.2	65.6	60.3				
PPI (YoY%)	0.5	-0.6	-0.1	0.5	1.1				
Money Supply (YoY%)	3.04	4.05	4.33	3.61	3.27				
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa				
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA				
Fiscal Budget (%GDP)	-	-	-	-0.19	-				



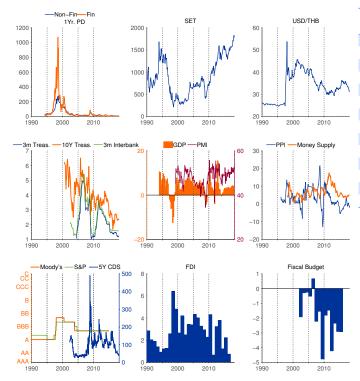
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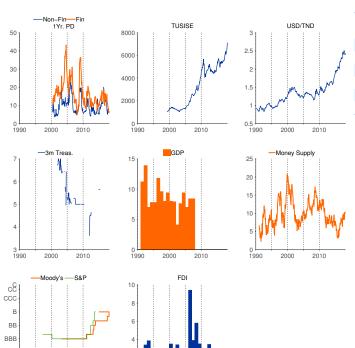
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Taiwan		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	0.50	0.37	0.50	0.41	0.47
1Yr. PD, Fin.	0.51	0.40	0.51	0.34	0.27
TAIEX	9812	10395	10384	10643	10919
USD/TWD	30.35	30.43	30.32	29.73	29.11
10Y Treas. Yield (%)	1.12	1.10	1.05	0.98	-
3m Interbank (%)	0.66	0.66	0.66	0.66	0.66
GDP (YoY%)	2.6	2.3	3.2	3.3	-
PMI	56.2	53.3	54.2	56.6	55.3
Money Supply (YoY%)	3.59	3.57	3.58	3.56	3.45
Sov. Rating, Moody's	Aa3	Aa3	Aa3	Aa3	Aa3
Sov. Rating, S&P	AA-	AA-	AA-	AA-	AA-

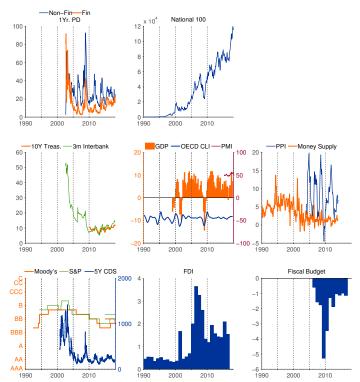


Thailand		20	17		2018
manana	- 01			04	
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.35	6.54	5.67	5.04	4.49
1Yr. PD, Fin.	2.48	1.87	1.54	1.31	0.84
SET	1575	1575	1673	1754	1776
USD/THB	34.35	33.93	33.31	32.57	31.18
3m Treas. Yield (%)	1.48	1.40	1.21	1.19	1.15
10Y Treas. Yield (%)	2.69	2.48	2.29	2.32	2.40
3m Interbank (%)	1.59	1.59	1.57	1.57	1.57
GDP (YoY%)	3.4	3.9	4.3	4.0	_
PMI	52.6	50.7	52.2	50.2	53.3
PPI (YoY%)	2.6	-1.2	0.5	-0.6	-1.4
Money Supply (YoY%)	3.25	4.31	4.89	5.01	5.05*
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1
Sov. Rating, S&P	BBB+	BBB+	BBB+	BBB+	BBB+
5Y CDS (bps)	54.24	61.88	50.47	45.00	47.06

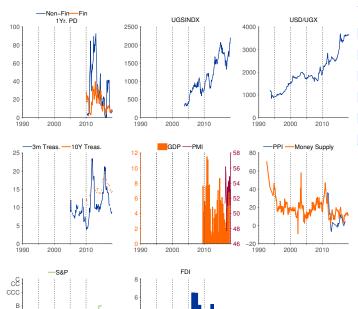


AA AAA 1990

Tunisia		2017					
	Q1	Q2	Q3	Q4	Q1		
1Yr. PD, Non-Fin. (bps)	13.50	7.65	5.50	8.14	6.05		
1Yr. PD, Fin.	13.04	16.14	9.82	7.24	6.08		
TUSISE	5543	6023	6181	6282	7143		
USD/TND	2.29	2.45	2.48	2.46	2.41		
Money Supply (YoY%)	6.37	9.22	9.99	10.32	10.28*		
Sov. Rating, Moody's	B2	B2	B2	B2	B2		



Turkey		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	27.54	22.35	23.09	22.34	23.68
1Yr. PD, Fin.	16.43	15.71	18.16	15.98	20.77
National 100	88947	100440	102908	115333	114930
10Y Treas. Yield (%)	10.65	10.27	10.68	11.35	12.27
3m Interbank (%)	12.41	13.02	13.12	14.96	13.98
GDP (YoY%)	5.4	5.4	11.3	7.3	_
OECD CLI	8.50	8.82	8.69	8.49	-
PMI	52.3	54.7	53.5	54.9	51.8
Sov. Rating, Moody's	Ba2	Ba2	Ba2	Ba2	Ba2
Sov. Rating, S&P	BB-	BB-	BB-	BB-	BB-
5Y CDS (bps)	239.28	194.72	187.51	164.79	195.74



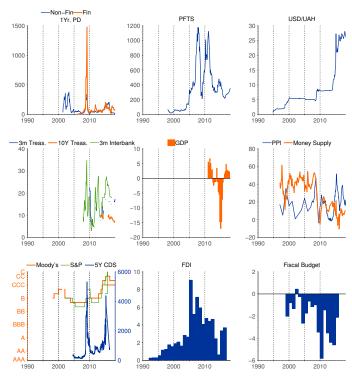
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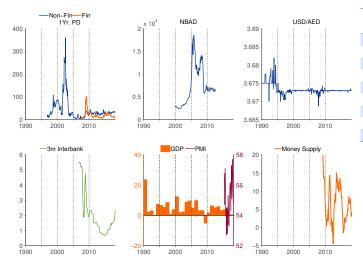
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AA 1990

Uganda		2017						
	Q1	Q2	Q3	Q4	Q1			
1Yr. PD, Non-Fin. (bps)	41.40	8.86	5.98	6.47	6.39			
1Yr. PD, Fin.	12.52	7.32	7.44	7.46	7.94			
UGSINDX	1558	1678	1718	2001	2203			
USD/UGX	3615.42	3602.25	3596.76	3643.25	3688.05			
3m Treas. Yield (%)	11.10	10.82*	9.79	8.32	8.77			
10Y Treas. Yield (%)	16.26*	15.98*	14.92*	14.54*	14.38			
GDP (YoY%)	4.6	6.5	7.5	6.6	-			
PMI	53.5	52.8	53.8	54.3	53.2			
PPI (YoY%)	4.5	-	-	-	-			
Money Supply (YoY%)	12.60	13.55	12.70	12.78	12.29*			
Sov. Rating, S&P	В	В	В	В	В			

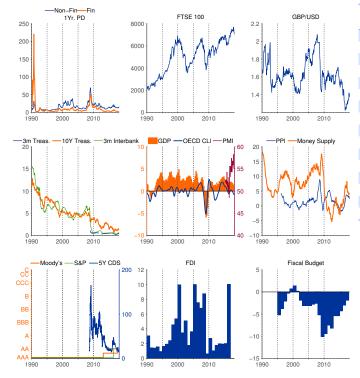


Ukraine		2017				
	Q1	Q2	Q3	Q4	Q1	
1Yr. PD, Non-Fin. (bps)	23.86	23.51	28.68	19.51	17.43	
1Yr. PD, Fin.	142.86	111.94	114.52	80.82	72.60	
PFTS	272	286	294	315	354	
USD/UAH	27.06	26.08	26.58	28.10	26.27	
3m Treas. Yield (%)	-	-	-	16.00	17.33	
10Y Treas. Yield (%)	9.07	8.20	7.38	7.29	7.42	
3m Interbank (%)	18.00	-	-	-	-	
GDP (YoY%)	2.8	2.6	2.4	2.2	_	
PPI (YoY%)	38.3	26.3	22.4	16.5	15.9	
Money Supply (YoY%)	6.70	6.50	6.60	9.60	10.40*	
Sov. Rating, Moody's	Caa2	Caa2	Caa2	Caa2	Caa2	
Sov. Rating, S&P	B-	B-	B-	B-	B-	

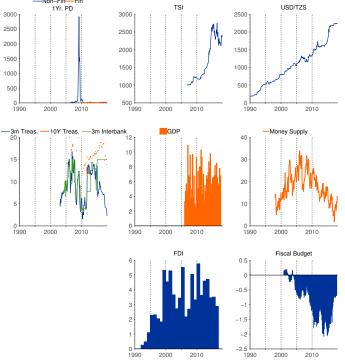


United Arab Emirates		2	2017		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	33.57	30.54	32.16	32.44	34.94
1Yr. PD, Fin.	11.31	11.41	14.29	8.06	7.87
USD/AED	3.67	3.67	3.67	3.67	3.67
3m Interbank (%)	1.47	1.51	1.56	1.79	2.33
GDP (YoY%)	-	-	-	0.5	-
PMI	56.2	55.8	55.1	57.7	54.8
Money Supply (YoY%)	6.70	7.20	6.53	5.36	4.15
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
5Y CDS (bps)	-	-	146.80	153.21*	-

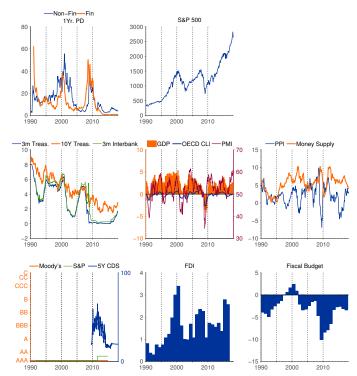
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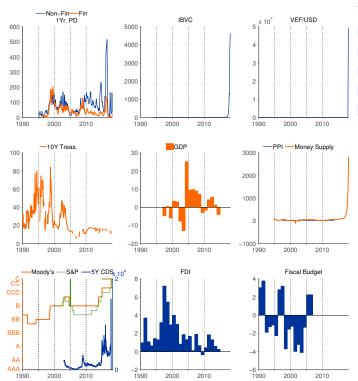
United Kingdom		201	7		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.00	13.05	13.32	13.43	15.27
1Yr. PD, Fin.	3.53	2.69	2.29	1.63	1.96
FTSE 100	7323	7313	7373	7688	7057
GBP/USD	1.25	1.30	1.34	1.35	1.40
3m Treas. Yield (%)	0.27	0.17	0.28	0.40	0.49
10Y Treas. Yield (%)	1.14	1.26	1.37	1.19	1.35
3m Interbank (%)	0.34	0.31	0.34	0.52	0.71
GDP (YoY%)	2.1	1.9	1.8	1.4	_
OECD CLI	100.20	100.02	99.76	99.32	99.15*
PMI	54.3	54.3	55.9	56.1	55.1
PPI (YoY%)	3.7	3.3	3.3	3.3	2.4
Money Supply (YoY%)	6.70	5.40	4.80	3.70	4.10*
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	AA	AA	AA	AA	AA
5Y CDS (bps)	-	19.94	23.73	18.26	16.31
Fiscal Budget (%GDP)	_	_	-	-1.90	_



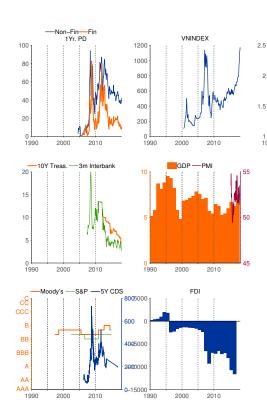
United Republic of Tanzania		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	0.68	1.63	1.15	1.97	1.71
1Yr. PD, Fin.	19.42	18.52	19.22	17.82	19.11
TSI	2315	2217	2117	2396	2409
USD/TZS	2230.88	2227.00	2234.60	2234.63	2255.94
3m Treas. Yield (%)	7.20	5.53	4.10	4.00	2.25
10Y Treas. Yield (%)	18.56	14.76	15.75*	15.89*	13.86
3m Interbank (%)	15.00	15.00	15.00	15.00	15.00*
GDP (YoY%)	5.7	7.8	6.8	-	-
Money Supply (YoY%)	6.00	9.40	6.90	10.40	13.60*
Fiscal Budget (%GDP)	-0.73	-0.75	-0.68	-0.69	_



United States		20	17		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.84	4.64	4.07	4.09	4.38
1Yr. PD, Fin.	0.60	0.61	0.68	0.69	0.81
S&P 500	2363	2423	2519	2674	2641
3m Treas. Yield (%)	0.75	1.01	1.04	1.38	1.70
10Y Treas. Yield (%)	2.39	2.30	2.33	2.41	2.74
3m Interbank (%)	1.05	1.10	1.25	1.67	1.67
GDP (YoY%)	2.0	2.2	2.3	2.6	-
OECD CLI	99.66	99.64	99.71	99.91	100.08*
PMI	56.6	56.7	60.2	59.3	59.3
PPI (YoY%)	3.8	2.1	3.3	3.3	3.0
Money Supply (YoY%)	6.30	5.60	5.20	4.70	4.00
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AA+	AA+	AA+	AA+	AA+
5Y CDS (bps)	_	_	_	_	19.42
Fiscal Budget (%GDP)	-	_	-	-3.40	_



Venezuela		20	017		2018
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	21.41	69.33	57.56	36.78	33.77
1Yr. PD, Fin.	4.47	9.42	4.27	5.12	7.13
IBVC	44	123	489	1263	4647
VEF/USD	9990.05	9985.05	10155.80	9987.50	49415653.89
10Y Treas. Yield (%)	-	-	13.29	13.07	-
Money Supply (YoY%)	206.90	326.50	533.90	1121.40	2833.10
Sov. Rating, Moody's	С	С	С	С	С
Sov. Rating, S&P	CSD	CSD	CSD	CSD	CSD
5Y CDS (bps)	3571.02	3562.06	5191.26	0.71	_



Vietnam		2018			
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	45.55	37.27	36.79	35.89	41.17
1Yr. PD, Fin.	13.86	10.96	13.21	8.30	8.11
VNINDEX	722	776	804	984	1174
VND/USD	22755.00	22731.00	22730.00	22698.00	22794.00
10Y Treas. Yield (%)	6.07	5.80	5.60	5.30	4.30*
3m Interbank (%)	4.90	4.00	3.20	4.30	2.60
GDP (YoY%)	-	-	-	6.8	-
PMI	54.6	52.5	53.3	52.5	51.6
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	BB-	BB-	BB-	BB-	BB-
5Y CDS (bps)	197.34*	-	-	-	-

D Data notes

This Appendix provides a comprehensive list of the macroeconomic and capital market data provided in Appendix C as well as their sources. Most of the data was obtained from Bloomberg. In some cases, the data was not available in Bloomberg and was obtained directly from primary sources. In either case, the primary sources for the data are listed in the tables below. The data was retrieved during October 2017 and every effort has been made to verify its accuracy.

Stock index (top-center graph) The one-year return on an economy's stock index is one input variable for RMI's default forecast model. The stock indices used in the model are the ones that are displayed in Appendix C. A list of the stock indices included in Appendix C can be found here.

FX rate (top-right graph) Foreign exchange (FX) rates are quoted by market convention against the US dollar. For Eurozone countries, a fixed official rate is used to convert the domestic currency to the Euro prior to the introduction of the common currency. In the graphs, the FX rate for the domestic currency before the economy adopted the Euro is in orange, and the FX rate for the Euro after the Euro was adopted is in blue. The table below shows the conversion dates and rates. The exchange rate for the Cypriot Pound is excluded due to scaling reasons.

Conversion to Euro

Economy	Conversion Date	Conversion Rate (per Euro)	 Economy	Conversion Date	Conversior Rate (Per Euro)
Austria	31/12/1998	13.7603	Italy	31/12/1998	1936.27
Belgium	31/12/1998	40.3399	Luxembourg	31/12/1998	40.3399
Estonia	31/12/2010	15.6466	Malta	31/12/2007	0.4293
Finland	31/12/1998	5.94573	Netherlands	31/12/1998	2.20371
France	31/12/1998	6.55957	Portugal	31/12/1998	200.482
Germany	31/12/1998	1.95583	Slovakia	31/12/2008	30.126
Greece	31/12/2000	340.75	Slovenia	31/12/2006	239.64
Ireland	31/12/1998	0.787564	Spain	31/12/1998	166.386

10-year treasury bond yield (middle-left graph) All 10-year treasury bond yields are based on Bloomberg indices except for the following list: Bank Negara Malaysia for Malaysia, Korea Financial Investment Association for South Korea and Philippine Dealing & Exchange Corp for Philippines.

3-month government bond yield (middle-left graph) The primary sources of the 3-month government bond yields are listed in here.†

3-month interbank rate (middle-left graph) The primary sources of the 3-month interbank rates can be found here.

GDP (middle-center graph, left axis) Real GDP YoY changes are seasonally-adjusted except for China, Hong Kong, Iceland, India, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand. A list of primary sources of the GDP data can be found here.

[†]The RMI CRI model uses Germany's three-month Bubill rate for all eurozone countries after their adoption of the euro. For the period before joining the eurozone, their own interest rates are used where available.

OECD CLI (middle-center graph, right axis) The OECD Composite Leading Indicator for each economy is intended to provide early signals of turning points between different trends in the economic cycle. For forecasting purposes, peaks in CLI are candidate early signals of downturns in the economic cycle, and troughs in the CLI are candidate early signals of upturns in the economic cycle. More information can be obtained at www.oecd.org/std/clits. The OECD CLI shown in Appendix C is amplitude adjusted with a deduction of 50 for the purpose of presentation along with the PMI.

PMI (middle-center graph, right axis) The Purchasing Manager's Index or similar indices are used to reflect an economy's manufacturing activities. An index reading above 50 indicates an expansion of manufacturing activity while a reading below 50 indicates a contraction. An exception is the Business Survey Index used in South Korea, which has 100 as its benchmark. A list of primary sources of the Purchasing Managers Index data can be found here.

PPI (middle-right graph) The Producers' Price Index or similar indices are presented as YoY changes. A list of primary sources of the Producers' Price Index data can be found here.

Money Supply (middle-right graph) YoY growth of money supply uses M3 when it is available for an economy. The exceptions are: Brazil, Chile, China, Cyprus, the Czech Republic, Indonesia, Jordan, Kazakhstan, Latvia, Lithuania, Mexico, Nigeria, Norway, Pakistan, Peru, Romania, Russia, Sri Lanka, Taiwan, Thailand and the US where M2 is used; and Croatia and the UK where M4 is used. For Eurozone countries, data after the adoption of the Euro represents total money supply growth of the Euro. A list of primary sources of the Money Supply data can be found here.

Sovereign credit ratings (bottom-left graph, left axis) For most of the economies, the Standard & Poor's and Moody's sovereign ratings are for foreign currency long term debt. Moody's ratings for France, Germany, India, Japan, Netherlands, Singapore, Switzerland, Taiwan, United Kingdom and the United States are foreign currency long term issuer ratings instead. Among the above mentioned economies, France, Germany, Switzerland, United Kingdom and the United States ratings are cited from Moody's website directly, with the remainder of the data from Moody's and S&P retrieved from Bloomberg. For graphical purposes, selective or restricted defaults are reflected as C grades in the graphs. For example, according to S&P data, Indonesia had selective default events on March 29, 1999; April 17, 2000 and April 23, 2002, seen as C grades in the graphs above.

5Y CDS spread (bottom-left graph, right axis) 5-year Credit Default Swap spreads are for each economy's long term sovereign debt. All of the CDS data is sourced from Bloomberg.

FDI (bottom-center graph) FDI into each economy is presented as a percentage of GDP. The World Bank is the primary source of all FDI data.

Fiscal budget (bottom-right graph) Fiscal budget is presented as a percentage of GDP. A list of primary sources of the Fiscal Budget data can be found here.

About The Credit Research Initiative

The Credit Research Initiative (CRI) was launched by Professor Jin-Chuan Duan in July 2009 at the Risk Management Institute of the National University of Singapore. Aiming at "Transforming Big Data into Smart Data", the CRI covers over 67,000 public firms and produces daily updated Probabilities of Default (1-month to 5-year horizon), Actuarial Spreads (1-year to 5-year contract) and Probability of Default implied Ratings on over 34,000 currently active, exchange-listed firms in 128 economies. The CRI also distributes historical time series of over 33,000 inactive firms due to bankruptcy, corporate consolidation or delisting for other reasons. In addition, the CRI produces and maintains Corporate Vulnerability Indices (CVI), which can be viewed as stress indicators, measuring credit risk in economies, regions and special portfolios.

As a further step, the CRI converts smart data to actionable data to meet the customized demands of its users and offers bespoke credit risk solutions leveraging on its expertise in credit risk analytics. A concrete example is our development of the BuDA (Bottom-up Default Analysis) toolkit in collaboration with the IMF. BuDA is an automated analytic tool based on the CRI PD system, enabling IMF economists to conduct scenarios analyses for the macro-financial linkage.

The CRI publishes Weekly Credit Brief and Quarterly Credit Report, highlighting key creditrelated events, offering insights based on the CRI PD of the entities involved, and providing useful statistics on credit risk of economies and sectors.

For more information about the CRI project, please visit our main site at http://rmicri.org

Usage, redistribution and publication of data

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