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# Quarterly Credit Report

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*Q1/2019*

*Volume 8, No 4*



**NUS**  
National University  
of Singapore

**RMI**  
*Advancing Risk Management  
for Singapore and Beyond*

# 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 8, Issue 4 covers the first quarter of 2019. 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.

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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 68,000 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](http://www.rmicri.org)

As of March 2019, the PD system covers 128 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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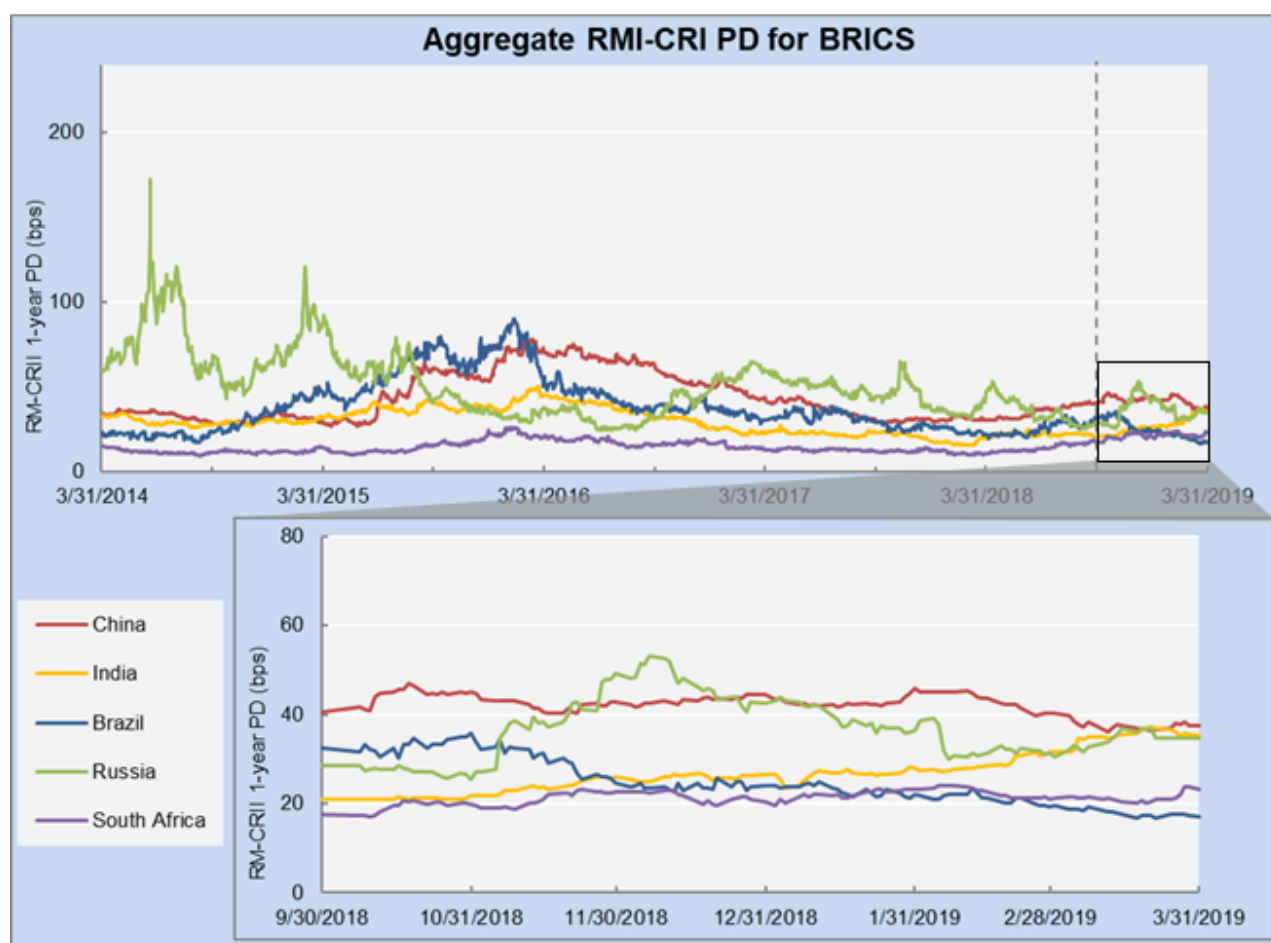
# Acronyms

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

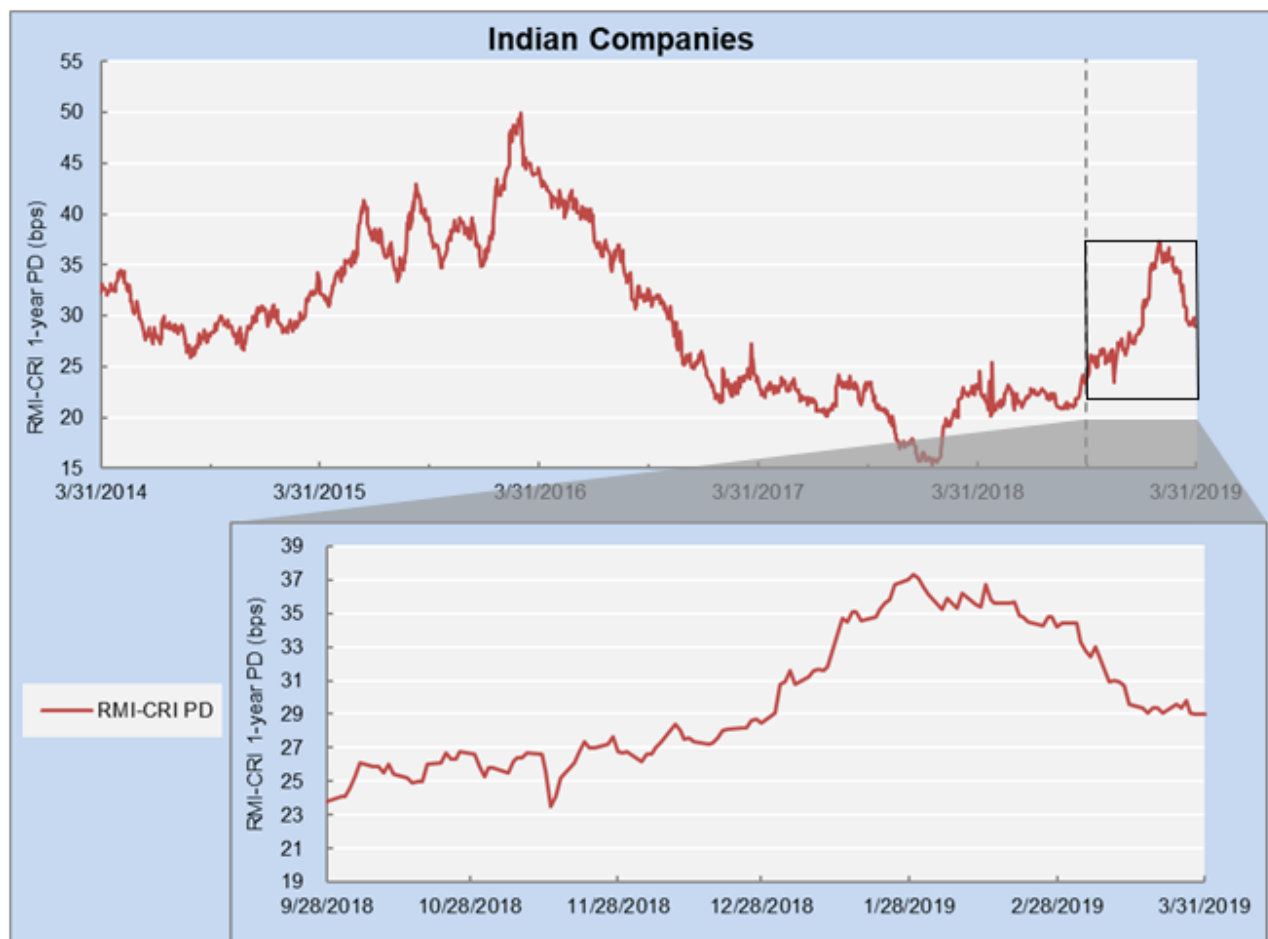
# BRICS

In the first quarter of 2019, listed companies in BRICs see a better credit outlook other than India and South Africa. The RMI-CRI aggregate PDs for China, Russia and Brazil improved as compared to the last quarter despite weaker economy indicators. The improvement in credit profile for Chinese companies comes amid its lowest quarterly growth rate of 6.4% since the global financial crisis. GDP growth is slowing down as the trade war with the US intensifies which may hit global economy activity in the second half of this year. India's economy expanded at its slowest pace in over a year as there is a slower growth in agriculture and mining output as well as waning consumer demand. South Africa's economy growth is expected to contract in the first quarter of 2019 as retail, mining and manufacturing sectors are expected to slow down and two straight quarters of shrinkage would mean that South Africa would be in a technical recession. Brazil faced a contraction in the first quarter of 2019 amid falling fixed investments and reduction in industrial and agricultural output. The Brazilian government warned that the economy's weakness may persist for the rest of the year. Russia's GDP growth slowed down in the first quarter of 2019 due to weak consumption and lower utilities output. The Russian government have revised their 2019 GDP growth downwards as income have stagnated and concerns about poorly executed state-led investments, one of the main drivers of economic growth, may lead to slower GDP growth.



## Indian Companies

The 1-year aggregate NUS-CRI PD for Indian companies remained flat over Q1 2019. The economy continued to expand buoyed by consumption and subdued inflation. On the production side, this growth could be attributed to the growth in manufacturing, construction, financial and professional services. Inflation rate decreased to an annual rate of 3.07% in April along with a decrease in wholesale prices in light of declining prices for fuel and power. Current account deficit decreased due to higher earnings from software and financial services. Monetary wise, Reserve Bank of India (RBI) is monitoring liquidity conditions carefully through a purchase of Government securities under Open Market Operations (OMO).



## Economy

- India's real Gross Domestic Product for Q3 2018 grew at an annual rate of 6.6% against a 7.7% expansion in the same quarter last year. Sectors that experienced strong growth YoY include manufacturing (8.1%), construction (8.9%), and financial, real estate and professional services (7.3%). IMF forecasts India's growth at 7.3% for FY20 and 7.5% in FY21, benefiting from the recovery of investment and strong consumption amid an expansionary monetary policy.<sup>1,2</sup>



- India's manufacturing sector experienced a slowdown in growth as factory orders and production expand at slowest pace since last September. The Nikkei India Manufacturing PMI slightly weakened in March to reach a level of 52.6 from 54.3 in February. The slowdown in production was accompanied by low inflationary pressures with rates of increase in input costs below the respective long-run averages. In the future, companies expected that the strong underlying demand, successful advertising and the receipt of bulk orders to underpin sales growth.<sup>3</sup>
- The annual rate of inflation, based on monthly Wholesale Price Index (WPI), decreased to an annual rate of 3.07% in April from an annual rate of 3.8% for the month of December. The wholesale price index decreased by 0.5% over the previous month, which was mainly due to declining prices for fuel and power. The MCX India Crude Oil Spot Index increased to 4092 from 3172 in Q1 2019 despite investors' concern over the prospects for global economic growth and fuel demand.<sup>4,5</sup>
- India's current account deficit (CAD) decreased to USD 16.9bn (2.5% of GDP) in Q4 2018 from USD 19.1bn (2.9% of GDP) in Q3 2018 and was higher than in the same quarter last year at USD 13.7bn (2.1% of GDP). The widening of the CAD on a YoY basis is primarily due to a higher trade deficit of USD 49.5bn as compared with USD 44bn a year ago. Net services receipts increased on a YoY basis due to a rise in net earnings from software and financial services. Private transfer receipts, mainly representing remittances by Indians employed overseas, increased by 6.3% to USD 18.7bn as compared to the preceding year.<sup>6</sup>
- During Q1 2019, the Indian Rupee (INR) strengthened 1.14% against the US dollar. The Fed's signal of a slower pace of rate hikes in 2019 amid an expected weaker US economic growth was beneficial for emerging market to attract liquidity, contributing to the strengthening of the INR in early 2019. In Feb 2019, net inflows from foreign portfolio investors in India reached a 15-month high of USD 2.49bn.<sup>7</sup>

## Monetary

- According to the bi-monthly monetary policy statement on April 4, 2019, the RBI reduced the policy rate (repo rate) to 6.25%. Consequently, the reverse repo rate under the liquidity adjustment facility was reduced to 5.75%. Similarly, the Bank Rate dropped to 6.25%.<sup>8</sup>
- The Reserve Bank conducted a total of two open market purchase operations in February and March to inject INR 615bn of durable liquidity. Liquidity adjustment facility (LAF) injected, on a daily net average basis, was INR 950bn in February and INR 570bn in March. The weighted average call rate (WACR), on an average, remained broadly aligned with the policy repo rate in February and March.<sup>9</sup>
- The Monetary Policy Committee (MPC) stated that the retail inflation rose to 2.6% after four months of continuous decline. The rise in inflation was driven by an increase in prices of items excluding food and fuel and weaker momentum of deflation in the food group. Inflation in the fuel group collapsed to its lowest print in the new all India CPI series.<sup>10</sup>

- The RBI increased the investment limit for FY 2019 and 2020 for foreign portfolio investors in Central government securities to 6% of outstanding stock of securities from 5.5% in FY 2018 and 2019. The limit for FPI investment in state development loans and corporate bonds has been left unchanged at 2% and 9% of outstanding stocks. <sup>11</sup>

### **Funding & Liquidity**

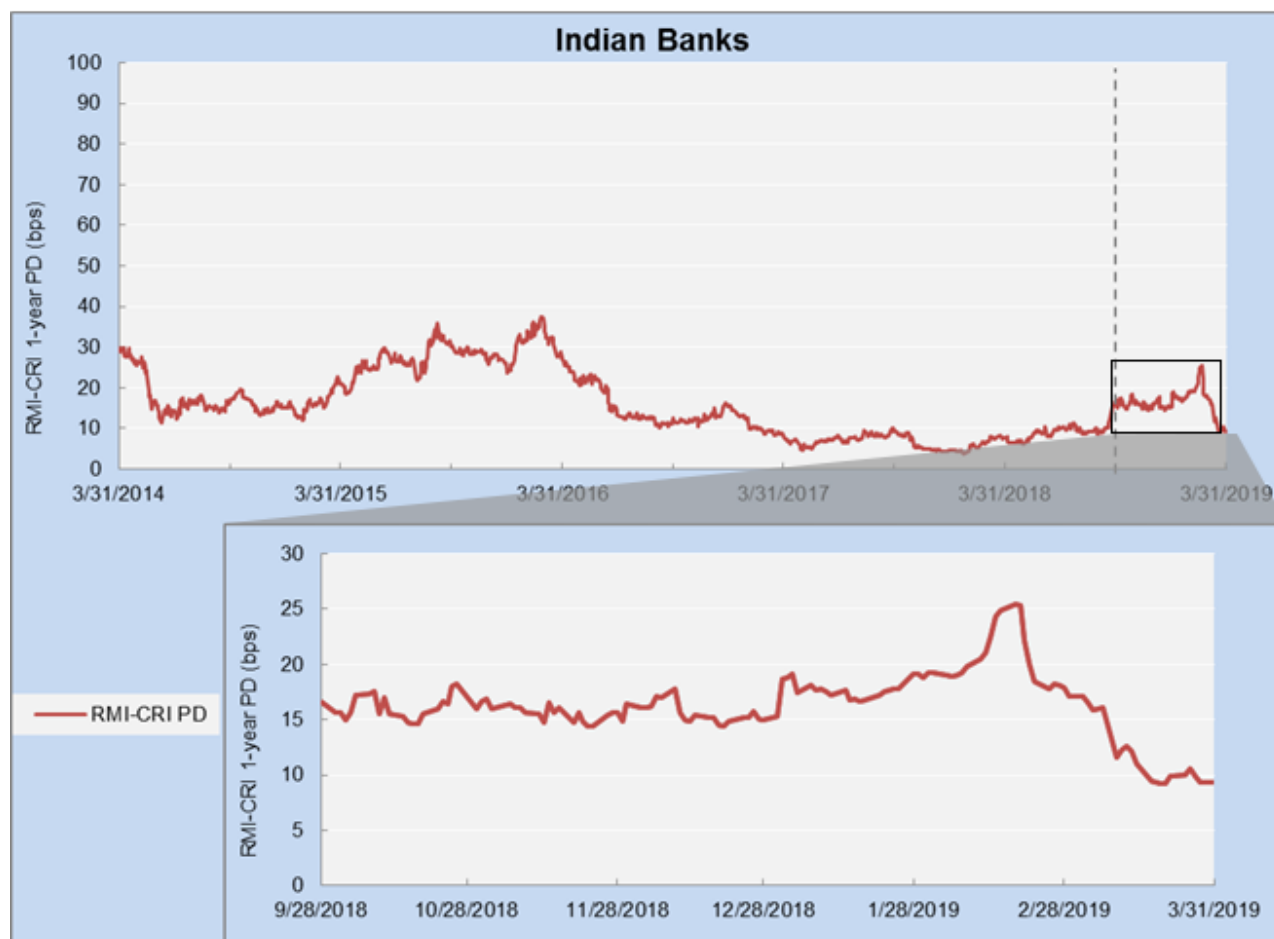
- The yield on India's 10-year government sovereign bonds generally remained flat during Q1 2019 at 7.35%. Its yield gradually decreases from September 2018 before reaching its 8-months low in December 2018. <sup>12</sup>
- The RBI's deputy governor stated that RBI will continue to inject liquidity into the banking system through open market operation (OMO) purchases to increase the economic impact of its policy decisions. The RBI announced a new set of open market operations to purchase a total of INR 250bn worth of bonds in May. This came immediately after the central bank's second ever net infusion of nearly INR 700bn in the banking system. <sup>13</sup>

### **Sovereign Credit Ratings**

- Fitch, S&P and Moody's kept their ratings on the sovereign bonds of India at BBB-, BBB- and Baa2 respectively in Q1 2019, all of which have 'stable' outlook, unchanged from the previous quarter.

## Indian Banks

The aggregate 1-year NUS-CRI PD for Indian banks decreased slightly in Q1 2019. Indian banks' asset quality showed sign of worsening as non-performing assets ratio is expected to worsen in the recent quarter. Most of these lenders also reported losses for the March quarter with total losses of eight banks at nearly INR 152bn. However, RBI warned that it is essential to remain vigilant on the asset quality of banks and to keep watch on the resolution of stressed assets with a focus on the implementation of the new resolution framework.



## Profitability

- Non-financial borrowings increased to INR 3.78tn on March 29, 2019 from INR 3.58tn on December 21, 2018. Other liabilities such as time deposits with non-financial institutions increased to INR 5.43tn in Q1 2019 from INR 5.38tn in Q4 2018.<sup>14</sup>
- The Credit-Deposit ratio for the banking system decreased to 77.68% on March 29, 2019 from 78.59% on December 21, 2018. Bank credit grew from INR 92.88tn to INR 97.64tn during Q1 2019.<sup>15</sup>

- The outlook for most India state lenders remain quite weak despite extensive reforms in the banking sector. The huge volume of bad assets will be a dampener on their future as credit cost will remain high. The bad debt situation has shown signs of improvements through recent bank earnings report. However, the recovery may stall given that the Supreme Court voided the central bank's guidelines on how lenders should resolve their bad debts.<sup>16</sup>

### Funding & Liquidity

- The weighted-average call money rate, the interest rate on short-term finance repayable on demand, decreased from 6.57% as of December 28, 2018 to 6.35% as of March 30, 2019. The call money rates were generally lower than the repo rate during Q1, indicating a stable banking system.<sup>17</sup>
- The amount of cash on the balance sheet of Indian banks increased from INR 691.9bn on December 28, 2018 to INR 748.1bn on March 29, 2019.<sup>18</sup>
- Deposit rates generally remained stable in Q1 2019. According to the Reserve Bank of India's daily call money rates, interest rates decreased to 6.23% on February 15, 2019, from 6.6% in Q4 2018.<sup>19</sup>

### Asset Quality

- The loan-loss provisions across 13 state owned banks stood at more than INR 527bn sharply higher than the INR 296bn in the previous quarter. Most of these lenders also reported losses for the March quarter with total losses of eight banks at nearly INR 152bn. The RBI also initiated a Prompt Corrective Action (PCA) framework to discipline banks with a record of poor financial performance. With the onset of corporate bankruptcies, a group of state-owned banks has set aside INR 500bn in the March quarter for existing and potential loan losses.<sup>20</sup>

<sup>1</sup>Feb 28, 2019, [Press Notes on Estimates of Gross Domestic Product for 3rd Quarter \(Oct-Dec\) 2018-19](#), Ministry of Statistics and Programme Implementation, mospi.nic.in

<sup>2</sup>Apr 09, 2019, [IMF cuts India growth forecast for 2019-20 to 7.3 per cent](#), The Hindu Business Line, <https://www.thehindubusinessline.com>

<sup>3</sup>Apr 02, 2019, [Nikkei India Manufacturing PMI](#), Markit Economics, markiteconomics.com

<sup>4</sup>Apr 14, 2019, [Index Numbers of Wholesale Price in India](#), Ministry of Commerce & Industry Office of The Economic Advisor, eaindustry.nic.in

<sup>5</sup>Apr 14, 2019, [Crude Oil Spot Market Price](#), MCX India, mcxindia.com

<sup>6</sup>Mar 29, 2019, [Developments in India's Balance of Payments during the Third Quarter of 2018-19](#), Reserve Bank of India, rbi.org.in

<sup>7</sup>Apr 02, 2019, [Daily Trends in FPI Investments](#), Natinoal Securities Depository Limited (NSDL) fpi.nsdl.co.in

<sup>8</sup>Apr 04, 2019, [First Bi-monthly Monetary Policy Statement, 2019-20 Resolution of the Monetary Policy Committee \(MPC\)](#) Reserve Bank of India, Reserve Bank of India, rbi.org.in

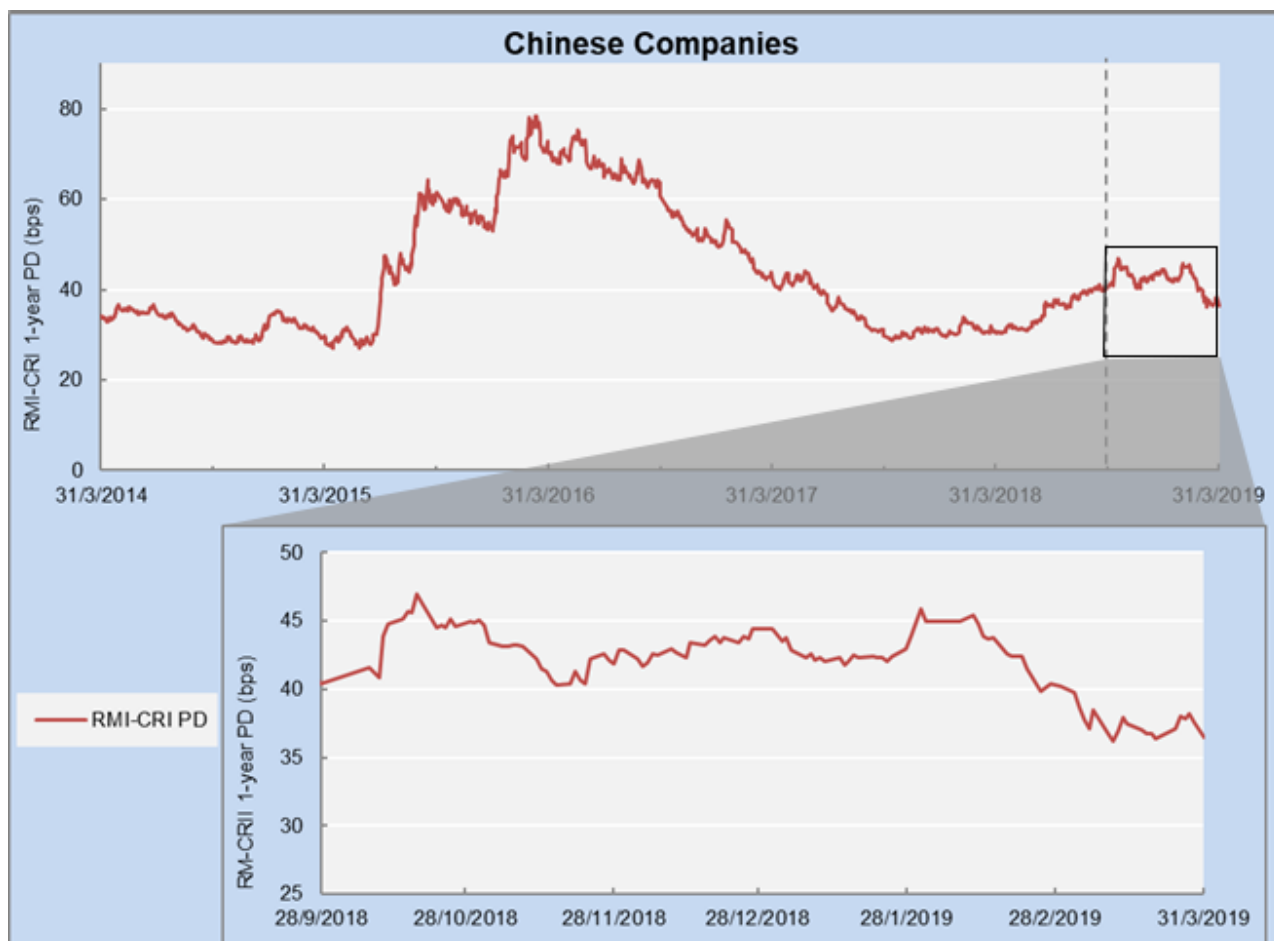
<sup>9</sup>Apr 04, 2019, [First Bi-monthly Monetary Policy Statement, 2019-20 Resolution of the Monetary Policy Committee \(MPC\)](#) Reserve Bank of India, Reserve Bank of India, rbi.org.in

<sup>10</sup>Apr 04, 2019, [First Bi-monthly Monetary Policy Statement, 2019-20 Resolution of the Monetary Policy Committee \(MPC\)](#) Reserve Bank of India, Reserve Bank of India, rbi.org.in

- <sup>11</sup> Mar 27, 2019, [RBI raises FPI investment limit in G-Secs](https://www.thehindubusinessline.com), The Hindu Business Line, <https://www.thehindubusinessline.com>
- <sup>12</sup> Apr 04, 2019, [India Govt Bond Generic Bid Yield 10 Year](https://www.bloomberg.com), Bloomberg, [bloomberg.com](https://www.bloomberg.com)
- <sup>13</sup> Apr 24, 2019, [RBI steps up liquidity management to make rate cuts count](http://economictimes.indiatimes.com/), Economic Times, <http://economictimes.indiatimes.com/>
- <sup>14</sup> Apr 04, 2019, [Scheduled Commercial Banks - Business in India](https://www.rbi.org.in), Reserve Bank of India, [rbi.org.in](https://www.rbi.org.in)
- <sup>15</sup> Apr 04, 2019, [Scheduled Commercial Banks - Business in India](https://www.rbi.org.in), Reserve Bank of India, [rbi.org.in](https://www.rbi.org.in)
- <sup>16</sup> Apr 10, 2019, [Bad debts may still be a headache for India's state banks](https://www.cnbc.com), CNBC, <https://www.cnbc.com>
- <sup>17</sup> Apr 10, 2019, [Cash Reserve Ratios and Interest Rates](https://www.rbi.org.in), Reserve Bank of India, [rbi.org.in](https://www.rbi.org.in)
- <sup>18</sup> Apr 04, 2019, [Scheduled Commercial Banks - Business in India](https://www.rbi.org.in), Reserve Bank of India, [rbi.org.in](https://www.rbi.org.in)
- <sup>19</sup> Apr 10, 2019, [Reserve Bank of India Bulletin - March 2019](https://www.rbi.org.in), Reserve Bank of India, [rbi.org.in](https://www.rbi.org.in)
- <sup>20</sup> May 10, 2019, [India's state-owned banks brace for bad loans](https://www.asiatimes.com), Asia Times, <https://www.asiatimes.com>

## Chinese Companies

GDP growth rate lodged in at 6.4% which is the same the previous quarter, the lowest growth rate since the global financial crisis. Overall growth momentum continued to slow and pressures are strong. Despite the slowest growth, the 1-year aggregate PD for Chinese firms shows a downward trend in Q1 2019. This could be driven by the stronger industrial production, retail sales as well as fixed asset investment. The better than expected performance is also driven by measures taken by the government through the fiscal policies as well as the supportive monetary policies. The ongoing trade tensions between China and the US may hit economic activity globally especially in the second half of this year.



## Economy

- The Chinese economy advanced 6.4% year-on-year in the first quarter of 2019, matching last quarter's growth and slightly beating market expectations. It was the lowest growth rate since the global financial crisis, amid intense trade dispute with the US. On a quarter-on-quarter basis, the GDP advanced 1.4%, compared to a 1.5% expansion in the previous period and in line with market estimates.<sup>21</sup>
- China's consumer price inflation rose to its highest since October 2018 of 2.5% YoY in April 2019. The jump in inflation was mainly due to a jump in food prices due to soaring pork prices. In April 2019, China's Producer Price Index (PPI) increased 0.9% from a year earlier, beating market expectations of 0.6%. On a monthly basis, producer prices rose 0.3%, after a 0.1% gain in March.<sup>22,23</sup>
- Unemployment rate in China decreased to 3.67% in the first quarter of 2019 from 3.8% in the fourth quarter of 2018. Unemployment Rate in China averaged 4.09% from 2002 until 2018, reaching an all-time high of 4.30% in the fourth quarter of 2003.<sup>24</sup>
- The Caixin China Composite PMI data picked up at the strongest pace in eight months

as it hit a high of 50.8 in March. The neutral 50-mark divides expansion from contraction on a monthly basis. Despite the stronger rise in output, growth in new domestic and exports orders was marginal. Meanwhile, activity in China's services sector picked up to a 14-month high in March as demand improved at home and abroad. <sup>25,26</sup>

- In the first three months of 2019, the investment in fixed assets (excluding rural households) reached CNY 10,187bn, up by 6.3% year-on-year, and the growth rate was 0.2% higher than that in the first two months. In March, the investment in fixed assets (excluding rural households) increased 0.45%, month-on-month, of which, the private investment in fixed assets reached CNY 6,149bn, and the growth rate was 1.1% lower than that in the first two months. <sup>27</sup>
- China's trade surplus widened to USD 32.64bn in March 2019 from a deficit of USD 5.77bn in the same month a year earlier, above market consensus of a USD 7.05bn surplus as exports increased while imports fell. For the first quarter of 2019, China posted a trade surplus of USD 76.3bn, widened sharply from USD 54.6bn in the same period the prior year as exports grew 1.4% while imports shrank 4.8%. <sup>28</sup>

### Monetary Policy

- The People's Bank of China will maintain a prudent monetary policy stance this year and keep the yuan in line with fundamentals. China will continue to improve its exchange rate mechanism and keep its exchange rate in line with fundamentals. It also plan to strength the vitality of the financial sector as it open up its financial sector. <sup>29</sup>
- At end-March, broad money supply (M2) grew by 8.6% year-on-year, the highest in 13 months and grew from 8.0% in February. The year 2018 saw a net money injection of CNY 256bn. Growth of outstanding total social financing (TSF), increased to 10.7% in March from 10.1%. TSF quadrupled to CNY 2.86tn from CNY 703bn in February. <sup>30</sup>
- China's central bank continued to maintain its benchmark interest rate at 4.35% since it was cut by 25bps in October 2015. The rate for 7-day reverse repurchase agreements is likely to move down to about 2.5% toward the end of the year from 2.8% now. <sup>31,32</sup>
- The PBOC has already delivered five required reserve ratio cuts since early 2018 and has lowered the ratio to 13.5% for big banks and 11.% for small to medium sized lenders. The central bank pumped out CNY 3.35tn in net liquidity through the five reserve cuts. It is expected that PBOC will continue the reduction in RRR in three phases and the funds will be used for loans to small and private companies. <sup>33,34</sup>
- China central bank lent CNY 200bn to financial institutions via its one-year medium term lending facility (MLF) with its interest rate unchanged at 3.3%. The PBOC also injected CNY 160bn through seven-day reverse repos into the market. <sup>35</sup>
- 10-year government bond yield decreased from 3.2% at end-December 2018 to 3.13% at the end of March 2019. 1-year government bill yield increased from 2.45% to 2.48% over the same period. <sup>36</sup>
- The 3-month 5-day average SHIBOR decrease from 3.32% on 29th Dec, 2018 to 2.81% on 29th Mar, 2019. <sup>37</sup>
- China's foreign exchange reserves rose to USD 3.098tn in Mar 2019, up from USD 3.07bn in December. <sup>38</sup>

### Fiscal Policy

- Large scale tax and fee cuts amounting to CNY 2tn have been planned in 2019. Efforts have also been made to finish distributing local government debt quota totalling CNY 3.08tn by the end of September in a bid to shore up investment and expand domestic demand. The central government also plan to reduce general expenditure by over 5%.



The planned fiscal expenditure in 2019 surges by 6.5% to CNY 23tn and the fiscal deficit goes up to CNY 2.38tn. <sup>39</sup>

**Sovereign Credit Ratings**

- Both S&P and Fitch maintained rating A+ on the Chinese government while Moody's credit rating for China stood at A1, all with a stable outlook. <sup>40</sup>



## Chinese Banks

The aggregate 1-year RMI PD for banks declined over the first quarter of 2019 amid better profitability and higher interest income as the government supported banks to encourage lending especially to small and medium companies. Chinese banks have extended a record amount of new credit the first quarter, totalling CNY 5.81tn while non-performing loans (NPL) ratio remain steady. The pressure on asset quality of banks have marginally eased due to a stabilising economy in the first quarter and the disposal of bad loans by lenders. Margins at the big banks will likely to continue to narrow in 2019 due to relatively ample liquidity in the market.



## Profitability

- China's largest lenders posted increases in first quarter profit and higher interest income as the government encouraged fresh lending to support the economy. Combined earnings at the five biggest lenders are estimated to grow in 2019 at the fastest pace in five years. It was reported that net income rose as much as 4.9% in the first quarter of 2019. Profit at the big five will probably increase about 6% in 2019 after a 4.9% gain in 2018. <sup>41</sup>

## Funding & Liquidity

- Chinese banks extended CNY 1.02tn in net new yuan loans in Apr 2019, compared to CNY 1.69tn in the previous month and beating market consensus of CNY 1.20tn, suggesting the government was fine-tuning its policy stance last month while a rebound of money and credit is now expected in May. <sup>42</sup>
- The PBOC extended CNY 267.4bn to commercial banks via its targeted medium-term lending (TMLF) facility as it looks to provide struggling smaller business with a steady stream of affordable financing. The PBOC said that the one-year interest rate on the

TMLF was 3.15% and 15 basis points lower than medium-term lending facility loans.<sup>43</sup>

## Regulations

- Listed Chinese banks will need to raise about USD 260bn in fresh capital over the next three years as regulations force shadow bank loans back on to their balance sheets and global rules on systemically important groups impose extra requirements. China bank regulators has forcefully implemented the global Basel III rules on bank capital adequacy. The PBOC has said that it will encourage commercial banks to issue perpetuals to meet capital needs. The largest Chinese lenders also face additional requirements to for so-called “total loss-absorbing capacity”, a category of liabilities similar to regulatory capital.<sup>44</sup>

## Asset Quality

- The total non-performing loans (NPLs) of commercial banks amounted to CNY 2.16tn, the highest since the end of 2003. While NPLs rose CNY 95.7bn from the start of the year, the industry wide NPL ratio declined slightly at the end of the first quarter to 1.8% as compared with 1.89% at the end of 2018. The dip in the NPL ratio is likely due to record bank lending in the quarter. Chinese banks disposed of CNY 368.9bn in bad loans over the first quarter, an increase of CNY 30.9bn a year earlier. The average capital adequacy ratio at commercial banks at end March was 14.18%, 0.57% higher than one year earlier.<sup>45</sup>

<sup>21</sup> Apr 21, 2019, [China GDP Annual Growth Rate](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>22</sup> Apr 21, 2019, [China Inflation Rate](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>23</sup> Apr 21, 2019, [China's Producer Price Index](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>24</sup> Apr 21, 2019, [China Unemployment Rate](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>25</sup> Apr 1, 2019, [Caixin China General Manufacturing PMI](http://www.reuters.com), Reuters, <http://www.reuters.com>

<sup>26</sup> Apr 3, 2019, [Caixin China General Services PMI](http://www.reuters.com), Reuters, <http://www.reuters.com>

<sup>27</sup> Apr 17, 2019, [Investment in Fixed Assets for the First Three Months of 2019](http://www.stats.gov.cn), National Bureau of Statistics of China, <http://www.stats.gov.cn>

<sup>28</sup> Apr 12, 2019, [China Balance of Trade](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>29</sup> Apr 14, 2019, [China to Maintain Prudent Monetary Policy, PBOC's Chen Says](http://www.pbc.gov.cn/), Bloomberg, <http://www.pbc.gov.cn/>

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<sup>31</sup> Apr 12, 2019, [China interest rate](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>32</sup> Mar 26, 2019, [PBOC Expected to Adopt More Moderate Stimulus in 2019](https://www.bloomberg.com), Bloomberg, <https://www.bloomberg.com>

<sup>33</sup> May 6, 2019, [China gives modest boost to economy with RRR cut amid renewed trade tensions](http://www.reuters.com), Reuters, <http://www.reuters.com>

<sup>34</sup> Apr 12, 2019, [China Cash Reserve Ratio Big Banks](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>35</sup> Apr 17, 2019, [China c.bank injects 200 bln yuan through 1-year MLF, rate unchanged](http://www.reuters.com), Reuters, <http://www.reuters.com>

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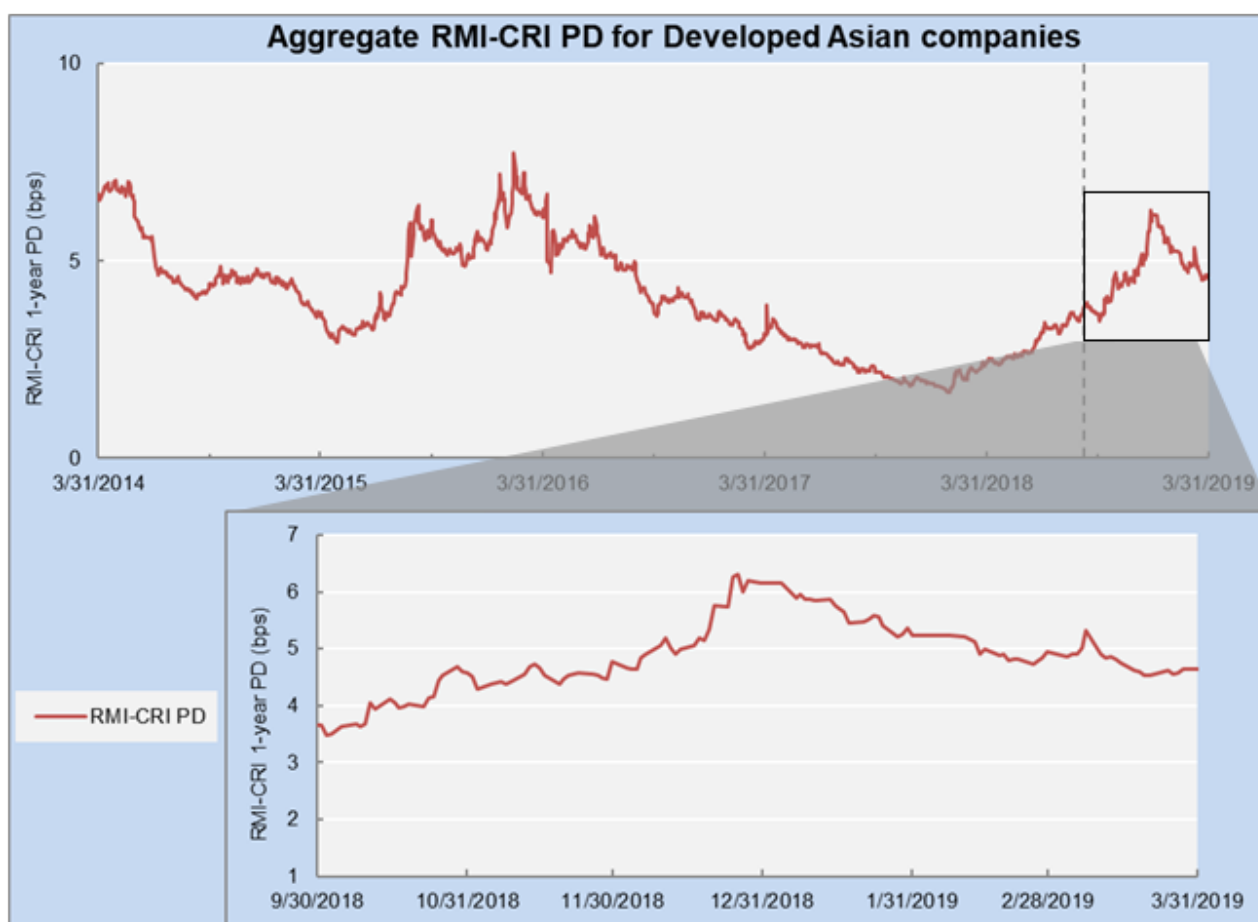
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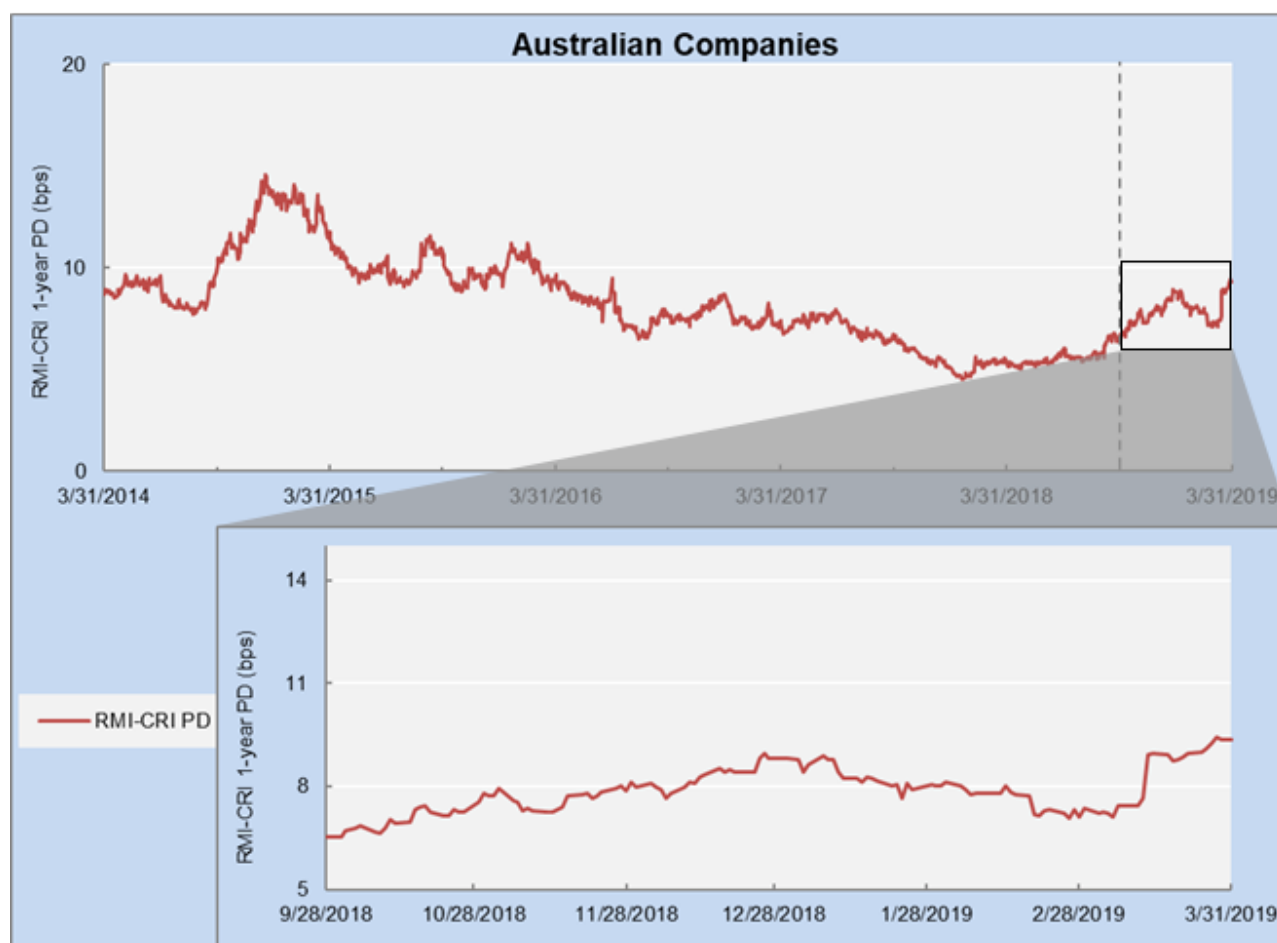
## Asia-Pacific - Developed economies

The RMI-CRI aggregate 1-year PD for listed companies in the developed Asia Pacific decreased during the first quarter of 2019, suggesting an improvement in the credit outlook. The ongoing US-China trade tensions, which weigh on the macro environment, affects trade and investments decision which may slow down the region's growth. Singapore's economy grew in Q1 with a slower than expected 1.3% GDP YoY growth. Singapore grew at a slower pace due to the contracting manufacturing sector which contracted by 12%. Likewise, Taiwan also reported a slower than expected 1.72% GDP YoY growth. The slower growth was due to the weaker than expected private consumption. At the same time, South Korea's economy grew the slowest since global financial crisis as GDP declined by 0.3% due to a drop in business investment. Developed Asia Pacific economies are expected to see a softening in growth reflecting the global headwinds coming from trade tensions and a slowdown in China's growth.



## Australian Companies

The aggregate 1-year RMI PD for Australian companies remained stable during Q1 2019. Based on Q4 data, economic growth slowed sharply with a modest expansion in private consumption and a contraction in residential construction. Unemployment rate increased slightly. Going forward, the credit outlook for Australian firms remain dependent on the rebalancing of the economy as the increasing performances of household consumption, exports, construction sectors and decreasing unemployment rate fades the concern in household debts. Credit standards have been tightened to reduce the risk profile of household borrowers. Attempts to support economic growth is also assisted by RBA's 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 0.2% from Q4 2018 to Q1 2019, slowing from a 0.3% expansion in the previous period and missing market consensus of 0.3%. Like in the previous period, this is the weakest pace of expansion since a contraction seen in the third quarter of 2016. The central scenario is for GDP growth to average around 0.3% over the year, before slowing in 2020 due to slower growth in exports of resources.  
[46,47](#)
- The lower GDP growth in Q1 was driven by a modest expansion in private consumption and a contraction in residential construction. Household final consumption expenditure increased 0.4% during the quarter, contributing 0.2% to GDP growth. Compensation of employees increased by 1.0%. Net exports fell by 0.7% due to a 0.1% rise in imports. Consumer spending grew by 0.3% in the third quarter, easing from a 0.9% expansion

in the previous period. The modest was driven by rises insurance and other financial services (1.6%).<sup>48</sup>

- The Reserve Bank of Australia's (RBA) had left the cash rate unchanged at 1.5%, amid a continuing global economic expansion and low unemployment rates. The economy is to grow strongly with 2.75% over 2019 and 2020. Business conditions are positive and non-mining business investment is expected to increase. Higher levels of public infrastructure investment are also supporting the economy. The long term bond yields have fallen to historically low levels. Inflation remains low over the past year and is expected to pick up over the next couple of years. The central scenario for inflation is 2.0% in 2019 and 2.25% in the following year.<sup>49</sup>
- The unemployment rate inched to a record 8-year lowest rate at 4.9% in February 2019, which gradually edged to 5% in March. The number of employed increased by 17,100 in March. Furthermore, the labor force participation rate rose 0.1 point from a month earlier to 65.7% in March and slightly above market consensus 65.6%. The employment to population ratio remain unchanged at 62.3%.<sup>50</sup>
- The Australian Performance of Manufacturing Index (PMI), as reported by The Australian Industry Group, fell 3.0 point to 51.0 in March 2019. The manufacturing recovery slows again in March. Four of the seven sub-indexes indicated expansion or stable conditions in March. The Australian Performance of Services Index (PSI) was relatively unchanged in March 2019, rising just 0.3 points to 44.8. The March results also represented the first time every sector in the PSI has experienced contraction since August 2010. Meanwhile, the Australian Performance of Construction Index (PCI) increased by 1.8 points to 45.6 in March 2019, indicating a slight easing in the construction industry's aggregate rate of contraction.<sup>51,52,53</sup>
- Key export prices rose 4.5% in March quarter 2019, following a rise in last quarter 2018 of 4.4%. Metalliferous ores and metal scrap, gold, natural, and gas, natural and manufactured posted the highest increase in prices in this quarter. Through the year to Q1 2019, the export index price rose by 15.3%, driven by metalliferous ores and metal scrap, natural gas, coke and coal. On the other hand, import prices fell 0.5% in Q1 2019, following a 0.5% rise in the previous quarter. The drop was driven by higher prices in petroleum products, inorganic chemicals and pharmaceutical products. Trade surplus narrowed to AUD 4.94bn in March 2019. Exports fell 2% month over month while imports dropped 1%. Balance of Trade in Australia reached an all-time high of AUD 5140mn in February 2019.<sup>54,55</sup>

## Monetary Policy

- The Reserve Bank of Australia (RBA) has maintained its benchmark interest rate unchanged at 1.5%. Meanwhile, as household income has been growing slowly and debt levels are high, some lenders have reduced their appetite to lend, while standard variable mortgage rates are a little higher than a few month ago. Credit conditions for some borrowers are tighter than they have been for some time, although mortgage rates remain low and there is strong competition for borrowers of high credit quality. The low level of interest rates is continuing to support the Australian economy. Further progress in reducing unemployment and have inflation return to target is expected, although this progress is likely to be gradual.<sup>56</sup>

**Funding & Liquidity**

- Yields on 10-year Australian government bonds fluctuated throughout the quarter with 2.72% in January 2019, 2.60% in February 2019, and back to 2.46% in March 2019. The previous quarter reported a different trend from the 3.06% in October 2018, 3.06% in November 2018, and back to 2.85% in December 2018. <sup>57</sup>
- The 3-year fixed lending rates to small businesses remained at 5.18% in March quarter 2019 after it remained at 5.29% in December 2018 to 5.33% in September 2018. The lending rates for owner-occupied housing loan increases to 5.37% in March from its previous value of 5.34% in December 2018. <sup>58</sup>
- Average commercial lending during the quarter increased driven mainly by lending to the business sector while total loans to financial intermediaries increases in Q1 2019. Meanwhile, total lending to individuals continues to increase over the first quarter of 2019 and total lending to government increases following the similar trend in the last quarter. <sup>59</sup>

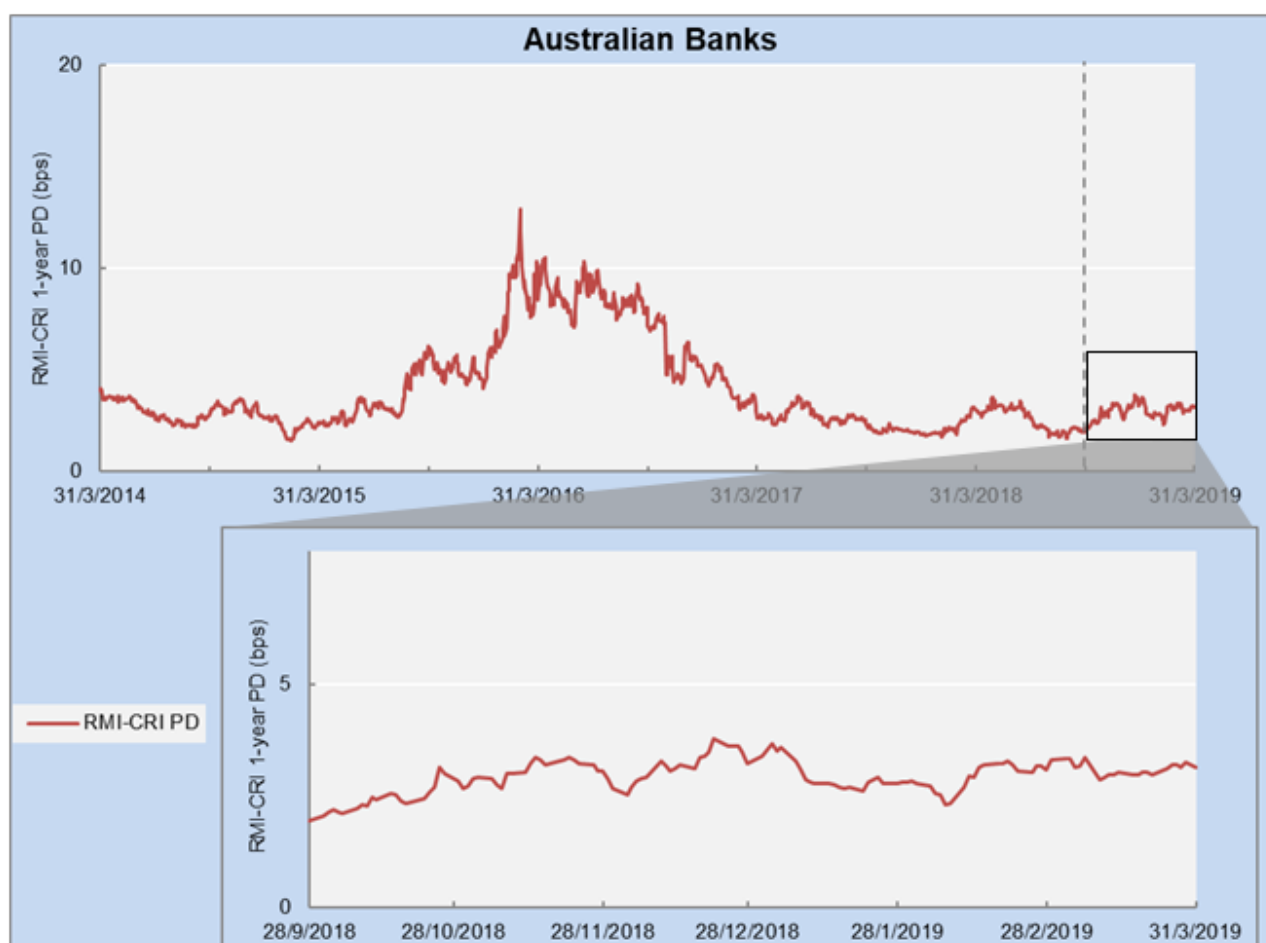
**Sovereign Credit Ratings**

- Standard & Poor's and Fitch Ratings maintained their AAA ratings on Australia, while Moody's maintained their Aaa rating. All three rating agencies had stable outlooks on the government's credit. <sup>60</sup>



## Australian Banks

The aggregate 1-year RMI PD has decreased slightly over the quarter. The profitability of banks has slightly decreased due to lower non-interest income. Housing credit fell by 1.2% to around AUD 24.64bn in March 2019 as compared to a growth in the last quarter. Overall, it sharply dropped by 19.4% since March 2018 in total. Banks are currently struggling with stagnating profitability in a narrower interest margin environment, in which pricing competition from second-tier banks and higher funding costs are driving down interest rates. A report by the Royal Commission published in Q1 2019 has disclosed numerous instances of misconduct, which highlights the deficiencies of working standards and governance within Australia's financial institutions. As the government has already announced regulatory changes based on this report, further pressure on Australian banks is expected in 2019, due to increased remediation costs and operating costs related to compliance.<sup>61,62</sup>



### Profitability

- For the whole year 2019, with lower earnings and under pressure from the drastic drop in housing lending in the last year, profitability is expected to continue its fall for Australia's major banks, including ANZ, NAB, Westpac and Commonwealth Bank. Westpac announced a drop of 24% in statutory net profit, comparing H1 2019 (ending in March 31) to H1 2018. ANZ's profit dropped by 5% during the same period.<sup>63,64,65,66,67</sup>

### Funding & Liquidity

- The Australian Prudential Regulation Authority's funding requirements have left the Common Equity Tier 1 ratios above the APRA benchmark of 10.5% using current risk weights, with the majors switching to more liquid assets. As a result, the Return on Equity has stabilized over the first quarter of 2019. Net interest margin reduced for all major banks, with NAB reporting a 5bps loss to a 1.79% level at the end of March 2019 and Commonwealth reporting a 4bps loss to a 2.10% level. The Liquidity Coverage



Ratio of Australian banks remained well above its 100% minimum, with the major banks averaging a level above 130%.<sup>68,69</sup>

### Asset Quality

- Asset quality mostly stagnated across the major banks, with Westpac reporting a slight increase in stressed exposures to total committed exposures from 1.09 in March 2018 to 1.10 in March 2019. Likewise, for NAB the total value of impaired assets only reduced from AUD 2.26bn to 2.23bn in the same period. For Commerzbank, the second half of 2018 saw a rise of 12% in impaired assets, indicating a reverse trend from the improvement of credit quality in H1 2018. Non-performing mortgages remain well-secured, but some past-due housing loans could become impaired if housing values continue to fall. Further risks will emerge as interest-only loan periods expire and borrowers struggle with higher repayments.<sup>70,71</sup>

<sup>46</sup>Mar 6 2019 [5206.0 - Australian National Accounts: National Income, Expenditure and Product, Dec 2018](#), Australian Bureau of Statistics, abs.gov.au

<sup>47</sup>Mar 6 2019 [Australia GDP Growth Rate](#), Trading Economics tradingeconomics.com

<sup>48</sup>Mar 6 2019 [Australia GDP Growth Rate](#), Trading Economics tradingeconomics.com

<sup>49</sup>Apr 2 2019 [Statement by Philip Lowe, Governor: Monetary Policy Decision](#), Reserve Bank of Australia, rba.gov.au

<sup>50</sup>Apr 18 2019 [Australia Unemployment Rate](#), Trading Economics ft.com

<sup>51</sup>Apr 1 2019 [Australian PMI®: Manufacturing recovery slows again in March](#), Australian Industry Group, aigroup.com.au

<sup>52</sup>Apr 3 2019 [Australian PSI®: Services sector stays slow in March](#), Australian Industry Group, aigroup.com.au

<sup>53</sup>Apr 5 2019 [Australian PCI®: Construction downturn shows some signs of easing in March](#), Australian Industry Group, aigroup.com.au

<sup>54</sup>Apr 26 2019 [6457.0 - International Trade Price Indexes, Australia, Mar 2019](#), Australian Bureau of Statistics, abs.gov.au

<sup>55</sup>Apr 3 2019 [Australia Balance of Trade](#), Trading Economics tradingeconomics.com

<sup>56</sup>Apr 2 2019 [Statement by Philip Lowe, Governor: Monetary Policy Decision](#), Reserve Bank of Australia, rba.gov.au

<sup>57</sup>Apr 5 2019 [Capital Market Yields](#), Reserve Bank of Australia, rba.gov.au

<sup>58</sup>Apr 2 2019 [Indicator Lending Rates](#), Reserve Bank of Australia, rba.gov.au

<sup>59</sup>Mar 29 2019 [Bank Lending Classified by Sector](#), Reserve Bank of Australia, rba.gov.au

<sup>60</sup>Nov 12 2018 [Australian Government Credit Ratings](#), Fitch fitchrating.com

<sup>61</sup>April 1 2019 [Australian major banks' overview](#), EY ey.com

<sup>62</sup>April 1 2019 [Financial Stability Review, April 2019](#), Reserve Bank of Australia, rba.gov.au

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<sup>64</sup>May 6 2019 [Westpac H1 2019 Results](#), Westpac westpac.com

<sup>65</sup>May 1 2019 [ANZ H1 2019 Results](#), ANZ anz.com

<sup>66</sup>March 31 2019 [NAB H1 2019 Results](#), NAB nab.com

<sup>67</sup>March 31 2019 [Commonwealth bank H1 2019 Results](#), Commonwealth commbank.com

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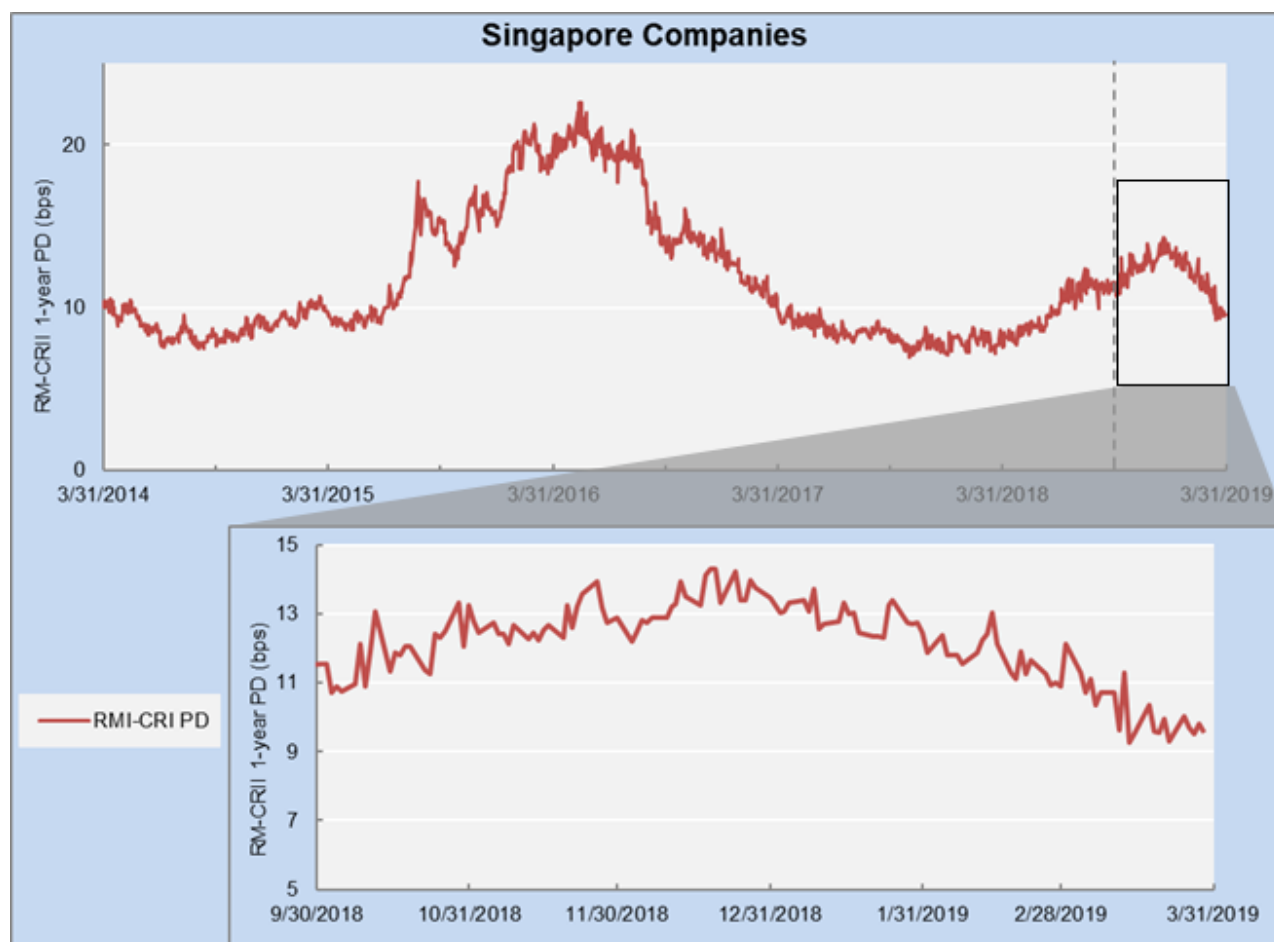
<sup>69</sup>April 1 2019 [Financial Stability Review , April 2019](#), Reserve Bank of Australia, [rba.gov.au](#)

<sup>70</sup>April 1 2019 [Australian major banks' overview](#), EY [ey.com](#)

<sup>71</sup>April 1 2019 [Financial Stability Review , April 2019](#), Reserve Bank of Australia, [rba.gov.au](#)

## Singapore Companies

The RMI-CRI aggregate PD for Singapore firms decreased from 11.27bps in Q4 2018 to 8.18bps in Q1 2019. The economy grew by 1.3% on a YoY basis. The slower growth rate was due to the contraction of precision engineering and electronics clusters. Data from March shows that the unemployment rate stabilized and retail sales decreased. Furthermore, the export declined furthest in the recent two years and manufacturing PMI reversed the downward trend of the previous 6 continuous months.



## Economy

- The Singapore economy grew 1.3% on an annual basis in Q1 2019, a slowdown from 1.9% in the previous quarter. Weighing down on overall growth was a contraction in the key manufacturing sector, which shrunk 1.9% on a year-on-year basis in the first quarter on the back of output declines in the precision engineering and electronics clusters. The services producing industries grew by 2.1% on a year-on-year basis in the first quarter, slightly higher than the 1.8% growth in the fourth quarter of last year.<sup>72</sup>
- Singapore's Consumer Price Index for all items YoY change was 0.6% in March 2019, higher than 0.3% in last month and the end of last quarter. Smaller declines in private road transport and accommodation costs year-on-year contributed to this, the release said. Core inflation, which excludes changes in the price of accommodation and private road transport, eased to 1.4% in Q1 2019 from 1.9% in last quarter, mainly due to smaller increases in the prices of retail items and electricity and gas more than offset the rise in services and food inflation.<sup>73</sup>
- The overall unemployment rate remained at 2.2% in Q1 2019, even as economic growth slowed. Retrenchments in the service industry declined over the quarter, but increased in manufacturing and remained unchanged in construction. Retrenchments are ex-

pected to fluctuate in 2019 especially with the continued US-China trade tensions and several key political elections across the globe which result in natural uncertainties.<sup>74</sup>

- The Purchasing Manager's Index (PMI), an early indicator of manufacturing activity, came in at 50.8 at the end of Q1 2019. The Singapore manufacturing PMI has now recorded 31 months of consecutive expansion and reversed the downward trend of the previous 6 continuous months. The improved reading was attributed to faster growth recorded in the new orders, new exports, factory output, inventory, and employment level.<sup>75</sup>
- Retail sales in Singapore fell 1% in March 2019 from one year ago, easing from the revised 9.9% fall in February 2019. Most retail segments registered a fall in March, with optical goods and books seeing the biggest decline of 6.1%. Categories which registered year-on-year increases included medical goods and toiletries (2.8%), as well as supermarkets and hypermarkets (0.9%).<sup>76</sup>
- Singapore's non-oil domestic exports (NODX) slumped to their worst decline in more than two years in March 2019, with shipments to most of its top markets declining. Total trade decreased by 0.9% in March on a year-on-year basis, after the 3.3% growth in the preceding month. Overall, exports to nine out of Singapore's top 10 markets declined in March, except to the United States. The largest contributors to the NODX decrease were Japan (-36.6%), Taiwan (-27.4%) and Hong Kong (-22.4%).<sup>77</sup>

### Monetary

- GDP growth in the Singapore economy has eased, bringing the level of output closer to its underlying potential. Despite some pickup in labor costs, inflationary pressures are mild and should remain contained. MAS will therefore maintain the current rate of appreciation of the SGD NEER policy band. There will be no change to its width and the level at which it is centered. This policy stance is consistent with a modest and gradual appreciation path of the SGD NEER policy band that will ensure medium-term price stability.<sup>78</sup>

### Funding & Liquidity

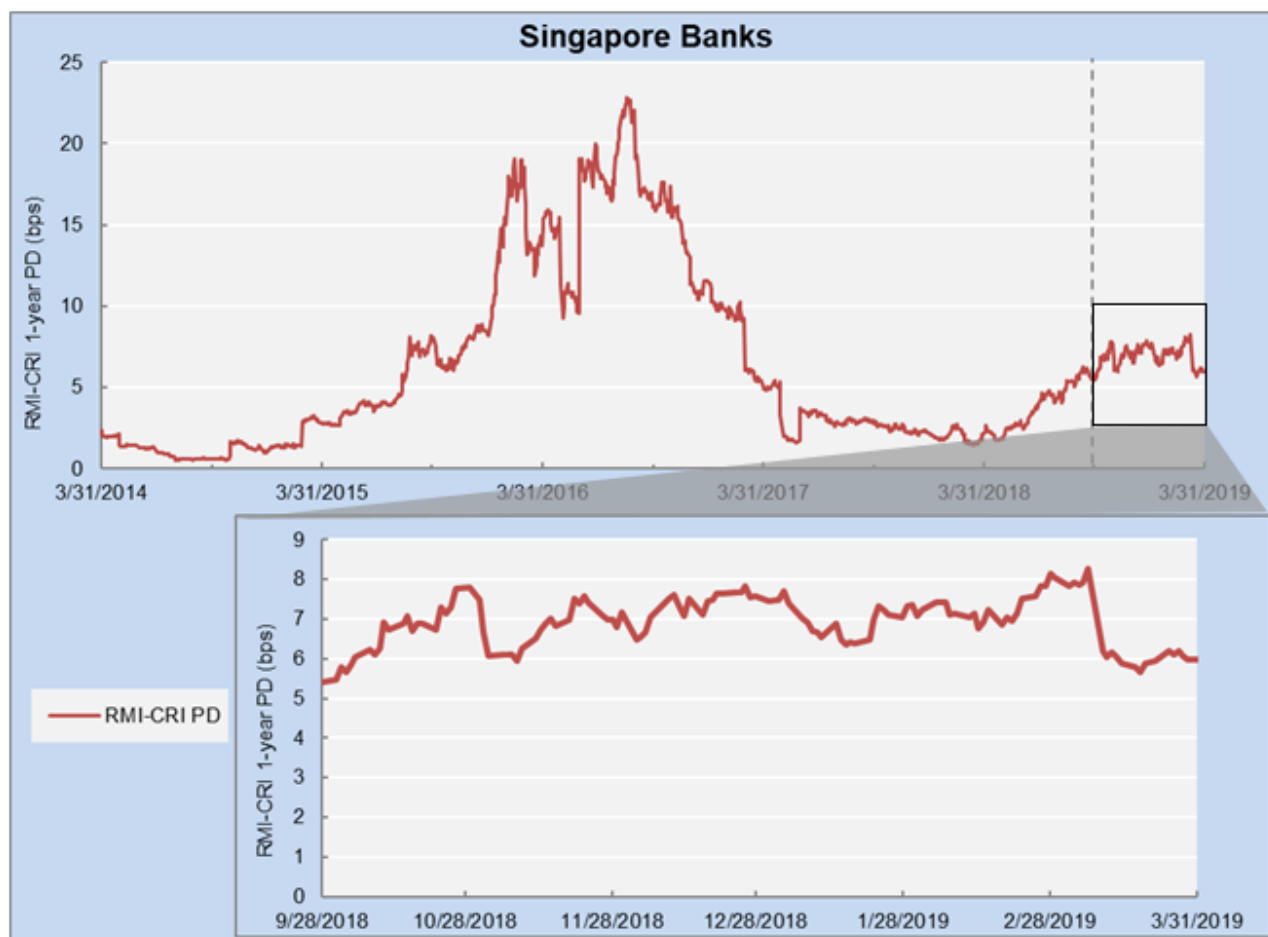
- Yields of 10-year Singapore government bonds decreased to 2.17% on Mar 31 2018 from 2.04% on Dec 31 2018.<sup>79</sup>
- Loans and advances of domestic banking units to non-bank customers rose from SGD 672bn in Q4 2018 to SGD 676bn in Q1 2019. Total loans to businesses rose from SGD 405.5bn in Dec 2018 to SGD 411.5bn in Mar 2019 while loans to consumers decreased marginally from SGD 266.2bn in Q4 to SGD 264.7bn in Q1.<sup>80</sup>
- The amount of outstanding sovereign bonds rose from SGD 114.7bn in Q4 2018 to SGD 119.2bn at the end of Q1 2019.<sup>81</sup>
- The prime lending rate decreased to 5.25% in Q1 2019.<sup>82</sup>

### Sovereign Credit Ratings

- All three major rating agencies kept their highest investment grade ratings for Singapore sovereign bonds with stable outlooks over Q1 2019.

## Singapore Banks

The RMI-CRI 1-year aggregate PD for Singapore banks in Q1 increased from 15bps in last quarter to 22.85bps by the end of December 2018. 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

- UOB Group achieved net earnings of SGD 1.05bn for Q1 2019, up 15% from the previous quarter. Total income rose 9% to SGD 2.41bn, led by a recovery in trading and investment income and healthy loan growth as macro conditions stabilised and the financial markets rebounded. <sup>83</sup>
- DBS Group's net profit for first quarter 2019 increased 9% to a record SGD 1.65 billion, boosted by a recovery in wealth management and trading income. DBS reported a record SGD 1.65bn net profit for first quarter 2019, increased by 9% from last quarter. Total income grew 6% to a new high of SGD 3.55bn, fuelled by healthy business momentum and a higher net interest margin. <sup>84</sup>
- OCBC achieved a net profit after tax of SGD 1.23bn for Q1 2019, 11% above SGD 1.11bn reported a year ago. This was driven by record operating profit before allowances, which was underpinned by strong income growth across the Group's banking, wealth management and insurance franchise. <sup>85</sup>
- The amount of loans to non-financial institutions rose from SGD 306bn in Q4 2018 to SGD 313bn in Q1 2019, according to data from the Monetary Authority of Singapore. Total business loans increased by 1.48% to SGD 411.5bn at the end of Q1 2019 from 405.5bn in the previous quarter. <sup>86</sup>

## Funding & Liquidity

- Total deposits in Singapore banks rose to SGD 653bn in Q1 2019 from SGD 628bn in Q4 2018. Local currency deposits increased by SGD 25bn to SGD 653bn in Q1. Foreign currency deposits decreased by about 17% to SGD 7.23bn during Q1 2019.<sup>87</sup>
- Singapore's fixed deposit rates for 6-month deposits increased to 0.26% in Q1 2019 from 0.24% in Q4 2018. The 3-month and 12-month deposit rate increased to 0.20% and 0.55% in Q1 respectively, from 0.17% and 0.45% in Q4 2018.<sup>88</sup>

## Capital Levels & Regulations

- All three Singapore banks kept their Tier 1 Common Equity ratios to be well above the recommended Basel III guidelines. Banks in Singapore need to have at least a Common Equity Tier 1 Capital Adequacy Ratio of 6.5%. The three banks are all sufficiently covered in this regard with DBS, UOB and OCBC having CET1 CARs of 14.1%, 13.9% and 14.2% respectively.

## Asset Quality

- Loan quality at local banks generally improved during Q1. Loans placed under the "special mention" category declined to 1.85% of total exposure at the end of Q1 2019, from 1.91% in the previous quarter. Loans classified as doubtful remained at 0.25% of total exposure.<sup>89</sup>
- All the three local banks had an unchanged NPL ratio from the previous quarter, standing at 1.5%.<sup>90,91,92</sup>

<sup>72</sup> Apr 12, 2019 [Singapore's GDP growth slows to 1.3% in Q1: MTI advance estimates](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>73</sup> Apr 23, 2019 [Singapore's core inflation eases to 1.4% in March](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>74</sup> Apr 26, 2019 [Jobless rate for Singaporeans in Q1 grows slightly to 3.2%: MOM](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>75</sup> Apr 2019, [March PMI improves 0.4-point to expand at 50.8](http://www.sipmm.edu.sg), Singapore Institute Of Purchasing & Materials, <http://www.sipmm.edu.sg>

<sup>76</sup> May 10, 2019 [Singapore retail sales fell 1% in March](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>77</sup> Apr 17, 2019 [Singapore March exports post worst fall in more than 2 years](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>78</sup> Apr 12, 2019 [MAS Monetary Policy Statement](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>79</sup> Mar, 2019 [SGS Prices and Yields - Benchmark Issues](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>80</sup> Mar, 2019 [Banks: Loans and Advances of DBUs to Non-Bank Customers by Industry](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>81</sup> Mar, 2019 [Issuance, Redemption and Outstanding Amount](https://secure.sgs.gov.sg/), MAS, <https://secure.sgs.gov.sg/>

<sup>82</sup> Mar, 2019 [Interest Rates of Banks and Finance Companies](https://secure.mas.gov.sg/msb/), MAS, <https://secure.mas.gov.sg/msb/>

<sup>83</sup> May, 2019 [UOB Group Reports First Quarter 2019 Earnings](http://www.uob.com.sg), UOB, [www.uob.com.sg](http://www.uob.com.sg)

<sup>84</sup> Apr, 2019 [DBS first-quarter net profit up](http://www.dbs.com.sg), DBS [www.dbs.com.sg](http://www.dbs.com.sg)

<sup>85</sup> May, 2019 [OCBC Group Reported First Quarter 2019](http://www.ocbc.com), OCBC Group, <http://www.ocbc.com>

<sup>86</sup> Apr, 2019 [Banks: Loans and Advances of DBUs to Non-Bank Customers by Industry](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>87</sup> Apr, 2019 [Deposits of DBUs by types of non-bank customers](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>88</sup>Apr, 2019 [Interest Rates of Banks and Finance Companies](https://secure.mas.gov.sg/msb/), MAS, <https://secure.mas.gov.sg/msb/>

<sup>89</sup>Apr, 2019 [Banks: Loans and Advances of DBUs to Non-Bank Customers by Industry](https://secure.mas.gov.sg/), MAS, <https://secure.mas.gov.sg/>

<sup>90</sup>Mar, 2019 [Interest Rates of Banks and Finance Companies](https://secure.mas.gov.sg/msb/), MAS, <https://secure.mas.gov.sg/msb/>

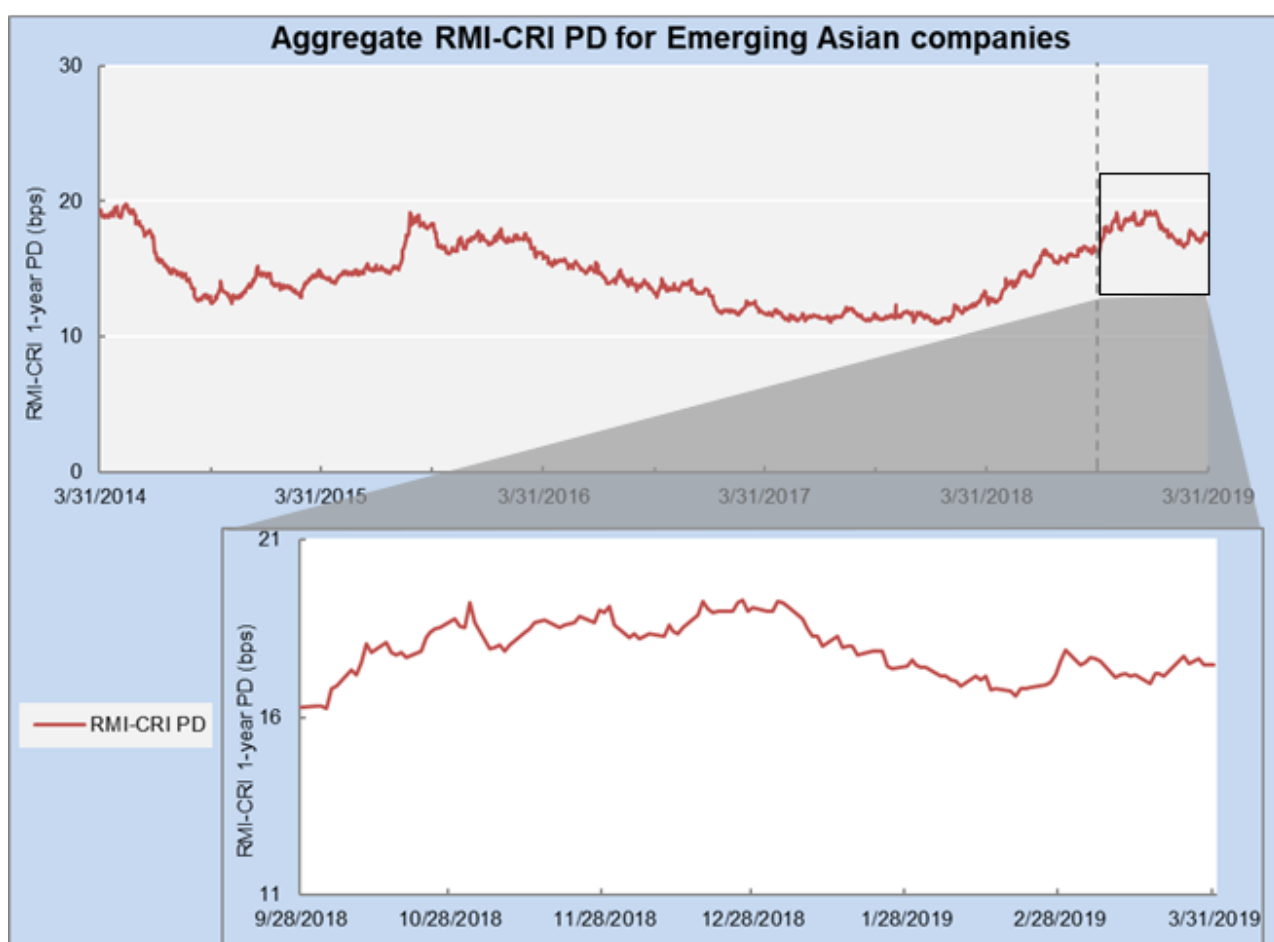
<sup>91</sup>May, 2019 [UOB Group Reports First Quarter 2019 Earnings](http://www.uob.com.sg), UOB, [www.uob.com.sg](http://www.uob.com.sg)

<sup>92</sup>Apr, 2019 [DBS first-quarter net profit up](http://www.dbs.com.sg), DBS [www.dbs.com.sg](http://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 2019, albeit at a higher-level overall compared to the end of Q4 2018. In terms of economic growth, Indonesia's economic acceleration continued in Q1 2019, slightly above market expectations at 5.11%. The growth was mainly driven by private consumption. The Malaysian economy, as measured by gross domestic product (GDP), expanded 4.5% in the Q1 2018 from a year earlier, driven mainly by household spending growth and continued expansion in manufacturing sector, with the exception of mining sector. Economic growth in Thailand decelerated to 2.8% YoY in the first quarter of 2019, down from the 3.6% annual expansion logged in Q4 last year and the lowest reading in nearly half a decade.





## Indonesian Companies

The NUS-CRI aggregate 1-year PD for Indonesian companies decreased to around 18.85bps at the end of March 2019 from 20.78bps at the end of December 2018. Indonesia's economy experienced a growth of 5.18% YoY in Q4 2018, slightly higher than the market expectation of 5.11%. Indonesia's inflation decreased for the first quarter of 2019, with a CPI of 2.48% from 3.13% in Q4. The trade balance improved to USD 0.54bn surplus in March 2019, from the USD 0.33bn surplus in February and USD 1.06bn deficit in January 2019. This was mainly due to non-oil and gas exports accelerating beyond non-oil and gas imports, which boosted a larger trade surplus. For the period from January-March 2019, Indonesia's trade balance recorded USD 0.19bn deficit cumulatively.



## Economy

- The Indonesian economy expanded by 5.18% YoY in Q4 2018, slightly faster compared to the previous period and still slightly above market expectations of 5.11%. Private consumption was the main driver behind the growth of the economy in this quarter (at 5.08%) while both fixed investment and government spending rose at a slower pace (at 6.01% and 4.56% compared to 6.96% and 6.27% in Q3 2018).<sup>93</sup>

- The Consumer Price Index (CPI) of Indonesia reached 2.48% in March. Respectively, the inflation of volatile food reached 0.16% (YoY), core inflation at 3.03% (YoY), inflation of administered prices at 3.25% (YoY). Going forward, the inflation is projected to stay at around 3.5% throughout 2019. Therefore, it is important that the central and regional governments as well as Bank Indonesia strengthen their coordination to keep inflation at check.<sup>94</sup>
- Indonesia's trade balance recorded a surplus of USD 0.54bn in March 2019, improving from a trade surplus of USD 0.33bn in the previous month. This was primarily supported by the acceleration of non-oil and gas exports beyond non-oil and gas imports. The oil and gas trade deficit widens to USD 0.45bn in March 2019 compared to the previous quarter while non-oil and gas trade balance surplus improved to USD 0.99bn. The improvement was attributable to a surge of non-oil and gas exports and a decline in oil and gas trade deficit. Bank Indonesia is confident that the current account position will improve as a larger trade surplus was recorded in March 2019. Moving forward, Bank Indonesia will continue to coordinate with the government to monitor global and domestic economic developments to strengthen external sector resilience.<sup>95</sup>
- According to Nikkei Indonesia Manufacturing Purchasing Managers Index (PMI), Indonesia's PMI rose in March to 51.2, from 50.1 in February. The first increases in output and new orders for three months, rising employments and a strongly upbeat business sentiment helped to lift the headline index.<sup>96</sup>

### Monetary

- On 24th and 25th April 2019, the Bank Indonesia (BI) Board of Governors agreed to hold the BI 7-day repo rate, deposit facility rate and lending facility rate at 6.00%, 5.25% and 6.75% respectively. The decision is consistent with Bank Indonesia's ongoing effort to strengthen the external stability of the economy and lower the current account deficit while simultaneously building economic growth momentum. Looking forward, Bank Indonesia will continue to coordinate with the Government to maintain economic stability and external stability, which includes controlling inflation and current account deficit.<sup>97</sup>

### Funding & Liquidity

- The yield of Indonesia's 5-year bonds decreased from 7.85% at the end of December 2018 to 7.16% at the end of March 2019. Similarly, Indonesia's 10-year government bond yield decreased from 8.00% at the end of Q4 2018 to 7.66% at the end of Q1 2019.<sup>98,99</sup>
- Indonesia's official reserve assets position stood at USD 124.5bn as of late March 2019, higher than the end of February 2019 level registered at USD 123.3bn. The increase was primarily attributable to oil and gas foreign exchange receipts and other foreign exchange receipts. Bank Indonesia considered the official reserve assets adequate in line with the confidence in the stability and upbeat outlook of the domestic economy as well as positive export performance.<sup>100</sup>

- External debt grew 7.2% (YoY) in January 2019. Long-term external debt remained dominant in Indonesia's external debt and stood at USD 330.4bn or 86.2% of total external debt. Long term external debt consisted of public sector external debt amounting to USD 189.4bn (57.3% of total long-term external debt) and private sector external debt amounting to USD 141bn (42.7% of total long-term external debt). Short-term external debt amounted to USD 52.7bn (13.8% of total external debt), comprised of private sector external debt amounting to USD 51.9bn (98.5% of total short-term external debt) and public sector external debt amounting to USD 862mn (1.5% of total short-term external debt). The ratio of external debt to GDP is stable at 36%.<sup>101</sup>

## Politics

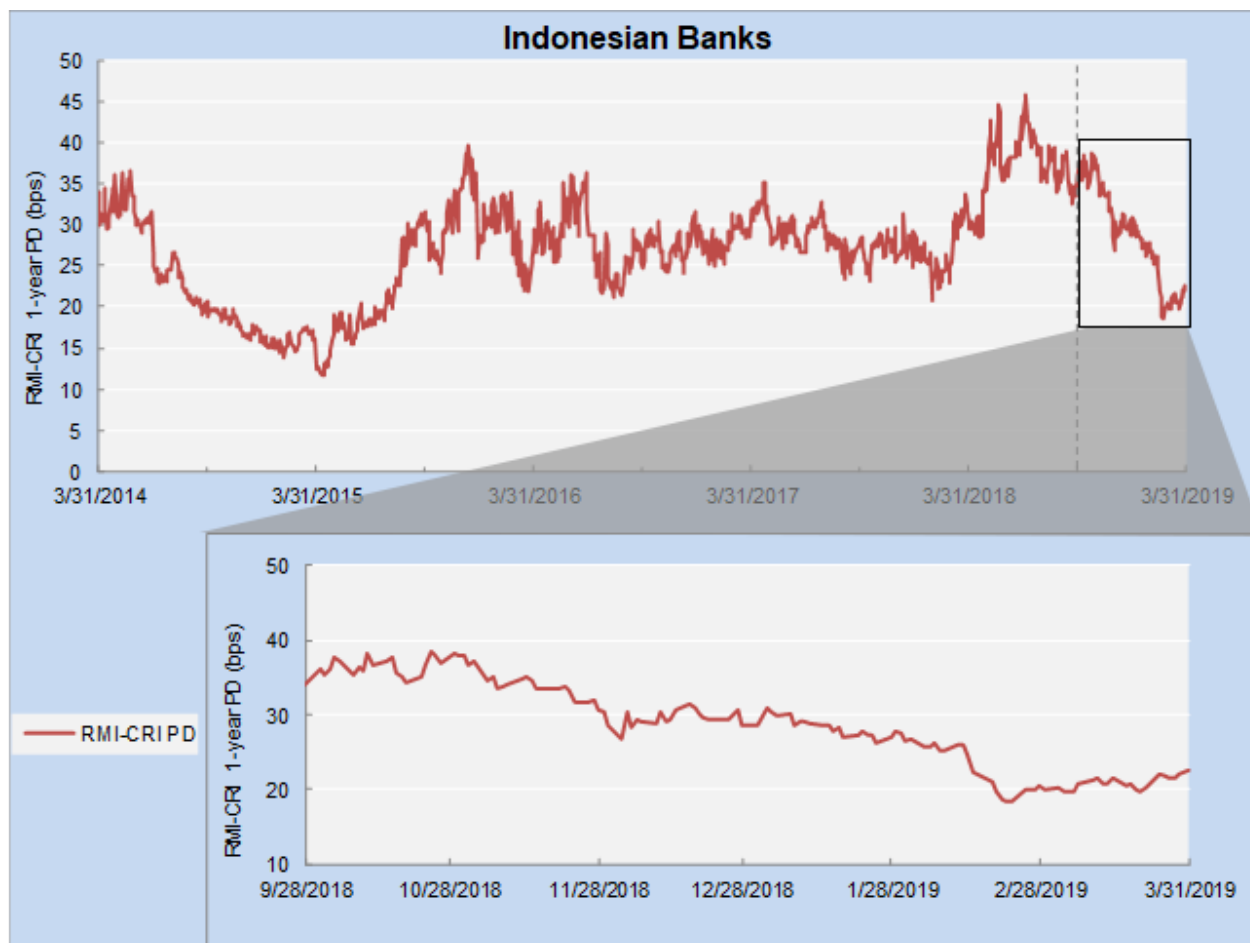
- Indonesia General Elections Commission's official results showed President Joko Widodo, who is also known as Jokowi, as the winner of the 2019 Indonesian General Election. Jokowi won 55.5% of the national vote, compared to his opponent Prabowo Subianto's 44.5%. However, Prabowo's camp refused to acknowledge the result as it claimed that the election was marred by voting irregularities and decided to challenge the result in the Constitutional Court. Moving forward, Jokowi's next government is expected to spend more on education and training in order to create 100 million jobs in the next 5 years to provide work for the growing number of millennials entering the labour market each year.<sup>102,103</sup>

## Sovereign Credit Ratings

- S&P, Moody's and Fitch kept their ratings on the local currency long term bonds of Indonesia at BBB-, BBB and Baa2 respectively. All three credit rating agencies have maintained their stable outlook on Indonesia's sovereign debt. This reflected the Indonesian government's consistent effort to ramp up productive spending and attract foreign investments<sup>104</sup>

## Indonesian Banks

The NUS-CRI aggregate 1-year PD for Indonesian banks decreased to 22.10bps at the end of March 2019 from 25.78bps at the end of December 2018. Loans extended by Indonesian banks grew 11.6% in March from a year earlier. Meanwhile, non-performing loans (NPL) stood at 2.6%.<sup>105</sup>



## Profitability

- Indonesian banks in general were still profitable in Q4 2018. Two of the three largest majority state-owned Indonesian banks, Bank Mandiri and Bank Rakyat Indonesia, reported a QoQ increase in net income of 17.1% and 3.4% respectively, while Bank Negara Indonesia reported a QoQ decrease in net income of -10.6%.<sup>106,107,108</sup>

## Funding & Liquidity

- The liquidity ratio (liquid asset/bank deposit) of Indonesian banks stood at 22.3% in February 2019.<sup>109</sup>
- The Jakarta 3-month interbank rate decreased from 7.71% at the beginning of Q1 2019 to 7.21% by the end of Q1 2019. Similarly, the 1-month interbank rate decreased from 7.52% at the beginning of Q1 2019 to 7.02% by the end of Q1 2019.<sup>110</sup>

## Regulation

- Indonesia's central bank, Bank Indonesia (BI) is planning to use sukuk issued by other countries in its monetary operations as demand for Shariah-compliant securities surge among lenders in Indonesia. The central bank is discussing whether to add more foreign sovereign sukuk to its reserves to be used as an underlying asset for Sukbi, a monetary instrument for liquidity operations, as its efforts to deepen the financial market and ensure stability are hampered by inadequate Shariah securities at its disposal. Meanwhile, regulators in Indonesia have finally recognized cryptocurrencies as commodities, thus providing legal backing for trading virtual currencies. However, BI stated that the ban on cryptocurrency payment is still in effect. <sup>111,112</sup>

## Asset Quality

- According to Bank Indonesia, the financial system remained stable. Capital adequacy ratio and liquidity of Indonesian banks, as of February 2019, stood at 23.4% and 22.3% respectively, while non-performing loans (NPL) stood at 2.6% (gross) or 1.2% (net). Bank Indonesia projects credit growth in 2019 at 10.0-12.0% (YoY). Moving forward, Bank Indonesia believes there is an adequate space to expand credit growth without disrupting the financial system stability considering that the credit cycle is below the optimal level with an outlook of solid demand. <sup>113</sup>

<sup>93</sup>Feb 06, 2019, [Indonesia GDP Annual Growth Rate](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>94</sup>Apr 01, 2019, [Low and Controlled Inflation Maintained](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>95</sup>Apr 15, 2019, [Trade Balance records Surplus in March 2019](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>96</sup>Apr 01, 2019, [Indonesian manufacturing sector expands in March](http://www.markiteconomics.com), Markit Economics, <http://www.markiteconomics.com>

<sup>97</sup>Apr 25, 2019, [BI 7-Day Reverse Repo Rate Held at 6,00%: Strengthening External Stability, Promoting Economic Growth Momentum](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>98</sup>Mar 29, 2019, [Indonesia 5-Year Bond Yield](http://www.investing.com), Investing, <http://www.investing.com>

<sup>99</sup>Mar 29, 2019, [Indonesia 10-Year Bond Yield](http://www.investing.com), Investing, <http://www.investing.com>

<sup>100</sup>Apr 08, 2019, [Official Reserve Assets Increased](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>101</sup>Mar 15, 2019, [External Debt Statistics of Indonesia - March 2019](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>102</sup>May 21, 2019, [Jokowi Declared Winner a Month After Indonesia Presidential Vote](https://www.bloomberg.com), Bloomberg, <https://www.bloomberg.com>

<sup>103</sup>May 21, 2019, [Indonesian presidential candidate Prabowo to challenge election result in Constitutional Court](https://www.smh.com.au), The Straits Times, <https://www.smh.com.au>

<sup>104</sup>Apr 13, 2018, [Indonesian Sovereign Rating: Market Data and Info](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>105</sup>Apr 24, 2019, [Indonesia Loan Growth](http://www.tradingeconomics.com), Trading Economics, <http://www.tradingeconomics.com>

<sup>106</sup>Jan 29, 2019, [Bank Mandiri \(Persero\)](http://quotes.wsj.com), The Wall Street Journal, <http://quotes.wsj.com>

<sup>107</sup>Jan 31, 2019, [Bank Rakyat Indonesia](http://quotes.wsj.com), The Wall Street Journal, <http://quotes.wsj.com>

<sup>108</sup>Jan 24, 2019, [Bank Negara Indonesia](http://quotes.wsj.com), The Wall Street Journal, <http://quotes.wsj.com>

<sup>109</sup>Apr 25, 2019, [BI 7-Day Reverse Repo Rate Held at 6,00%: Strengthening External Stability, Promoting Economic Growth Momentum](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

<sup>110</sup>Mar 29, 2019, [Jakarta Interbank Offered Rate \(JIBOR\)](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

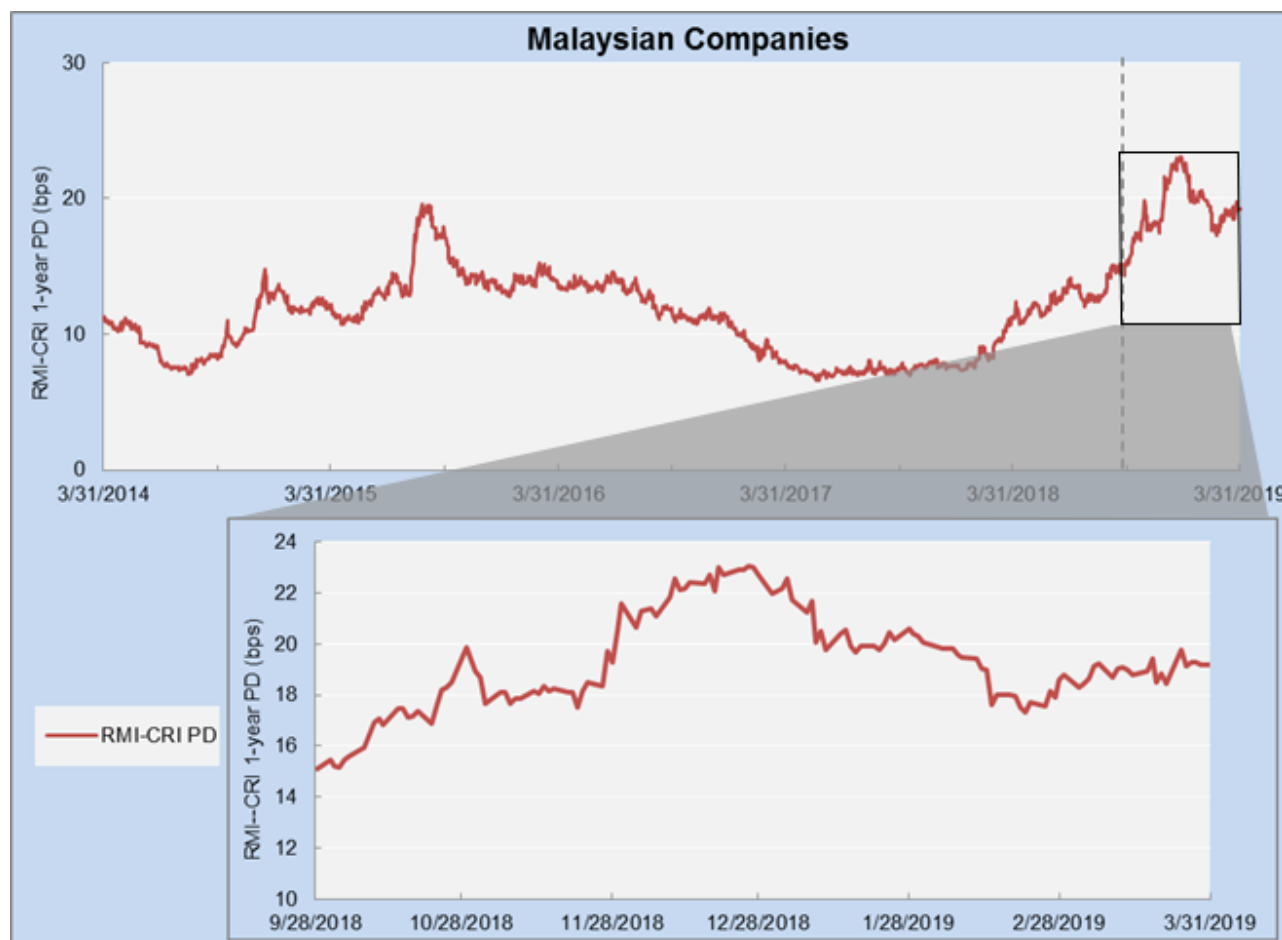
<sup>111</sup>Feb 17, 2019, [Bank Indonesia Mulls Accumulating Global Sukuk as Shariah Buffer](https://www.bloomberg.com), Bloomberg, <https://www.bloomberg.com>

<sup>112</sup>Feb 15, 2019, [Indonesia Officially Recognizes Bitcoin as a Commodity](https://bitcoinist.com), Bitcoinist, <https://bitcoinist.com>

<sup>113</sup>Apr 25, 2019, [BI 7-Day Reverse Repo Rate Held at 6,00%: Strengthening External Stability, Promoting Economic Growth Momentum](http://www.bi.go.id), Bank Indonesia, <http://www.bi.go.id>

## Malaysian Companies

The NUS-CRI aggregate 1-year PD for Malaysian fell to around 19bps over Q1 2019 from around 22bps at the end of 2018. Malaysia's economy grew by 4.5%, a slightly slower pace compared to Q4 2018. Exports fell sharply from 2.4% of GDP in Q1 2018 to 0.1% in Q1 2019, mainly due to modest global demand and a decline in oil and mineral production. Unemployment rate increased slightly to 3.4%. <sup>114</sup>



## Economy

- GDP of Malaysia growth lowered slightly to 4.5% YoY in Q1 2019 from 4.7% in Q4 2018 due to global headwinds. GDP growth is mainly driven by household spending growth and continued expansion in the manufacturing sector, with the exception of the mining sector. The agricultural sector recovered from -0.1% in Q4 2018 to 5.6% in Q1 2019. Headline inflation declined to -0.3% while core inflation remained unchanged at 1.6%. <sup>115</sup>



- Malaysia's CPI rose by 0.2% on a YoY basis in March 2019. Among the major groups which recorded increases were the indices for Housing, Water, Electricity, Gas & Other Fuels (+2.0%), Education (+ 1.3%) and Alcoholic Beverages & Tobacco (+1.1%). Major groups that experienced decreases were the indices for Health (-0.2%), Communication (-1.1%) and Miscellaneous Goods & Services (-2.0%).<sup>116</sup>
- Malaysia's unemployment rate increased slightly to 3.4% and the labour force participation rate in Malaysia remained at 68.5% in March 2019.<sup>117</sup>
- In Q1 2019, Malaysia exports recorded a decrease of 0.7% YoY to MYR 236.0bn. Imports also decreased 2.5% YoY to MYR 199.1bn. On a YoY basis, exports fell due to lower exports to Hong Kong (MYR -1.9bn), Indonesia (MYR -1.3bn), Japan (MYR -1.3bn), Switzerland (MYR -1.0bn) and Turkey (MYR -539.3m). On a YoY basis, lower imports were mainly from Singapore (MYR -3.3bn), the European Union (MYR -1.7bn), India (MYR -1.4bn), Switzerland (MYR -1.3bn) and Indonesia (MYR -891.2m).<sup>118</sup>

### Monetary

- Bank Negara Malaysia announced it would maintain the Overnight Policy Rate (OPR) at 3.25%, citing a slowdown in global economic expansion, with unresolved trade tensions remaining a source of risk. Despite facing other downside risks such as the problematic mining sectors, the Malaysian economy is projected to remain on the steady growth path for the rest of 2019 with continued support from household spending.<sup>119</sup>
- In March 2019, broad money (or M3), which measures the money supply, increased by 4.64% YoY to MYR 1.88tn.<sup>120</sup>
- Driven by non-resident outflows from the equity market, the ringgit depreciated by 0.3% against the USD in March 2019.<sup>121</sup>

### Funding & Liquidity

- The market indicative yield on the 10-year Malaysia government securities fell to 3.77% in March 2019, compared to 4.08% in December 2018. The same yield measure on 5-year Malaysia government securities decreased to 3.54% from 3.78% over the same period.<sup>122</sup>
- Bank loans approved to finance, insurance and business activities increased to MYR 2.95bn in March 2019 from MYR 2.74bn one year ago. Meanwhile, loans approved to the manufacturing segment decreased to MYR 2.56bn in March 2019 from MYR 3.29bn last year and loans approved to the wholesale, retail trade, restaurants and hotels segment increased to MYR 3.89bn, while loans approved to real estate decreased from MYR 2.51bn a year ago to MYR 1.59bn in March.<sup>123</sup>

### Regulations and Politics

- After several delays, the first trial of Malaysia's former Prime Minister Najib Razak over the 1MDB scandal, where it was alleged that billions of dollars were stolen by Najib and his cronies, started in April 2019 and continues on. The scandal was one of the main factors that contributed to Najib's loss at the general election in May 2018 and its handling is seen by many as a crucial indicator for the governmental policies on corruption for the future. While the first trial is currently under review for extension, additional trials are expected to follow it after its conclusion.<sup>124</sup>

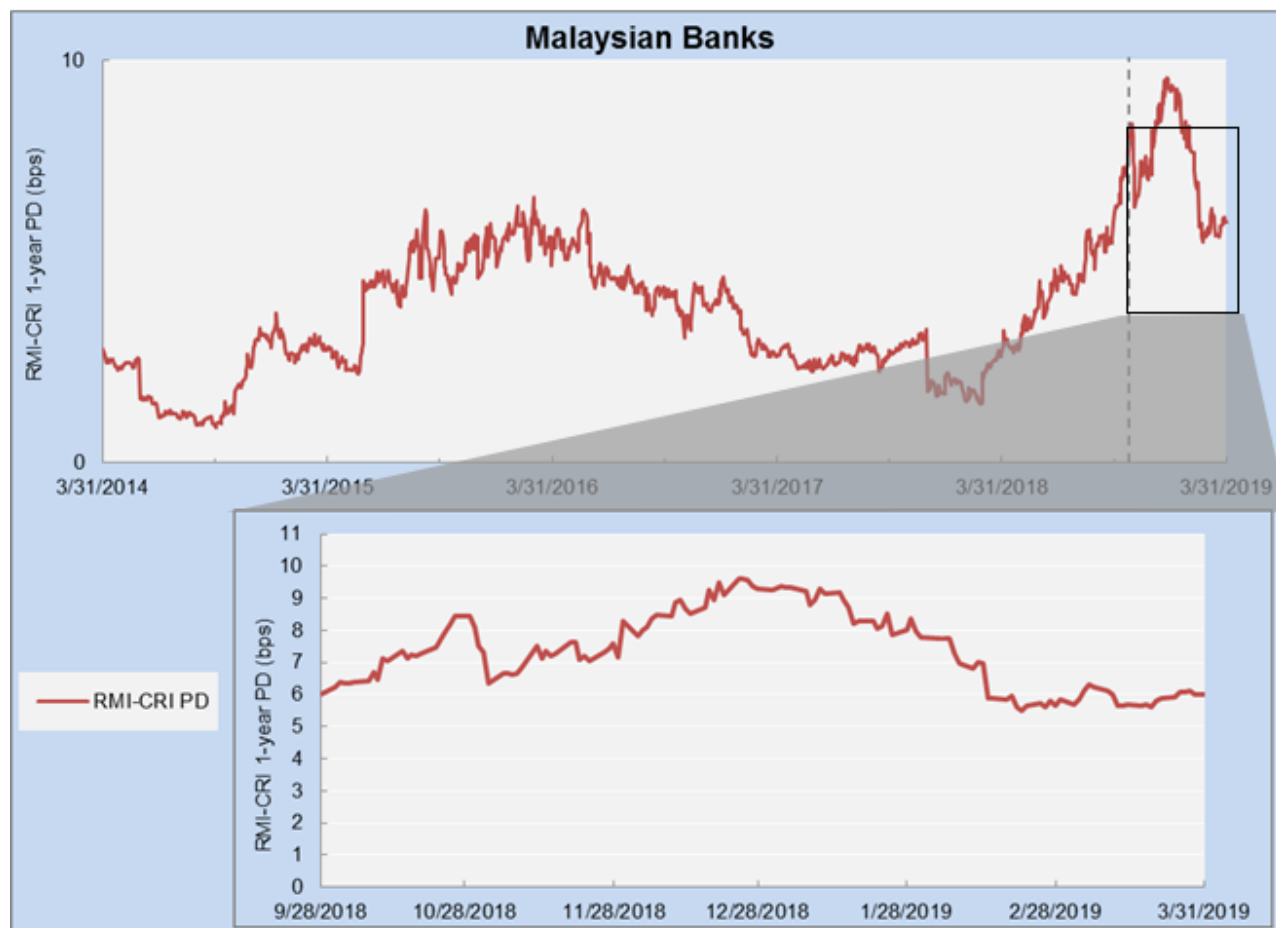
### Sovereign Credit Ratings

- 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 NUS-CRI aggregate 1-year PD for Malaysian banks decreased to around 6bps in Q1 2019, as the banking system remained well capitalized. Stable total bank deposits continue to ensure liquidity in Malaysian banks. The financials of Malaysian banks remained in the safety zone.



## Lending

- The amount of bank loan applications has increased to MYR 70.08bn in March from MYR 59.85bn in December. Loan application for finance, insurance and business activities had increased to MYR 5.38bn in March 2019 from MYR 4.93bn in December.<sup>125</sup>
- The base lending rate of Malaysian commercial banks remained at 6.91% in March 2019. The weighted base rate increased slightly to 3.92% in March 2019 compared to 3.91% in December 2018.<sup>126</sup>

## Funding & Liquidity

- Total bank deposits increased to MYR 1.895tn in March 2019 from MYR 1.883tn in December 2018. The repurchase agreement decreased to MYR 30.3bn in March 2019 from MYR 32.7bn in December 2018.<sup>127</sup>
- Savings deposit in banking system increased to MYR 161.63bn in March 2019 from MYR 1157.3bn in December 2018.<sup>128</sup>

## Capital Levels & Regulations

- The Common Equity Tier 1 Capital ratio for Malaysian banks increased to 13.7% in March 2019 from 13.1% in December 2018. Likewise, the Tier 1 Capital Ratio increased from 13.9% to 14.4% in the same period.<sup>129</sup>

## Asset Quality

- The value of impaired loans at Malaysian banks increased to MYR 24.58bn in March 2019 from MYR 24.49bn in December 2018. The ratio of net impaired loans to net total loans remained stable at 0.92% in the same period.<sup>130</sup>
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<sup>114</sup> May 16, 2019, [Economic and Financial Developments in Malaysia in the First Quarter of 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>115</sup> May 16, 2019, [Economic and Financial Developments in Malaysia in the First Quarter of 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>116</sup> Apr 24, 2019, [Consumer Price Index Malaysia March 2019](https://www.statistics.gov.my), Department of Statistics Malaysia, <https://www.statistics.gov.my>

<sup>117</sup> May 10, 2019, [Key Statistics of Labour Force in Malaysia March 2019](https://www.statistics.gov.my), Department of Statistics Malaysia, <https://www.statistics.gov.my>

<sup>118</sup> May 03, 2019, [Malaysia External Trade Statistics March 2019](https://www.statistics.gov.my), Department of Statistics Malaysia, <https://www.statistics.gov.my>

<sup>119</sup> Mar 05, 2019, [Monetary Policy Statement](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>120</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>121</sup> Apr 30, 2019, [Monthly Highlights – March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>122</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>123</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>124</sup> Apr 29, 2019, [Malaysia Seeks to Extend Najib's First 1MDB Trial](https://www.bloomberg.com/), Bloomberg, <https://www.bloomberg.com/>

<sup>125</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>126</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>127</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

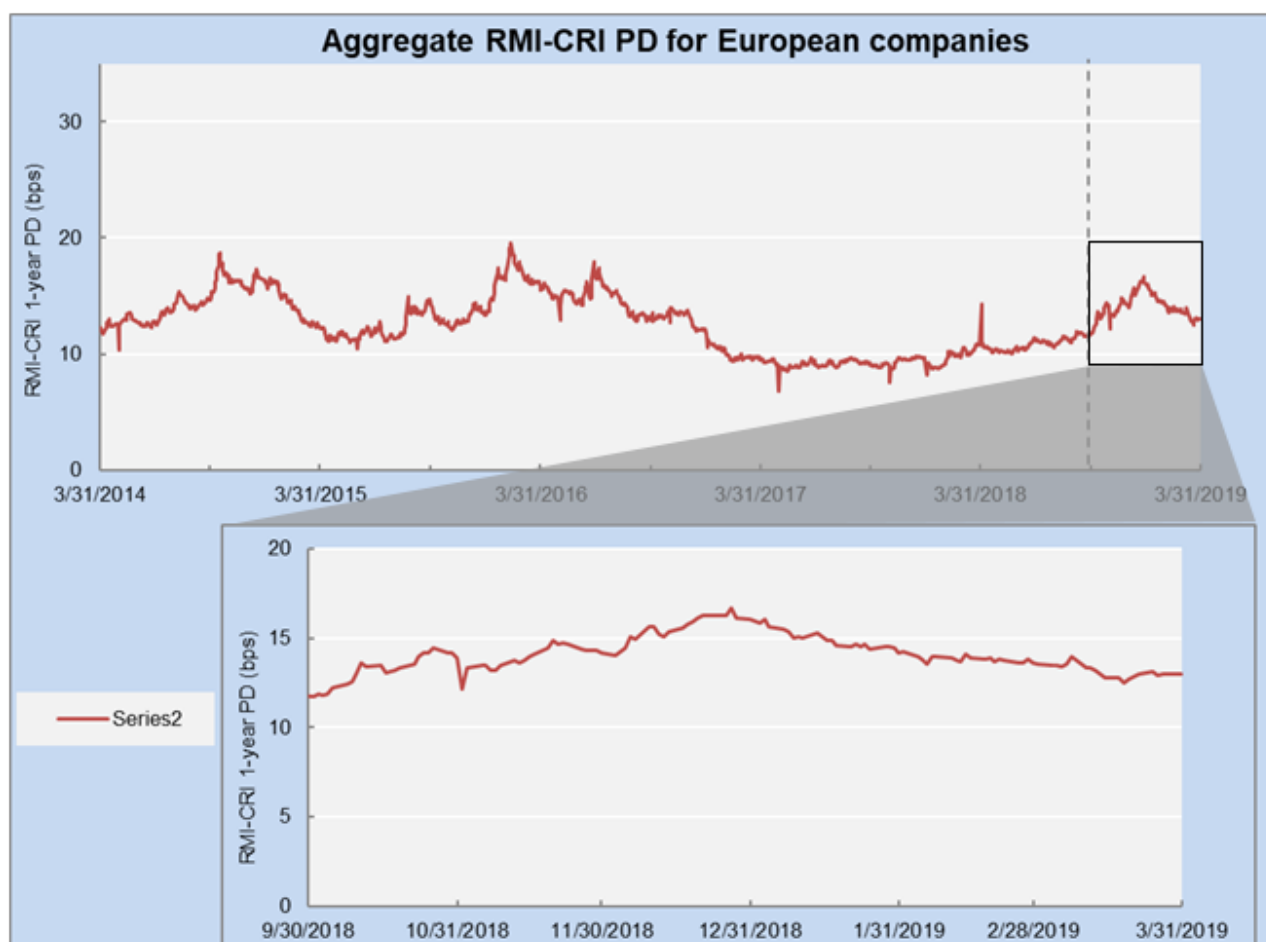
<sup>128</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>129</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

<sup>130</sup> Apr 30, 2019, [Monthly Highlights and Statistics March 2019](http://www.bnm.gov.my), Bank Negara Malaysia, <http://www.bnm.gov.my>

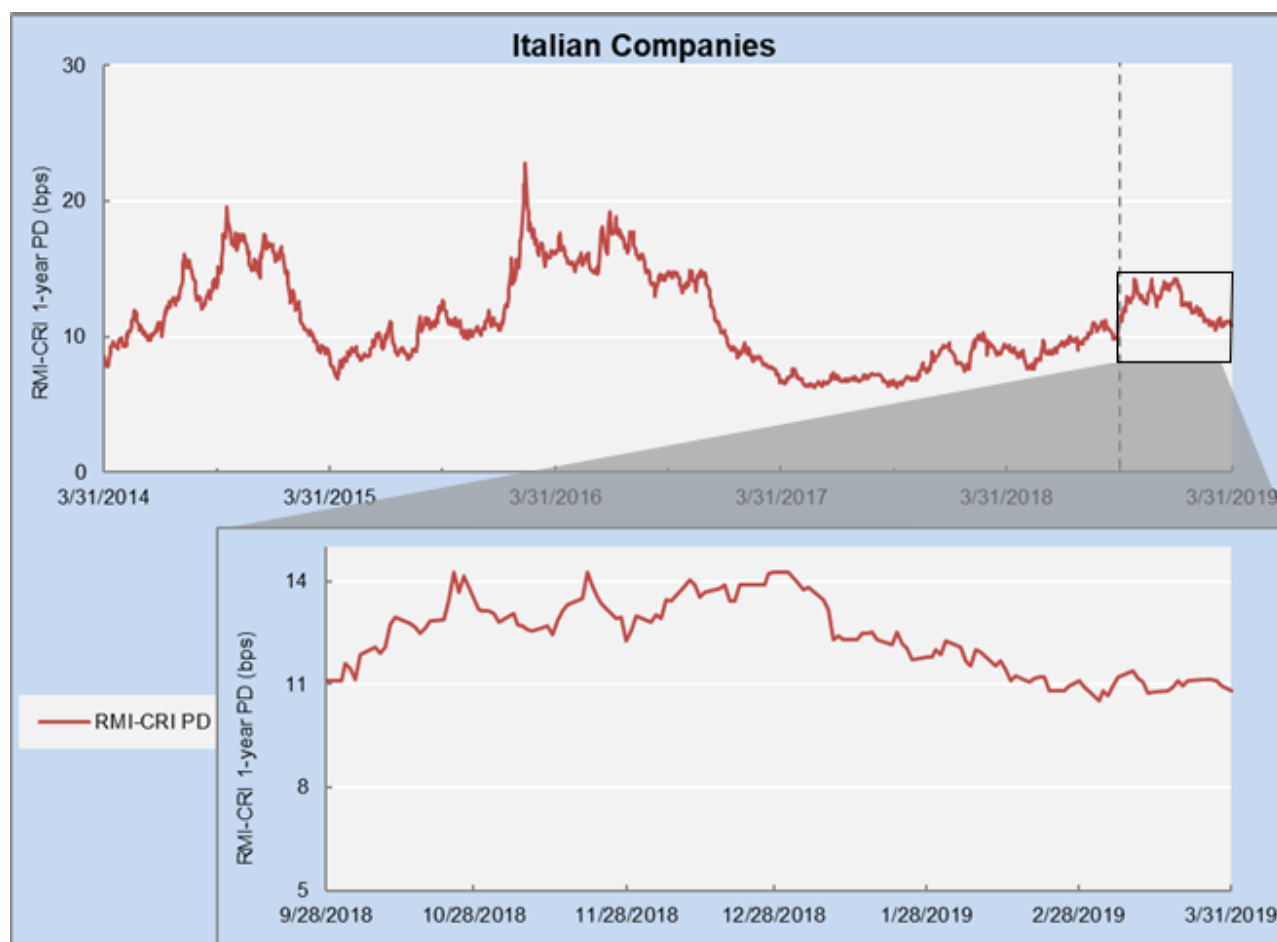
# Europe

European firms ended Q1 2019 with a slightly higher aggregate 1-year probability of default (PD) from the end of Q4 2018. Economic data showed that the European economy expanded more than expected in the first quarter of the year and unemployment rate remained stable at 7.8%. The European Central Bank (ECB) announced that a new series of quarterly targeted longer-term refinancing operations (TLTRO-III) will be launched, starting in September 2019 and ending in March 2021, each with a maturity of two years. These new operations will help to preserve favourable bank lending conditions and the smooth transmission of monetary policy.



## Italian Companies

The aggregate 1-year RMI PD for Italian companies decreased during the first quarter of 2019, from 14.08 bps in last quarter to 10.85 bps by the end of March 2019. Q1 saw credit outlook of Italian companies improve despite political uncertainty. The economy increased by 0.2%, and recorded a 0.1% YoY growth, emerging from the recession it entered in Q4 2018. With global economies slowing down, multiple analysts have predicted economic growth stagnation for export-oriented Italy in Q1 2019.



## Economy

- The GDP of Italy is estimated to increase by 0.2% from Q4 2018 to Q1 2019. The economy expanded 0.1% year-over-year. The pickup is attributed to the increase of value added in agriculture, services as well as in industry. The expansion followed drops in the third and fourth quarter's GDP, emerging from its third recession in a decade, which had started in Q4 2018.<sup>131,132</sup>
- Italy's unemployment rate was 10.2% in March 2019, a slight decrease over February 2019. The country ended the quarter with 23.291mn people employed. 2.641mn people were unemployed, a 3.5% decrease over the previous month. Youth unemployment (aged 15-24) was 30.2%, down 1.6% from the previous month.<sup>133</sup>
- Italy's manufacturing Purchasing Managers' Index (PMI) – a single-figure measure of developments in overall business conditions – increased slightly to 47.4 in March 2019, from 47.7 in February 2019. This marks the sixth month running for which the index posted below the 50.0 no-change mark. Both output and new orders underwent further reductions and manufacturers' confidence dipped slightly from February, but was nonetheless positive.<sup>134</sup>
- Italy's services PMI reported the fastest growth of the service sector in three months

during March, as a faster rise in new orders encouraged the increase of business activity. Italy's services PMI registered 53.10 in March, up from 50.3 in November. On the overall, the growth in staffing numbers continued in March from February, as well as continuing the trend of payroll expansion. Selling prices among Italian service providers continued their fall for the fourth consecutive month. Overall, sentiment remained positive among those surveyed.<sup>135</sup>

- 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 102.8 in January, 101.2 in February and 101.0 in March. These figures are lower than the 105.1 average reported over Q4 2018.<sup>136</sup>
- The confidence climate in March 2019 worsened from 112.4 to 111.2. All components lowered: economic from 126.4 to 123.9, personal from 108.2 to 106.8, current from 109.4 to 107.8 and future component from 116.9 to 115.9. The balance concerning expectations on production in manufacturing decreased from 5.6 to 3.5. The balance on expectations on employment in construction improved from 0.3 to 5.6. Market services balances on business improved from 5.3 to 9.7.<sup>137</sup>

### Funding & Liquidity

- Yield on 10-year Italian bonds decreased from the 2.77% it had reached on 31st December 2018, reaching 2.48% by the end of March. This was their lowest yield since May 2018. The decline was generally slower than in Q4 2018, which was partly due to Moody's decision not to downgrade Italian treasuries in March.<sup>138</sup>
- Interest rates on loans (other than bank overdrafts) to non-financial corporations rose slightly during Q1 2019, from 2.06% in December 2018 to 2.10% in March 2019. Bank interest rates (including revolving loans, overdrafts and extended credit card credit) to corporations rose from 2.81% in December 2018 to 2.98 at the end of March 2019. Loans for house purchases decreased slightly from 1.88% to 1.82% in the first quarter.<sup>139,140,141</sup>
- Preliminary estimates for outstanding loans to non-financial institutions stood at EUR 675.94bn. Total outstanding loans overall decreased by 2.03% from the previous quarter.<sup>142</sup>

### Politics

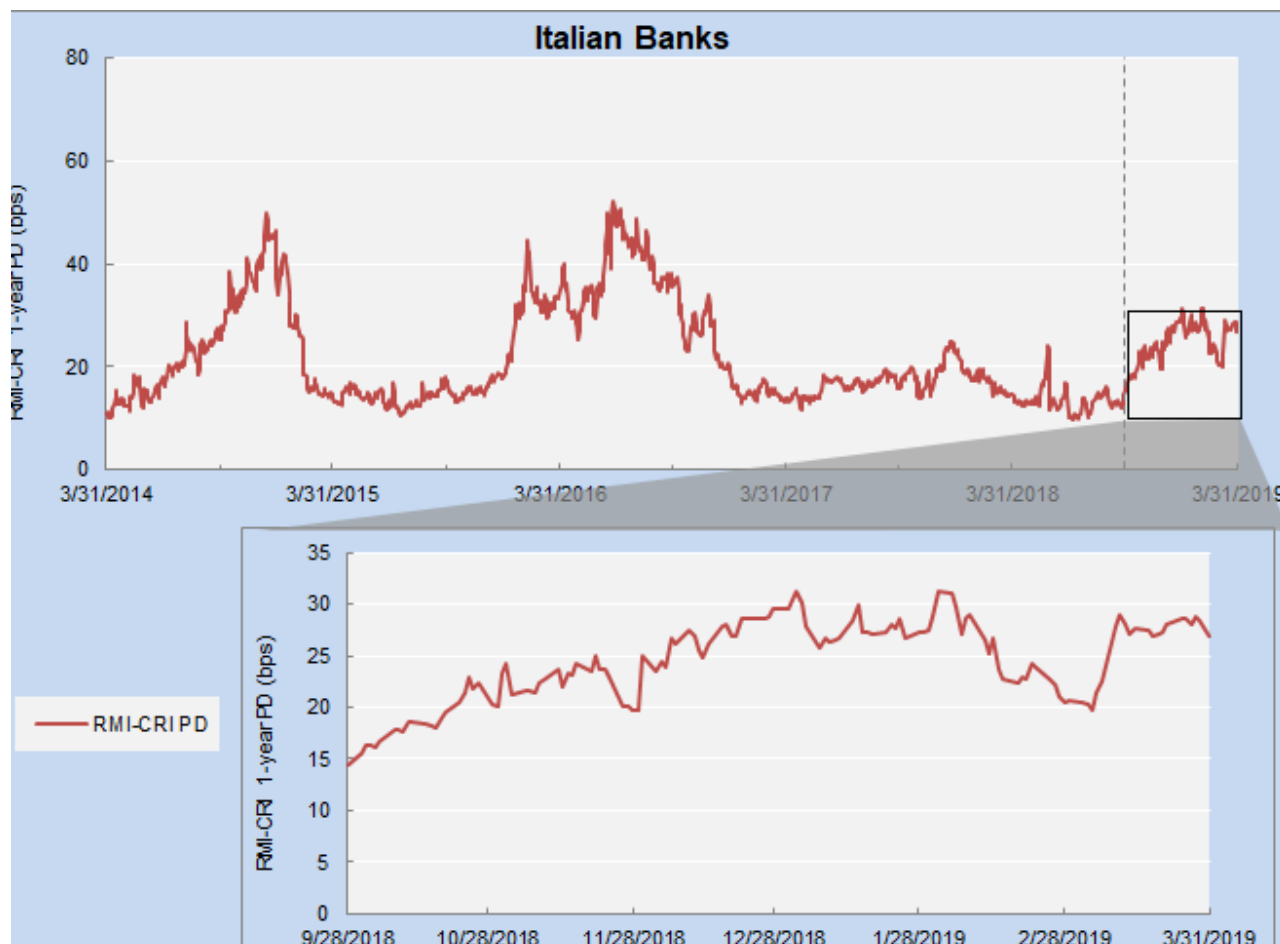
- Italy's government lowered its 2019 economic growth forecast to 0.2%, expecting an end to the country's third recession in the past ten years, which it had entered in December 2018. While policies of the populist government were repeatedly criticized by the European Commission, the expansionary budget of the coalition caused by costly election promises hurt the economy as well, despite economic optimism displayed by the government.<sup>143</sup>
- Italy's latest published public accounts were that of Q4 2018. Total revenues for General government grew by 1.5% while total expenditures grew by 1.7% compared to the same quarter of the previous year. The growth of total revenues results from an increase in current revenues (+2.1%) and a significant decrease in total capital revenues (-56.3%). The trend in expenditure results from an increase in current expenditures (+2.5%) and a fall in capital expenditures (-7.7%). The General government deficit (net borrowing) to GDP ratio was 2.0% in the fourth quarter of 2018, as compared to the -1.9% in the fourth quarter of 2017. Italy's debt-to-GDP ratio is set to stand at 132.2% based on latest data in Q4 2018.<sup>144,145</sup>

### Sovereign Credit Ratings

- Moody's and S&P maintained their ratings at Baa3 with a stable outlook and BBB with a negative outlook respectively. Fitch revised its ratings to BBB with a stable outlook in February 2019.<sup>146</sup>

## Italian Banks

The aggregate 1-year RMI PD for Italian banks, after dropping to 19.99bps in February, rose again to 26.68bps in March. Overall, it remained relatively stable at the end of Q1 2019, compared to the 27.75bps at the end of Q4 2018. Interest rates to firms and to households remained near multiple-year lows. Nevertheless, the demand for business lending slowed down. In the meantime, asset quality at Italian banks improved, with the ratio of new non-performing loans to outstanding loans decreasing. Meanwhile, coverage ratio for Italian banks worsened to 53.4%.



## Profitability

- Italy's biggest bank Unicredit posted its strongest first quarter in a decade for the second time in a row as its first quarter net profit increased by 24.7% as compared to a year ago. Its gross non-performing exposure ratio remained at 4.1% with a coverage ratio of 61.8% while its CET1 ratio improved to 12.25% from 12.07% in Q4 2018. For Intesa Sanpaolo, another major Italian bank, its net interest income is down 5.2% as compared to a year ago while its CET1 ratio worsened to 13.1% from 13.5% in December 2018. Intesa's loans loss provisions decreased significantly to EUR 369mn in Q1 2019 from EUR 698mn in Q4 2018. Based on its Q1 results, Intesa is firmly on track for meetings its fiscal targets in 2019.<sup>147,148</sup>

## Funding & Liquidity

- The 12-month percentage change in deposits of funds by Italian residents was 3.49% in March 2019, while for the total deposits of non-domestic residents it was 12.55%. Refinancing from Eurosystem decreased by 2.98% as compared to March 2018, while debt securities issued by banks decreased by 8.69% as compared to the same period last year.<sup>149</sup>



- Interest charged on business loans (other than bank overdrafts) of over EUR 1mn to non-financial institutions was 0.91% in March 2019, up from the 1.12% reported in December 2018. Similar loans with collateral and/or guarantees were charged with an interest rate of 1.17%, the same as was charged in December 2018. Bank interest rate on loans to sole proprietors was 3.11% in March 2019, up from 3.06% in December 2018.<sup>150</sup>
- The Bank of Italy's liabilities to Euro-area financial counterparties jumped to EUR 100,221.4bn in March 2019 from EUR 88,702.7bn in December 2018.<sup>151</sup>
- Italian bank liabilities towards the Eurosystem slightly decreased to EUR 243bn in February 2019 from EUR 244bn in November 2018. Lenders decreased their funds held at the ECB by 3.2% YoY in February 2019 while capital and reserves decreased to EUR 379bn during the three months ending February 2019.<sup>152</sup>
- According to the latest bank lending survey, Italian banks reported that in the fourth quarter of 2018, credit supply conditions are tightening, mainly due to a worsening macroeconomic outlook and an increase in funding costs. Lending to firms has slowed in the fourth quarter of 2018.<sup>153</sup>

### Asset Quality

- The Bank of Italy said that the ratio of new non-performing loans to outstanding loans continued to fall, from 1.7% in the fourth quarter of 2018 to 1.4% at the end of March 2019.<sup>154</sup>
- Share of non-performing loans to total loans fell from 9.4% to 8.3% in Q4 2018. The coverage ratio at Italian banks decreased from 54.5% to 53.4% between Q3 and Q4 2018.<sup>155</sup>

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<sup>151</sup> Apr 30, 2019, [Preliminary estimate of GDP](#), Italian National Institute of Statistics, [istat.it](#)

<sup>152</sup> Jan 31, 2019, [Italy Falls Back Into Recession – Raising Concerns for E.U.](#), Time, <http://time.com/>

<sup>153</sup> Apr 30, 2019, [Employment and unemployment: provisional data](#), Italian National Institute of Statistics, [istat.it](#)

<sup>154</sup> Apr 1, 2019, [Falling new orders contribute to further deterioration in Italian manufacturing performance](#), Markit, <https://www.markiteconomics.com/>

<sup>155</sup> May 6, 2019, [New order growth picks up in December](#), Trading Economics, <https://tradingeconomics.com/>

<sup>156</sup> Apr, 2019, [Economic sentiment indicator for Italy](#), Eurostat, [ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

<sup>157</sup> Mar 27, 2019, [Consumer and business confidence](#), Italian National Institute of Statistics, [istat.it](#)

<sup>158</sup> Mar 18, 2019, [No news is good news for Italian bonds as Moody's holds rating](#), Reuters, <https://www.reuters.com/>

<sup>159</sup> Apr, 2019, [Italian MFIs: Interest per annum on new loans to non-financial corporations](#), ECB, [sdw.ecb.europa.eu](http://sdw.ecb.europa.eu)

<sup>160</sup> Apr, 2019, [Italian MFIs: Revolving loans & overdrafts, convenience & extended credit card credit to corporations](#), ECB, [sdw.ecb.europa.eu](http://sdw.ecb.europa.eu)

<sup>161</sup> Apr, 2019, [Italian MFIs: Cost of borrowing for households for house purchase](#), ECB, [sdw.ecb.europa.eu](http://sdw.ecb.europa.eu)

<sup>162</sup> Apr, 2019, [Italian MFIs: Total loans to non-financial corporations](#), ECB, [sdw.ecb.europa.eu](http://sdw.ecb.europa.eu)

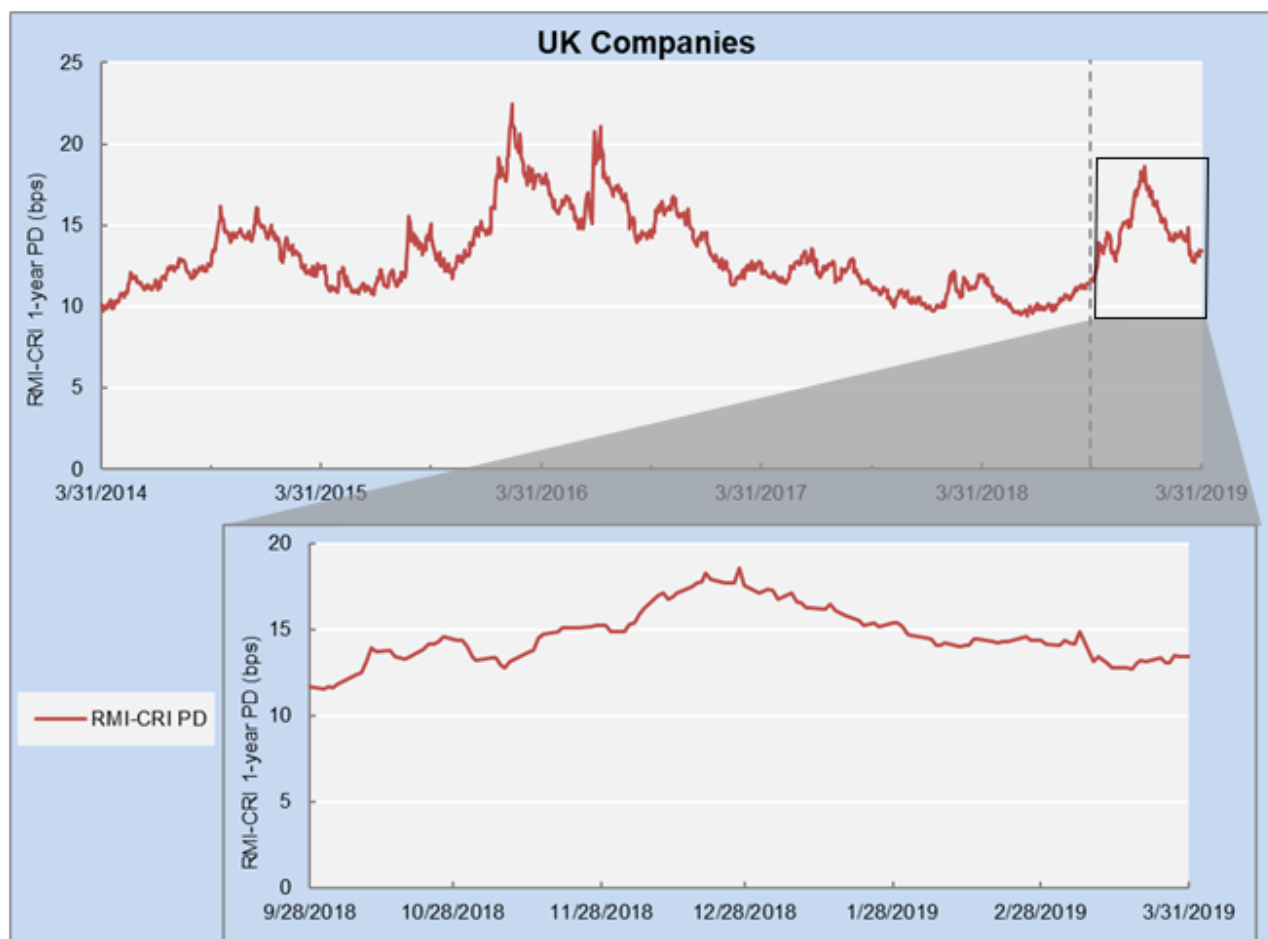
<sup>163</sup> Mar 4, 2019, [Italy Is Still in the Danger Zone, and Europe Is Nervous](#), Bloomberg, <https://www.bloomberg.com>



- <sup>144</sup> Apr 3, 2019 [Quarterly non-financial accounts and profits of non-financial corporations](#), Italian National Institute of Statistics, [istat.it](#)
- <sup>145</sup> Apr, 2019, [General Government gross debt - quarterly data](#), Eurostat, [ec.europa.eu/eurostat](#)
- <sup>146</sup> Mar, 2019 [Rating: Italy Credit Rating](#), CountryEconomy, <https://countryeconomy.com/>
- <sup>147</sup> May 9, 2019, [UniCredit: a pan-European winner. 4Q18 and FY18 Group Results](#), UniCredit, <https://www.unicreditgroup.eu/>
- <sup>148</sup> Feb 5, 2019, [INTESA SANPAOLO CONSOLIDATED RESULTS AS AT 31 MARCH 2019](#) , Intesa Sanpaolo Bank, [www.group.intesasanpaolo.com/](http://www.group.intesasanpaolo.com/)
- <sup>149</sup> Feb, 2019, [\[TSC40600\] Bank funding \(12-month percentage changes\)](#) , Banca Italia, <https://infostat.bancaditalia.it>
- <sup>150</sup> Jan, 2019, [Bank interest rates on euro loans to non-financial corporations](#) , Banca Italia, <http://www.bancaditalia.it>
- <sup>151</sup> Apr, 2019, [Bank of Italy balance sheet: liabilities - liabilities to euro area financial counterparties denominated in euros](#), Banca Italia, <http://www.bancaditalia.it>
- <sup>152</sup> Apr, 2019, [Economic bulletin - April 2019](#), Banca Italia, <http://www.bancaditalia.it>
- <sup>153</sup> Apr, 2019, [Economic bulletin - April 2019](#), Banca Italia, <http://www.bancaditalia.it>
- <sup>154</sup> Apr, 2019, [Economic bulletin - April 2019](#), Banca Italia, <http://www.bancaditalia.it>
- <sup>155</sup> Apr, 2019, [Economic bulletin - April 2019](#), Banca Italia, <http://www.bancaditalia.it>

## UK Companies

The aggregate RMI-CRI 1-year PD for companies in the UK displayed a subtle downward sloping trend, from 17.03 bps in Q4 2018 to 13.04 bps in Q1 2019. GDP growth rose to 0.5% QoQ. Consumer spending for the quarter declined when compared to previous quarter, in line with a marked drop in consumer confidence. Trade deficit widened on the account of rising imports of unspecified goods (including non-monetary gold), chemicals, and machinery and transport equipment. 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 2019 GDP is estimated to have grown by 0.5%, higher than 0.2% growth in the previous quarter. The strength in quarterly growth is in part due to the low December 2018 monthly growth in the base period, which makes the current period look stronger in comparison. Growth in the services sector slowed to 0.3% in the latest quarter, while there was a noticeable pickup in growth in the production sector, driven by growth of 2.2% in manufacturing output.<sup>156</sup>
- The UK unemployment rate was estimated at 3.8%, lowest since October 1974. Excluding bonuses, average weekly earnings for employees in Great Britain were estimated to have increased by 3.3%, before adjusting for inflation, and by 1.5%, after adjusting for inflation, compared with a year earlier.<sup>157</sup>
- Visa's UK Consumer Spending Index, compiled by IHS Markit, signalled a further year-on-year decline in consumer spending in March. Consumer spending falls by 0.2%, weakest reduction in five months. Face-to-Face spend fall slightly in 0.7%, but eCommerce expenditure rises by 0.5%. Food & Drink sees most marked reduction in expenditure (3.6%) , while spend rises strongly in Household Goods (5.4%).<sup>158</sup>

- The total trade deficit (goods and services) widened GBP 8.9bn to GBP 18.3bn in the three months to March 2019, as the trade in goods deficit widened GBP 6.4bn to GBP 43.3bn and the trade in services surplus narrowed GBP 2.5bn to GBP 25.0bn. Rising imports of unspecified goods (including non-monetary gold), chemicals, and machinery and transport equipment were the main reasons for the widening of the trade in goods deficit in the three months to March 2019.<sup>159</sup>
- All-sector' PMI slips to 50.0, the biggest quarterly decline in new orders since 2009. Disappointing PMI surveys indicates that the UK economy contracted in March, stalling over the first quarter as a whole and at risk of sliding into a deepening downturn in coming months. With the exception of the brief decline seen in the immediate aftermath of the 2016 EU referendum, the March reading was the lowest since December 2012.<sup>160</sup>
- British construction activity slowed slightly for the second month in a row in March, as businesses continued to postpone major building projects due to Brexit uncertainty. The IHS Markit/CIPS Purchasing Managers' Index (PMI) edged up to 49.7 from 49.5 but remained below the 50 mark that divides growth from contraction, representing the first back-to-back fall in output since August 2016, just after Britain voted to leave the European Union.<sup>161</sup>

## Monetary

- At its meeting ending on 1 May 2019, the Monetary Policy Committee (MPC) voted unanimously to maintain Bank Rate at 0.75%. The Committee voted unanimously to maintain the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, at GBP 10bn. The Committee also voted unanimously to maintain the stock of UK government bond purchases, financed by the issuance of central bank reserves, at GBP 435bn. MPC sets monetary policy to meet the 2% inflation target, in a way that helps to sustain growth and employment.<sup>162</sup>
- The Consumer Prices Index including owner occupiers' housing costs (CPIH) 12-month inflation rate was 1.8% in March 2019, unchanged from February 2019. Rising prices for motor fuels and clothing produced the largest upward contributions to change in the rate between February and March 2019. The largest, offsetting, downward contributions came from across a range of recreational and cultural goods, food and motor vehicles. The Consumer Prices Index (CPI) 12-month rate was 1.9% in March 2019, unchanged from February 2019.<sup>163</sup>

**Politics**

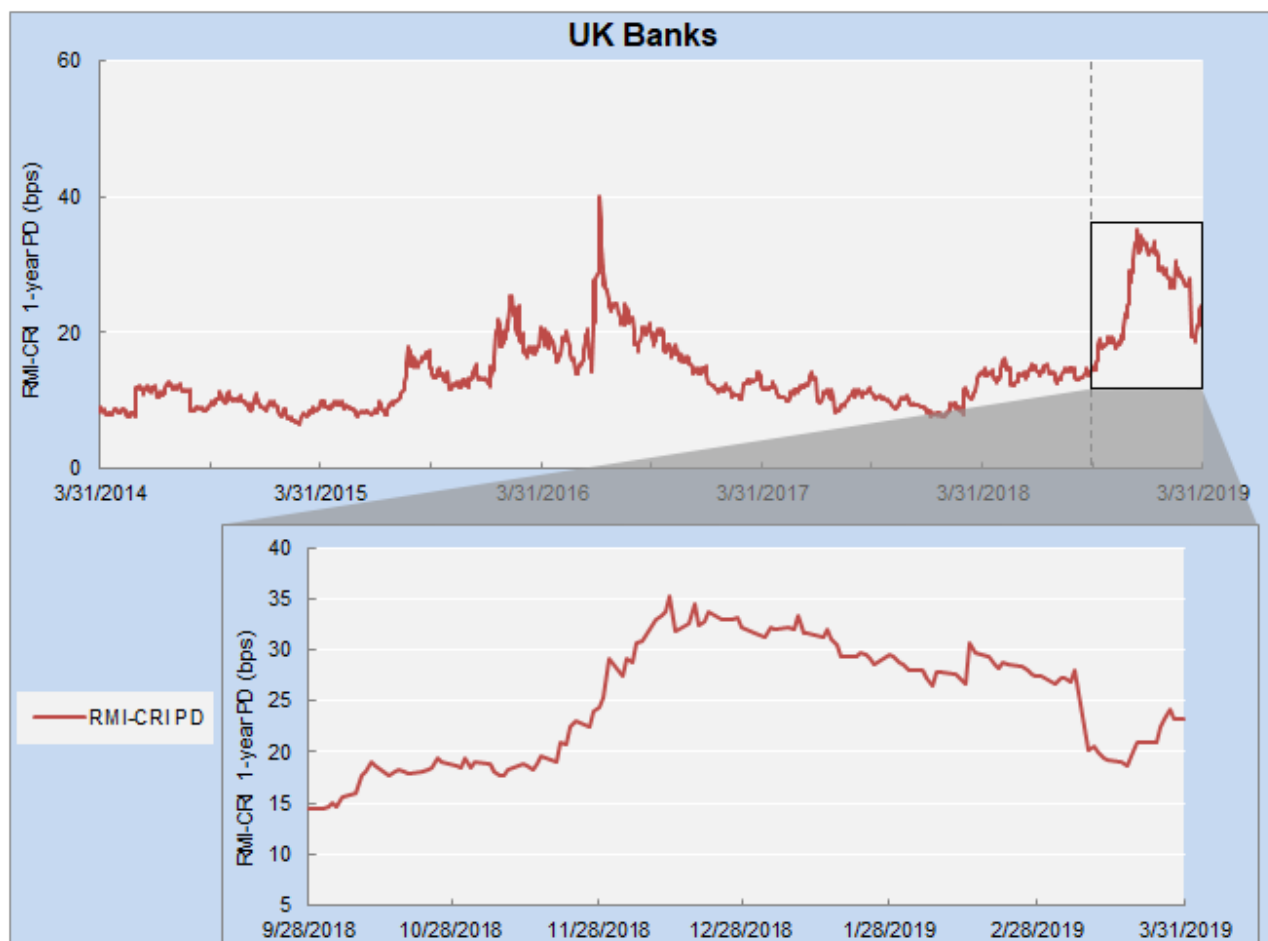
- Theresa May has said she will quit as Conservative leader on 7 June, paving the way for a contest to decide a new prime minister. With Mrs May's "bold new Brexit plan" in tatters, there is no vehicle for leaving the EU with a deal, and the default is that the UK's membership will expire on Halloween. If that is where things appear to be heading in the autumn, some MPs who previously opposed a second referendum might reconsider if it is the best option for avoiding no deal - putting Brexit at risk. <sup>164</sup>

**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 showed a downward trend in Q1 2019, falling from 13.04bps to 9.31bps. The FTSE 350 Banks Index showed an increase of 1.7% over the quarter.



## Profitability

- Profits at Lloyds Banking Group increased 6% to GBP 8.1bn. Net interest income was up 3% with increased margin of 2.93% and other income was GBP 6.0bn with strong performance from insurance new business.<sup>165</sup>
- Royal Bank of Scotland delivered a good financial performance in 2018, despite an uncertain economic outlook and a highly competitive environment. Operating profit before tax was GBP 3.4bn in 2018, up from GBP 2.2bn a year prior.<sup>166</sup>
- Standard Chartered's pre-tax profit surged to USD 3.9bn in 2018, after previously warning it had set aside nearly USD 1bn for regulatory fines in the US and Britain.<sup>167</sup>

## Funding & Liquidity

- According to the Bank Liabilities Survey produced by the Bank of England, UK banks and building societies reported that their total funding volumes unchanged in the three months to end-February 2019. Lenders expected total funding volumes to significantly increase in the three months to end-May 2019.<sup>168</sup>
- Lenders reported that the internal price charged to business units to fund the flow of new loans (the 'transfer' price) had increased in Q1. This was reported to have been driven by a significant increase in long-term wholesale funding spreads. Lenders expected a slight increase in the transfer price in Q2.

## Asset Quality

- The total write-offs of sterling denominated loans decreased from GBP 1094mn in Q3 2018 to GBP 1004mn in Q4, attributed mainly to write-offs to individuals, which decreased from GBP 855mn to GBP 755mn. Non-financial loan write-offs to businesses decreased further from GBP 233mn to GBP 226mn and write-offs to non-residents decreased slightly from GBP 15mn to GBP 1mn.<sup>169</sup>
  - Write-offs on loans denominated in foreign currency increased from GBP 126mn in Q3 2018 to GBP 181mn in Q4 2018, driven by increase in the write-offs on loans to non-residents, which constituted the largest share of the total write-offs.
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<sup>156</sup> May 10, 2019 [GDP first quarterly estimate, UK: January to March 2019](http://www.ons.gov.uk), ONS, <http://www.ons.gov.uk>

<sup>157</sup> May 14, 2019 [Labour market overview, UK: May 2019](http://www.ons.gov.uk), ONS, <http://www.ons.gov.uk>

<sup>158</sup> Apr 17, 2019 [Visa's UK Consumer Spending Index - March 2019](http://visa.co.uk), Visa, <http://visa.co.uk>

<sup>159</sup> May 10, 2019 [UK trade: March 2019](http://www.ons.gov.uk), ONS, <http://www.ons.gov.uk>

<sup>160</sup> Apr 3, 2019 [UK PMI surveys show economy stalling in first quarter](https://ihsmarkit.com/), IHS Markit, <https://ihsmarkit.com/>

<sup>161</sup> Apr 2, 2019 [UK construction activity slows for second month running: PMI](https://www.reuters.com), Reuters, <https://www.reuters.com>

<sup>162</sup> May 2, 2019 [Monetary Policy Summary and minutes of the Monetary Policy Committee meeting ending on 1 May 2019](http://www.bankofengland.co.uk/), Bank of England, <http://www.bankofengland.co.uk/>

<sup>163</sup> Apr 17, 2019 [Consumer price inflation, UK: March 2019](https://www.ons.gov.uk/), ONS, <https://www.ons.gov.uk/>

<sup>164</sup> May 24, 2019 [Theresa May resignation: What does it mean for Brexit?](http://www.bbc.com/), BBC News, <http://www.bbc.com/>

<sup>165</sup> Feb, 2019 [Lloyds Banking Group 2018 results](https://www.lloydsbankinggroup.com), Lloyds Banking Group, <https://www.lloydsbankinggroup.com>

<sup>166</sup> Feb 28, 2019 [RBS 2018 Results](https://www.ig.com/), IG, <https://www.ig.com/>

<sup>167</sup> Feb 26, 2019 [Standard Chartered's 2018 profits rise despite setting aside cash for fines](https://www.channelnewsasia.com), Channel News Asia, <https://www.channelnewsasia.com>

<sup>168</sup> Apr 18, 2019 [Bank Liabilities Survey - 2019 Q1](http://www.bankofengland.co.uk/), Bank of England, <http://www.bankofengland.co.uk/>

<sup>169</sup> May 1, 2019 [Bankstats \(Monetary & Financial Statistics\)](http://www.bankofengland.co.uk/), Bank of England, <http://www.bankofengland.co.uk/>

# 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 13, 2019, using data up to March 31, 2019. For a detailed description of RMI-CRI's default forecast model, the [Technical Report](#) is available on our website.

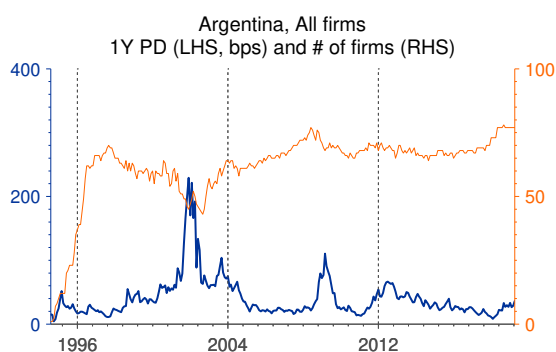
Appendix [A](#) provides 1-year aggregate PD by economy and sector. For each economy, the graph on the left shows the time series of 1-year aggregate PD for all exchange-listed firms within the economy (thick blue, left axis), and the time series of the number of firms with PD (thin orange, right axis). The table on the right provides the median and standard deviation of PDs for firms within ten industry sectors at the end of Q4 2018 and Q1 2019. 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.

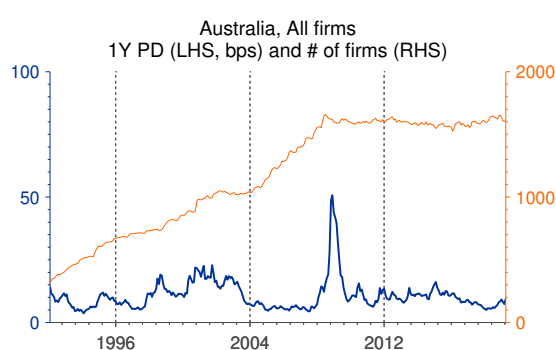
Appendix [C](#) provides common macroeconomic, corporate credit and sovereign risk indicators for each economy along with the RMI-CRI 1-year aggregate PD for financial and non-financial firms. The graphs on the left give historical context to the values, and the table on the right gives the data from 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](#)

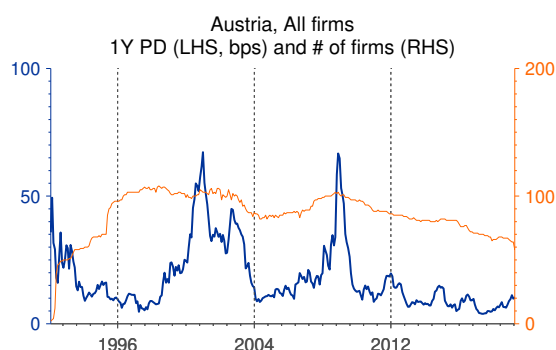
## A PD by economies



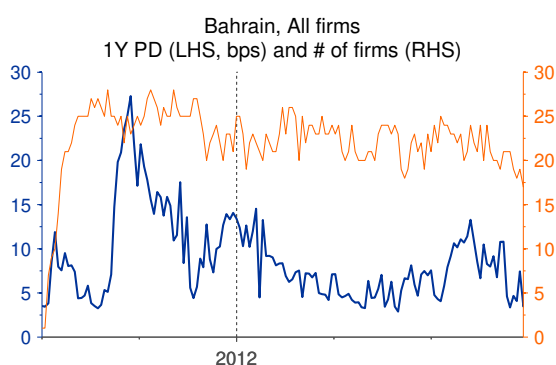
Argentina	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	14.8	39.5	18.8	49.4	3.8	10.9
Basic Materials	6	66.0	55.9	40.3	50.2	-0.2	29.4
Communications	5	54.9	94.9	90.7	102.7	0.4	57.6
Consumer Cyclical	5	73.3	55.9	84.4	42.9	-3.2	27.8
Consumer Non-cyclical	21	18.8	63.5	42.9	58.1	2.3	18.5
Diversified	2	59.7	84.5	68.2	96.5	8.5	12.0
Energy	2	42.4	55.4	45.2	54.8	2.8	0.6
Industrial	10	21.9	31.4	30.8	28.2	4.6	8.7
Technology	1	0.0	—	0.0	—	0.0	—
Utilities	13	33.1	34.5	46.7	25.5	6.4	23.7



Australia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	170	1.3	24.8	1.3	27.6	0.0	10.8
Basic Materials	569	8.9	110.5	10.7	128.8	0.4	53.4
Communications	100	16.2	55.7	19.5	134.5	0.8	100.9
Consumer Cyclical	87	5.1	73.8	5.4	83.8	0.1	47.6
Consumer Non-cyclical	247	7.1	58.3	8.6	64.6	0.3	41.1
Diversified	4	0.3	6.1	0.3	5.9	-0.0	0.2
Energy	141	13.1	73.6	12.0	144.6	0.3	96.6
Industrial	116	7.9	63.8	10.2	138.9	0.4	93.8
Technology	133	14.5	52.6	14.5	84.7	-0.2	60.1
Utilities	16	14.6	64.5	11.1	82.2	0.1	22.8

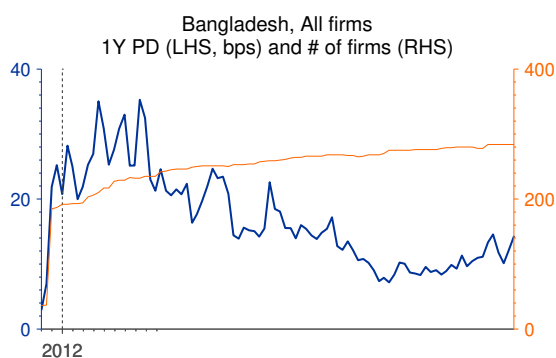


Austria	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	16	2.7	11.5	1.9	9.3	-0.5	5.9
Basic Materials	3	7.1	4.4	5.2	4.2	-1.9	0.2
Consumer Cyclical	9	18.1	66.8	16.9	114.7	-1.1	48.9
Consumer Non-cyclical	5	14.0	27.1	12.1	54.6	-0.4	42.3
Energy	3	15.2	2.2	10.8	3.5	-5.2	3.5
Industrial	16	17.6	22.0	18.7	14.8	-0.5	10.6
Technology	4	15.6	77.5	13.2	57.5	-6.3	20.5
Utilities	2	8.2	7.7	7.5	6.4	-0.6	1.4

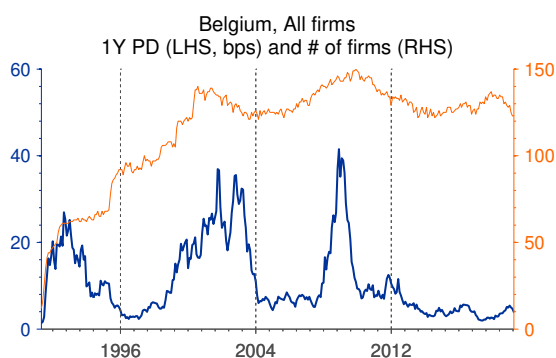


Bahrain	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	12.1	18.4	12.2	20.9	-0.7	6.6
Basic Materials	1	3.5	—	12.0	—	8.6	—
Communications	1	0.6	—	0.3	—	-0.3	—
Consumer Cyclical	3	0.1	0.7	0.0	0.8	0.0	0.1

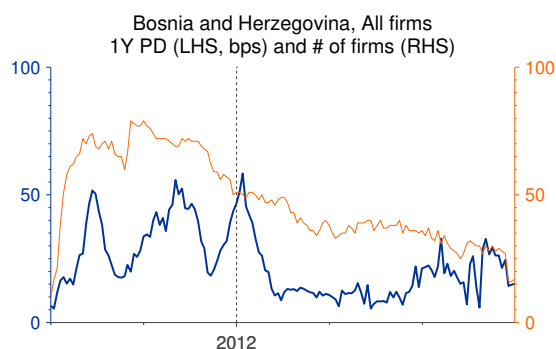




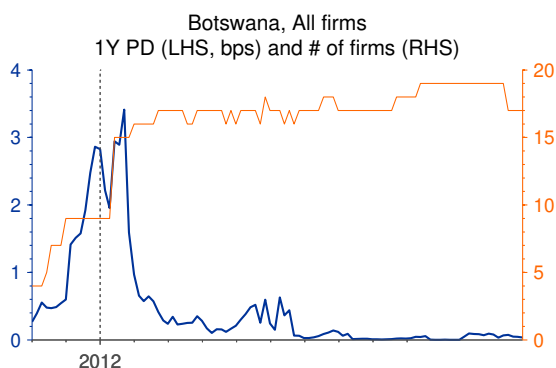
Bangladesh	2018Q4		2019Q1		Q1-Q4	
	#	Median St.Dev.	Median St.Dev.	Median St.Dev.	Median St.Dev.	Median St.Dev.



Belgium	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	0.3	9.8	0.1	5.6	-0.0	4.4
Basic Materials	6	18.0	393.1	15.3	496.8	-1.0	103.8
Communications	9	12.1	43.2	8.9	35.5	-1.3	31.2
Consumer Cyclical	8	10.9	15.1	8.4	17.5	-1.3	7.3
Consumer Non-cyclical	25	11.8	52.9	10.9	52.3	0.0	10.6
Diversified	4	0.2	2.8	0.2	3.2	0.0	0.4
Industrial	27	14.7	41.6	14.0	25.4	0.2	21.1
Technology	4	7.5	24.8	10.6	16.0	1.4	9.5
Utilities	2	5.0	4.5	8.9	9.9	3.9	5.4



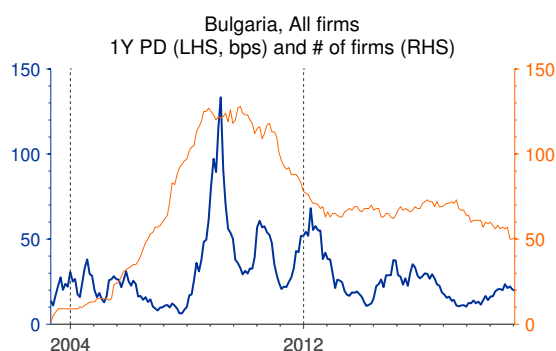
Bosnia and Herzegovina	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	15.3	2.5	9.0	2.6	-6.3	5.1
Basic Materials	2	19.1	6.5	27.5	8.8	8.4	2.3
Communications	2	5.3	5.0	6.7	7.6	1.4	2.6
Consumer Non-cyclical	4	10.8	7.9	8.3	12.7	0.1	6.3
Energy	1	10.9	—	8.4	—	-2.4	—
Industrial	1	134.5	—	130.0	—	-4.6	—
Utilities	4	36.6	24.4	30.3	25.7	3.0	20.3



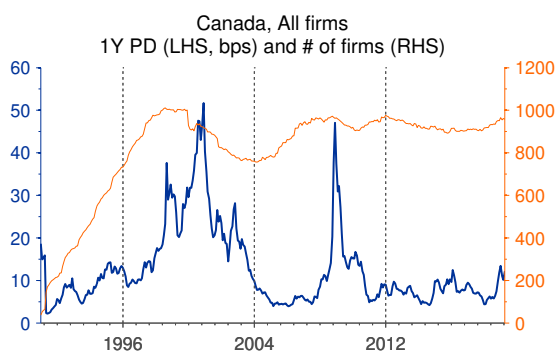
Botswana	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	10	0.1	0.9	0.0	0.9	-0.0	0.0
Communications	1	1.1	—	1.9	—	0.8	—
Consumer Cyclical	3	0.0	0.0	0.0	0.1	0.0	0.0
Consumer Non-cyclical	2	38.3	54.2	64.5	91.2	26.2	37.0
Energy	1	0.0	—	0.0	—	-0.0	—



Brazil	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	63	11.0	24.9	9.8	30.6	0.4	13.0
Basic Materials	18	40.3	187.8	32.6	263.9	1.8	119.7
Communications	8	17.0	106.5	20.9	165.1	1.7	102.4
Consumer Cyclical	53	19.7	272.2	24.9	233.4	2.3	102.0
Consumer Non-cyclical	48	26.1	550.3	35.0	700.7	4.2	155.0
Diversified	5	12.7	159.3	14.7	179.7	0.8	35.9
Energy	13	54.1	475.5	56.1	402.1	0.0	83.2
Industrial	25	51.9	234.5	54.1	238.5	2.0	92.8
Technology	7	2.5	222.5	1.8	142.7	-0.0	82.4
Utilities	30	14.2	24.1	15.2	33.4	0.8	14.5



Bulgaria	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	11	10.9	15.4	8.7	17.4	-0.3	4.8
Basic Materials	3	49.2	26.4	64.1	40.0	14.4	15.5
Communications	1	141.5	—	129.2	—	-12.3	—
Consumer Cyclical	2	34.8	10.8	27.1	1.4	-7.7	12.2
Consumer Non-cyclical	8	52.6	151.1	50.5	140.8	1.0	17.7
Diversified	7	19.2	53.5	31.5	45.4	-0.5	18.5
Energy	1	54.6	—	59.4	—	4.9	—
Industrial	15	15.1	53.7	17.1	48.2	0.1	17.3
Technology	1	5.9	—	9.8	—	3.9	—
Utilities	1	31.6	—	23.1	—	-8.5	—



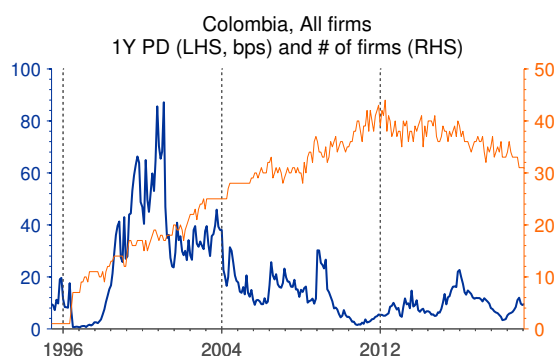
Canada	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	150	0.5	106.6	0.4	31.6	-0.0	86.1
Basic Materials	270	16.3	160.5	17.7	197.0	0.2	104.3
Communications	39	22.4	174.5	18.6	211.4	-0.2	198.8
Consumer Cyclical	66	5.3	159.2	5.1	98.1	0.4	114.8
Consumer Non-cyclical	148	20.8	159.5	18.9	217.7	0.0	130.8
Diversified	3	20.4	133.1	27.3	123.5	-0.3	10.4
Energy	126	48.9	521.7	36.2	341.8	-0.0	480.3
Industrial	76	5.6	132.9	6.4	106.3	0.0	73.3
Technology	49	58.4	361.9	60.4	285.3	0.0	199.9
Utilities	13	0.1	37.8	0.2	86.2	0.0	53.2



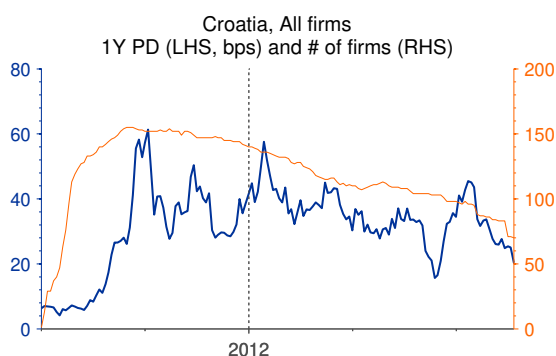
Chile	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	27	0.5	9.1	0.8	10.0	0.1	1.3
Basic Materials	15	6.2	60.1	6.0	140.9	-0.1	82.7
Communications	2	19.9	18.8	21.9	21.5	2.0	2.7
Consumer Cyclical	14	5.8	22.6	7.4	23.9	0.2	2.7
Consumer Non-cyclical	28	2.7	23.6	1.7	23.9	0.0	2.0
Diversified	3	5.8	15.9	10.3	12.8	0.5	4.1
Energy	3	2.6	4.4	2.3	6.5	0.0	2.3
Industrial	19	3.9	8.2	3.4	13.0	-0.1	6.1
Technology	1	1.8	—	2.4	—	0.6	—
Utilities	15	2.9	10.7	2.7	12.5	0.3	3.6



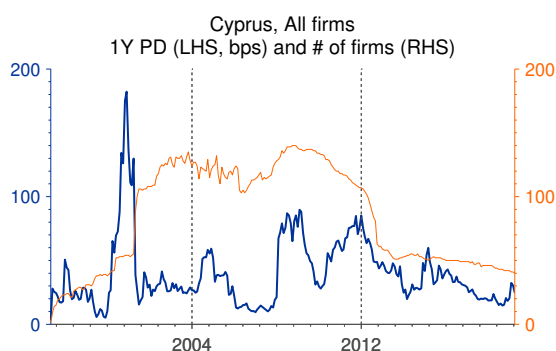
China	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	347	57.1	95.4	45.5	78.3	-11.6	27.9
Basic Materials	453	46.5	137.3	39.9	176.0	-6.7	85.7
Communications	268	34.1	106.9	31.4	92.4	-4.4	49.6
Consumer Cyclical	722	44.7	129.6	36.4	129.1	-6.1	48.5
Consumer Non-cyclical	693	22.3	156.5	19.5	124.2	-2.5	63.7
Diversified	14	74.0	76.8	54.1	64.3	-11.9	16.4
Energy	141	52.2	71.3	38.0	57.0	-6.7	22.6
Industrial	1235	45.6	149.2	37.4	143.2	-6.5	25.8
Technology	301	28.6	88.9	21.2	82.0	-5.8	27.0
Utilities	112	53.8	115.6	43.4	101.4	-5.5	24.0



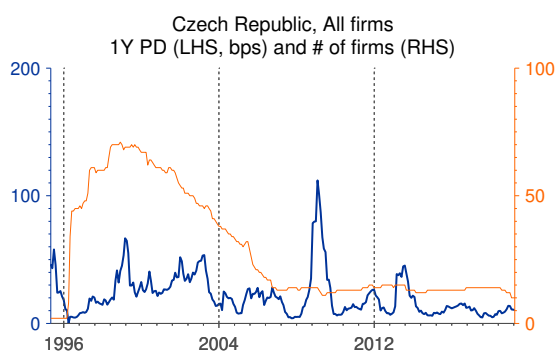
Colombia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	10	7.5	16.8	3.9	6.3	-1.5	13.6
Basic Materials	2	20.3	20.7	20.1	15.0	-0.2	5.7
Communications	1	47.5	—	21.2	—	-26.2	—
Consumer Cyclical	2	86.1	30.0	66.0	19.3	-20.0	10.7
Consumer Non-cyclical	1	0.2	—	0.3	—	0.1	—
Energy	4	17.5	12.3	18.7	16.1	1.1	4.1
Industrial	8	8.7	25.6	11.3	15.9	-0.5	10.8
Utilities	3	6.9	10.5	5.2	12.1	0.0	2.1



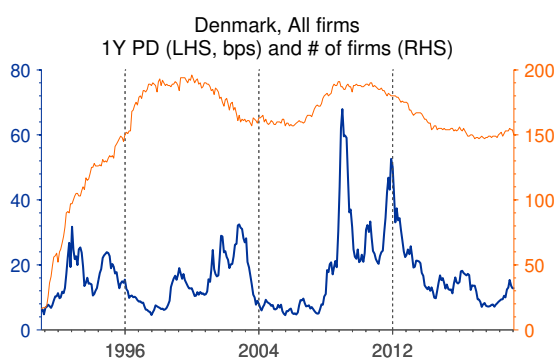
Croatia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	9	6.2	34.8	4.2	8.3	-0.6	30.0
Basic Materials	2	426.4	488.2	450.3	471.0	23.9	17.2
Communications	2	60.6	85.6	17.9	24.9	-42.7	60.7
Consumer Cyclical	27	14.3	72.4	13.5	87.3	0.1	28.9
Consumer Non-cyclical	13	31.1	118.9	36.1	130.9	3.2	56.0
Energy	2	0.8	0.9	0.6	0.5	-0.2	0.4
Industrial	14	91.0	121.1	138.7	1511.6	25.6	1490.9
Technology	1	4.8	—	2.2	—	-2.6	—



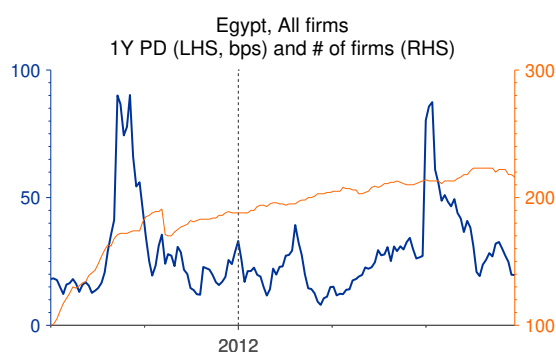
Cyprus	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	14	28.9	42.9	11.6	35.7	-12.2	15.9
Basic Materials	4	46.2	53.8	45.8	48.8	-1.4	5.3
Consumer Cyclical	8	48.8	47.5	47.2	38.0	-4.3	12.3
Consumer Non-cyclical	6	25.9	25.4	25.8	20.8	-1.3	6.3
Energy	4	46.0	209.2	50.7	154.2	-0.4	57.4
Industrial	3	3.6	5.2	1.7	11.3	0.0	6.4
Technology	1	109.0	—	106.3	—	-2.7	—



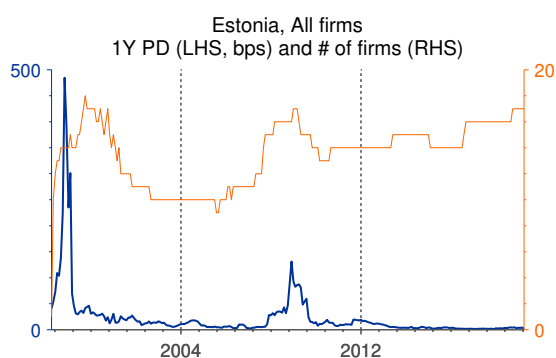
Czech Republic	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	6.4	3.9	6.3	4.9	-0.1	1.0
Communications	2	16.6	22.0	9.0	10.7	-7.5	11.4
Consumer Cyclical	1	5.2	—	2.8	—	-2.3	—
Consumer Non-cyclical	2	12.2	11.7	9.9	10.2	-2.3	1.5
Energy	1	18.0	—	13.1	—	-4.9	—
Utilities	2	13.8	1.7	13.7	3.3	-0.1	1.6



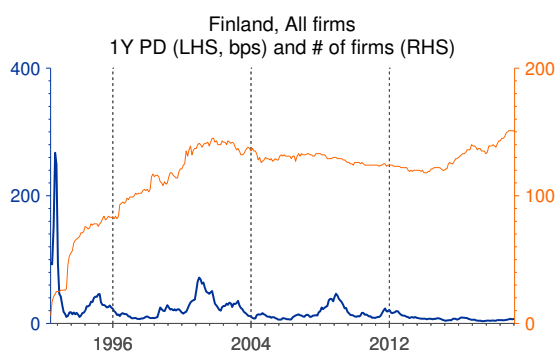
Denmark	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	7.1	12.8	5.8	13.1	-0.8	3.3
Basic Materials	1	0.4	—	0.4	—	0.0	—
Communications	7	13.9	60.1	8.0	49.8	0.0	18.6
Consumer Cyclical	17	26.4	75.3	28.6	61.4	0.1	20.3
Consumer Non-cyclical	34	6.9	106.3	8.3	59.1	0.0	57.1
Diversified	1	443.9	—	322.3	—	-121.6	—
Energy	3	8.3	15.6	9.1	8.3	0.8	7.4
Industrial	34	22.7	61.4	18.6	78.8	0.1	32.7
Technology	13	11.5	26.0	18.3	28.2	2.0	9.6
Utilities	2	4.9	3.2	4.8	2.3	-0.1	0.9



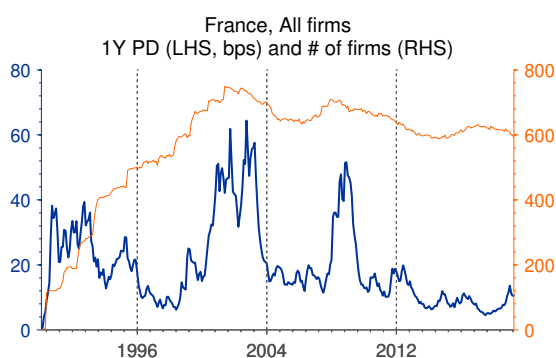
Egypt	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	67	22.6	71.7	12.3	45.3	-9.8	27.6
Basic Materials	24	26.4	51.7	21.3	54.0	-1.4	9.4
Communications	7	72.5	137.0	45.0	88.5	-15.5	50.1
Consumer Cyclical	27	18.0	44.5	16.8	39.9	-2.0	9.7
Consumer Non-cyclical	54	22.3	74.4	19.2	51.8	-2.9	45.5
Diversified	1	303.8	—	217.1	—	-86.7	—
Energy	1	126.6	—	136.4	—	9.9	—
Industrial	33	28.8	64.2	33.4	52.9	-1.5	24.7
Technology	1	0.8	—	1.1	—	0.3	—
Utilities	1	94.7	—	72.4	—	-22.3	—



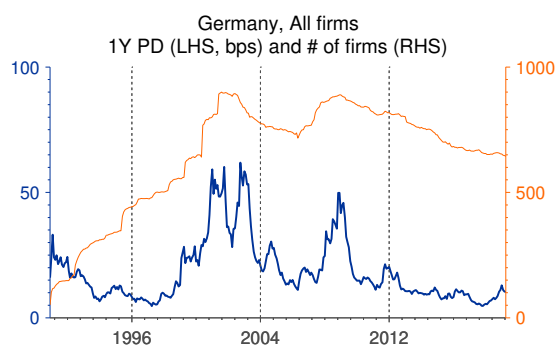
Estonia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	5.2	4.9	5.3	6.7	0.9	2.1
Communications	1	9.5	—	11.3	—	1.8	—
Consumer Cyclical	4	0.4	16.5	0.9	29.2	0.5	12.7
Consumer Non-cyclical	2	12.0	16.9	13.1	18.5	1.1	1.6
Industrial	5	3.6	22.4	2.0	21.0	-1.6	2.1
Utilities	1	0.1	—	0.2	—	0.0	—



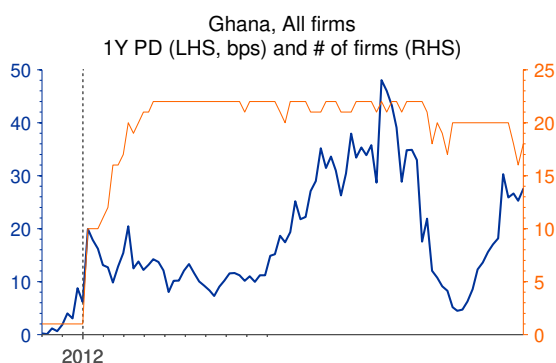
Finland	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	23	1.9	7.0	2.7	5.3	0.0	3.5
Basic Materials	6	5.7	14.2	4.3	16.4	0.3	4.6
Communications	15	4.5	18.1	4.1	18.9	0.7	4.8
Consumer Cyclical	15	9.0	24.9	11.4	25.6	-0.0	8.1
Consumer Non-cyclical	32	10.7	82.7	14.5	167.9	0.0	136.3
Energy	2	156.4	219.7	32.4	44.7	-124.0	174.9
Industrial	33	8.1	88.3	7.6	27.6	0.3	72.7
Technology	22	4.1	18.8	7.2	39.2	0.3	26.1
Utilities	1	2.3	-	3.7	-	1.3	-



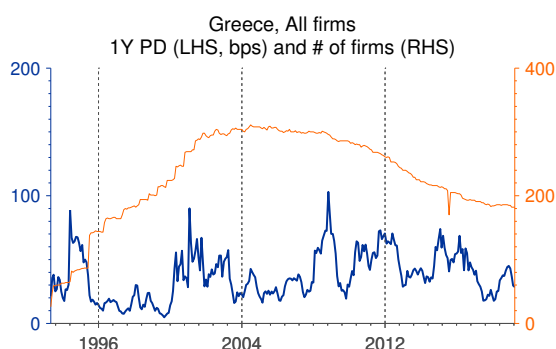
France	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	87	1.9	23.3	1.5	10.3	-0.2	17.8
Basic Materials	18	9.2	39.4	10.8	30.6	-0.0	14.8
Communications	58	13.4	42.0	15.2	32.0	-1.1	13.8
Consumer Cyclical	81	14.4	40.0	12.5	56.1	-1.0	39.7
Consumer Non-cyclical	138	12.6	41.2	11.2	73.4	-0.6	67.3
Diversified	3	2.1	263.5	1.8	337.6	-0.4	74.1
Energy	15	23.0	31.1	19.2	37.3	-0.4	10.4
Industrial	109	15.4	72.4	13.6	37.7	-0.8	38.6
Technology	70	14.4	72.4	14.3	59.7	-0.5	21.0
Utilities	10	4.4	5.7	4.6	3.8	-0.5	3.8



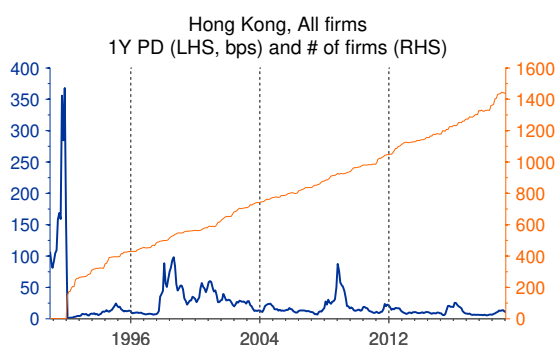
Germany	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	156	4.3	201.2	4.3	89.8	-0.2	144.9
Basic Materials	28	13.1	512.8	16.7	77.3	-1.0	436.6
Communications	65	14.8	128.0	14.9	87.1	-0.0	82.6
Consumer Cyclical	73	13.2	57.7	10.5	38.4	-0.0	32.0
Consumer Non-cyclical	96	11.7	32.1	10.7	31.9	-0.4	13.2
Diversified	4	49.8	26.7	46.2	28.7	1.5	10.4
Energy	20	13.5	128.8	11.6	128.9	-0.7	49.9
Industrial	114	14.4	173.7	13.2	76.7	-0.3	103.5
Technology	76	15.0	49.2	12.3	56.1	-1.1	23.0
Utilities	10	4.1	19.1	3.8	16.3	-0.3	3.2



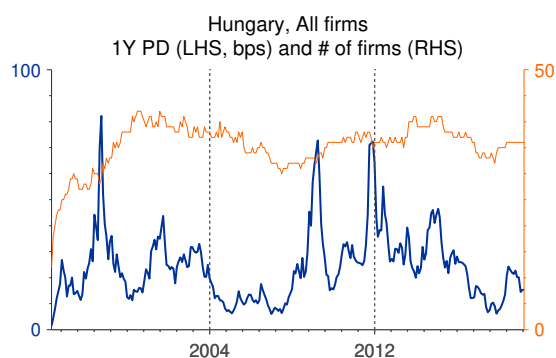
Ghana	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	7	26.6	15.9	25.7	11.3	1.4	6.6
Basic Materials	2	59.4	81.8	41.8	57.7	-17.6	24.1
Consumer Non-cyclical	7	1.2	192.0	1.2	200.6	1.0	8.8
Energy	2	62.3	50.4	57.4	2.5	-4.9	52.8



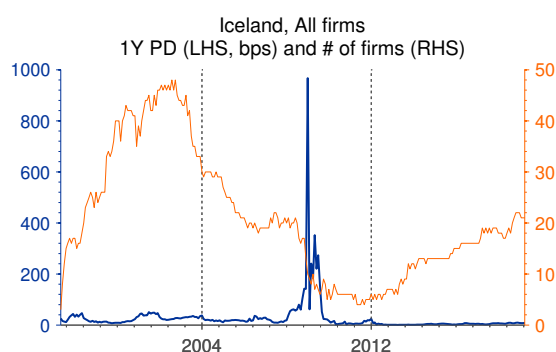
Greece	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	20	6.2	98.2	4.2	34.5	-2.0	72.4
Basic Materials	11	65.8	107.5	49.8	119.9	-3.4	21.3
Communications	6	58.2	277.8	69.0	101.4	-7.7	189.5
Consumer Cyclical	37	34.7	91.3	29.2	110.0	-4.5	65.0
Consumer Non-cyclical	35	29.5	178.1	29.4	96.4	-5.1	85.7
Diversified	1	22.1	—	12.0	—	-10.1	—
Energy	6	11.4	15.3	6.6	8.2	-4.8	8.0
Industrial	50	94.5	559.7	58.6	348.9	-15.8	242.8
Technology	12	17.8	39.9	12.3	23.6	-7.7	19.3
Utilities	4	2.1	117.4	1.6	66.9	-0.5	50.5



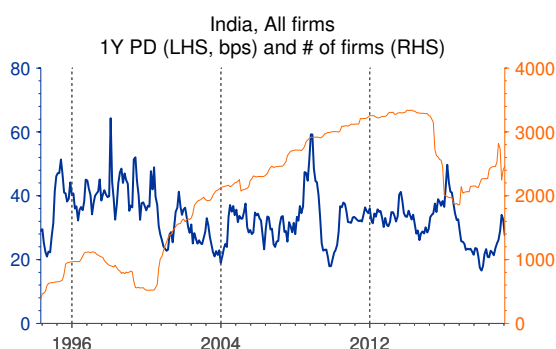
Hong Kong	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	333	11.9	51.7	8.6	38.0	-1.4	23.2
Basic Materials	58	26.8	164.0	24.5	128.2	-2.3	54.3
Communications	93	13.1	61.7	9.4	49.1	-1.3	34.7
Consumer Cyclical	329	11.9	79.2	9.4	96.1	-0.8	57.0
Consumer Non-cyclical	204	10.4	85.0	7.6	40.9	-1.1	65.1
Diversified	17	3.4	35.4	2.7	28.9	-1.4	6.8
Energy	48	27.9	279.7	20.7	191.0	-1.9	96.5
Industrial	260	16.1	132.7	13.5	99.6	-1.7	42.9
Technology	65	17.0	51.3	14.7	53.7	-1.4	24.4
Utilities	27	14.0	47.3	10.7	34.2	-1.2	21.6



Hungary	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	10.1	9.2	7.0	9.6	0.2	1.9
Communications	5	37.2	29.3	16.8	15.4	-7.6	27.4
Consumer Cyclical	3	126.0	198.0	118.2	119.1	-7.8	82.2
Consumer Non-cyclical	6	5.5	87.6	10.7	56.8	-1.3	57.3
Energy	1	14.4	—	16.0	—	1.6	—
Industrial	4	40.2	35.5	39.3	70.7	18.1	50.9
Technology	1	7.0	—	4.5	—	-2.5	—
Utilities	4	8.4	5.8	10.5	7.4	1.7	1.9



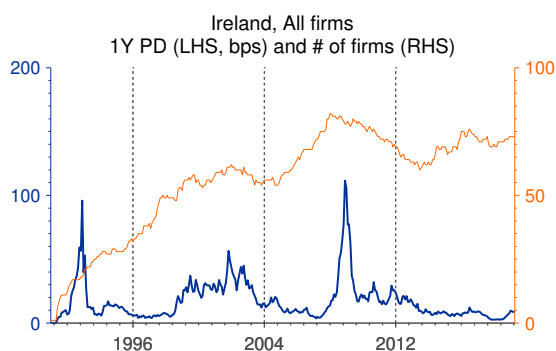
Iceland	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	9	6.2	3.3	6.4	3.9	-0.9	1.8
Communications	2	67.9	88.7	36.5	41.6	-31.4	47.1
Consumer Cyclical	3	79.0	44.1	68.7	46.9	16.9	22.3
Consumer Non-cyclical	3	5.0	12.0	8.2	9.3	0.5	3.4
Energy	1	14.0	—	10.1	—	-3.9	—
Industrial	2	12.8	14.1	14.2	18.3	1.4	4.2
Technology	1	11.1	—	36.8	—	25.7	—



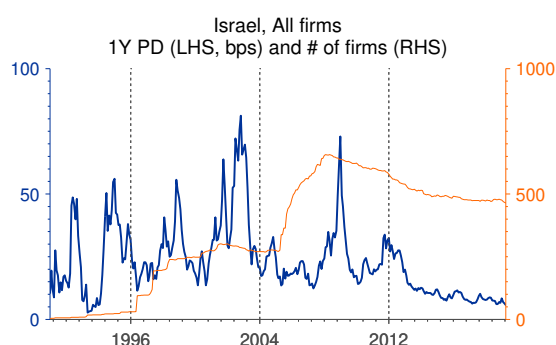
India	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	325	0.8	9.8	0.5	5.4	-0.3	5.0
Basic Materials	302	59.7	362.1	47.7	268.2	-7.8	124.1
Communications	75	45.2	338.4	29.1	354.8	-3.6	115.4
Consumer Cyclical	430	51.5	529.7	43.0	422.6	-6.1	116.8
Consumer Non-cyclical	348	32.5	375.8	27.1	264.4	-3.7	201.9
Diversified	12	92.2	222.0	63.6	168.5	-18.6	55.6
Energy	38	55.4	607.6	53.1	531.7	-12.7	84.1
Industrial	524	59.1	473.9	46.8	462.1	-8.1	87.6
Technology	106	32.4	424.5	23.1	308.3	-2.1	206.5
Utilities	36	152.5	1396.5	132.0	949.4	-9.8	595.5



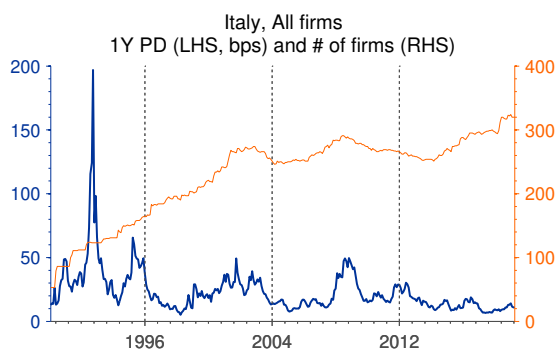
Indonesia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	139	19.0	25.7	19.4	24.3	-0.0	9.6
Basic Materials	51	30.2	258.0	34.4	228.5	3.5	53.9
Communications	28	28.0	136.2	38.0	113.3	1.0	38.8
Consumer Cyclical	78	22.2	57.8	24.7	67.6	0.6	37.9
Consumer Non-cyclical	85	19.4	103.3	20.7	125.2	0.0	51.3
Diversified	2	43.4	33.1	51.4	37.6	8.0	4.4
Energy	32	11.0	118.7	13.8	87.0	-0.2	48.0
Industrial	92	38.5	62.4	39.3	69.3	0.5	44.2
Technology	8	17.6	95.0	11.4	75.4	-2.3	23.1
Utilities	7	10.7	34.9	16.2	75.4	3.7	45.3



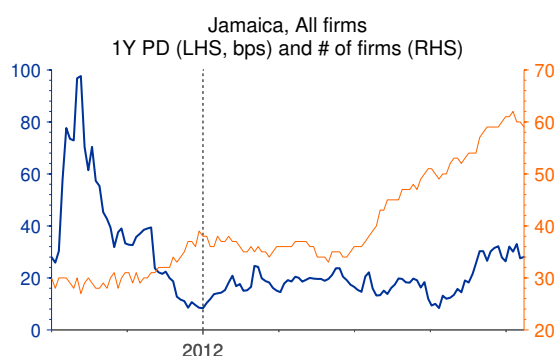
Ireland	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	11	1.9	6.8	2.0	9.1	-0.0	2.8
Basic Materials	10	29.2	62.1	33.2	89.6	1.9	35.4
Communications	2	30.2	10.7	55.1	37.9	24.8	48.5
Consumer Cyclical	7	2.3	4.3	3.0	11.2	-0.4	7.5
Consumer Non-cyclical	23	10.5	49.0	11.4	57.1	-0.0	25.7
Energy	7	95.3	118.2	123.4	96.5	-1.2	35.2
Industrial	10	7.9	8.7	5.1	8.5	0.2	5.9
Technology	3	5.3	12.8	5.8	20.3	0.5	7.6



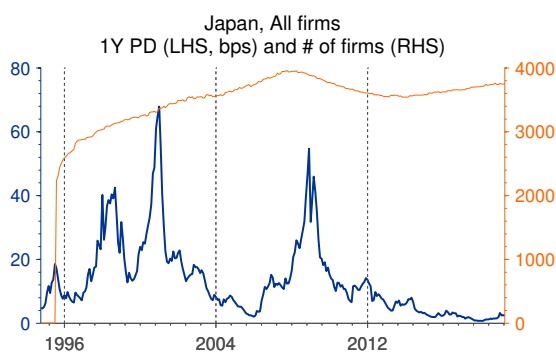
Israel	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	117	3.6	13.3	2.8	9.9	-0.6	4.8
Basic Materials	14	5.7	31.4	5.9	26.7	-0.1	8.3
Communications	37	12.0	1205.5	13.8	1140.3	0.1	81.2
Consumer Cyclical	47	9.7	54.1	9.8	44.8	-0.1	12.6
Consumer Non-cyclical	91	9.2	37.6	7.3	29.7	-0.0	23.7
Diversified	6	4.7	9.8	3.6	10.7	-0.6	1.4
Energy	30	10.8	33.1	11.1	28.8	-0.3	10.9
Industrial	83	10.1	50.0	8.8	50.9	-0.1	23.9
Technology	37	4.0	46.8	3.3	35.7	-0.0	20.3
Utilities	2	28.2	11.9	30.9	17.8	2.8	5.9



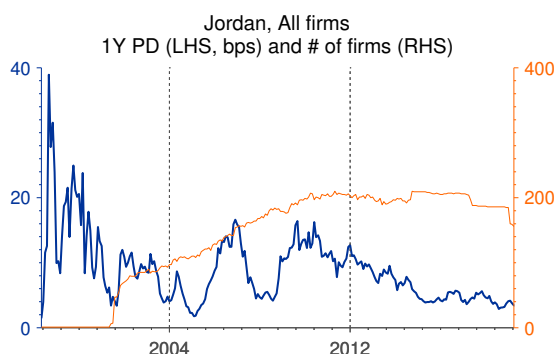
Italy	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	65	13.6	61.5	12.8	36.5	-1.5	39.2
Basic Materials	4	7.5	2.9	5.7	2.6	-0.7	1.3
Communications	37	22.9	44.6	17.2	470.2	-0.3	449.8
Consumer Cyclical	58	11.4	33.3	11.6	36.6	-0.9	12.5
Consumer Non-cyclical	46	10.9	18.3	8.6	17.8	-0.0	7.5
Diversified	9	0.0	5.5	0.0	4.6	0.0	1.0
Energy	18	17.0	34.4	12.6	33.0	-2.3	7.5
Industrial	54	11.3	33.4	9.5	20.9	-1.2	18.0
Technology	16	17.2	22.1	11.5	19.2	-0.0	7.3
Utilities	12	4.1	20.5	4.6	21.9	-0.1	1.7



Jamaica	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	19	27.4	26.3	22.9	20.2	-4.2	9.9
Basic Materials	1	25.8	—	19.4	—	-6.4	—
Communications	2	68.8	86.5	38.7	46.9	-30.1	39.5
Consumer Cyclical	10	28.9	37.6	38.4	49.7	-4.1	36.5
Consumer Non-cyclical	18	51.4	52.6	30.1	46.8	-6.1	13.7
Diversified	2	46.4	30.4	38.5	30.2	-7.9	0.2
Industrial	5	39.5	56.4	42.3	32.1	-1.0	30.7
Technology	2	17.9	25.4	11.7	16.6	-6.2	8.8

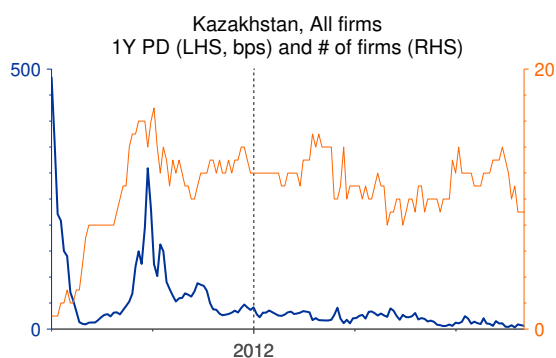


Japan	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	362	4.9	19.7	5.5	22.8	0.0	6.6
Basic Materials	232	3.1	7.0	2.8	6.5	-0.1	3.1
Communications	289	2.2	9.0	2.5	8.1	-0.0	4.3
Consumer Cyclical	873	2.6	10.7	2.6	10.8	-0.0	4.7
Consumer Non-cyclical	638	1.2	6.6	1.2	7.1	-0.0	3.6
Energy	18	9.2	19.4	11.2	19.0	0.8	10.4
Industrial	961	3.2	12.3	2.9	12.7	-0.1	3.8
Technology	341	1.5	6.6	1.4	6.1	-0.0	2.4
Utilities	24	3.1	18.4	3.6	18.7	0.4	4.1

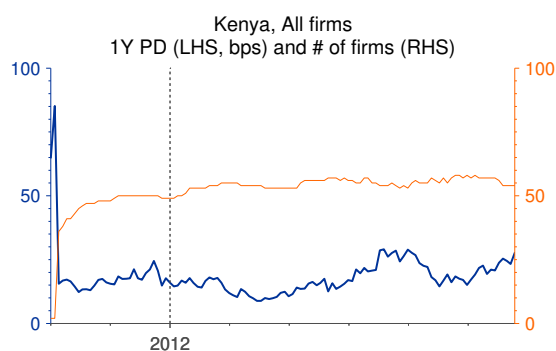


Jordan	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	82	1.4	4.9	1.3	3.9	-0.1	1.3
Basic Materials	13	16.6	44.2	19.5	46.5	2.1	4.7
Communications	2	143.2	168.8	169.5	202.5	26.3	33.6
Consumer Cyclical	12	6.5	57.4	6.9	63.5	0.4	8.7
Consumer Non-cyclical	21	14.5	29.1	13.0	34.7	0.1	7.8
Diversified	1	140.2	—	192.4	—	52.1	—
Energy	1	46.0	—	42.3	—	-3.8	—
Industrial	19	28.7	69.7	31.0	69.0	-0.0	4.5
Technology	1	59.8	—	70.6	—	10.8	—
Utilities	2	60.8	45.9	58.5	46.8	-2.4	0.9

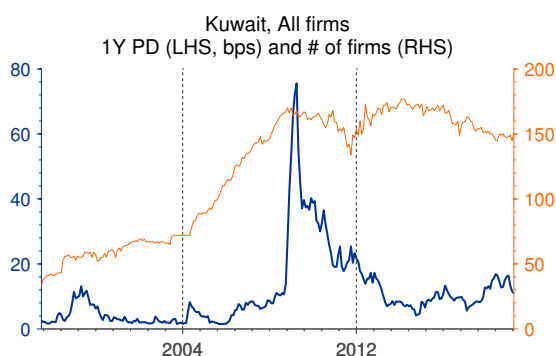




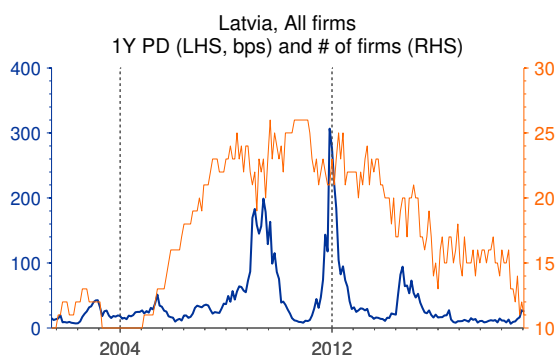
Kazakhstan	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	25.3	23.2	24.6	28.3	-0.7	6.0
Basic Materials	1	18.6	—	23.1	—	4.5	—
Communications	2	2.9	2.0	3.2	1.8	0.3	0.2
Energy	1	1.9	—	2.1	—	0.2	—
Utilities	1	0.7	—	0.7	—	-0.0	—



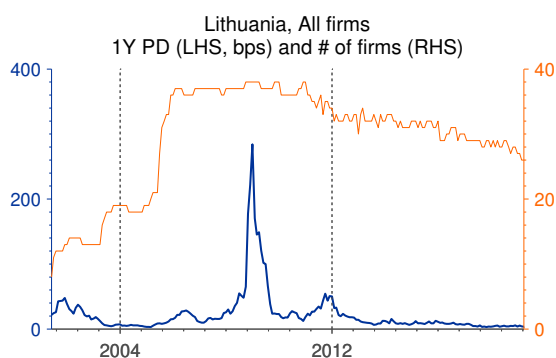
Kenya	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	21	11.1	23.9	9.4	23.5	-1.1	4.3
Basic Materials	2	38.3	5.5	38.3	10.5	-0.0	5.0
Communications	5	15.2	29.9	52.0	32.8	4.2	21.7
Consumer Cyclical	6	139.7	131.0	135.0	232.7	0.2	128.1
Consumer Non-cyclical	9	13.1	556.3	14.2	553.4	0.5	5.6
Diversified	3	55.7	44.9	85.2	48.8	0.3	17.8
Energy	2	22.4	22.9	32.1	34.4	9.7	11.6
Industrial	5	99.1	133.0	68.2	148.1	-13.7	33.6
Utilities	1	574.5	—	525.2	—	-49.3	—



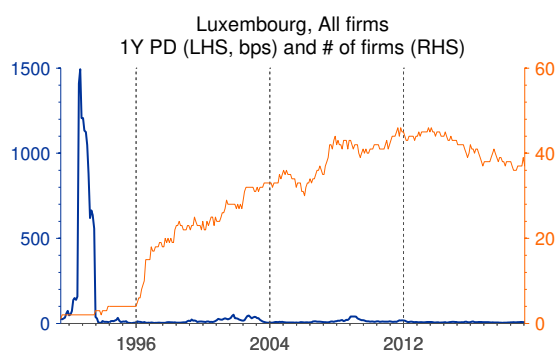
Kuwait	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	91	10.4	24.7	8.8	18.8	-0.4	15.5
Basic Materials	4	1.5	9.2	2.9	7.8	-0.0	2.1
Communications	7	38.7	78.9	30.4	107.5	0.4	77.2
Consumer Cyclical	13	9.3	117.0	9.7	117.9	0.0	42.9
Consumer Non-cyclical	7	16.2	60.6	15.6	70.7	-0.0	13.3
Diversified	4	23.2	82.5	29.9	79.2	3.5	12.3
Energy	6	58.9	39.5	43.4	46.1	3.3	15.9
Industrial	15	34.0	48.1	30.0	61.7	-1.4	26.4
Technology	2	44.1	21.4	45.5	13.4	1.4	8.0



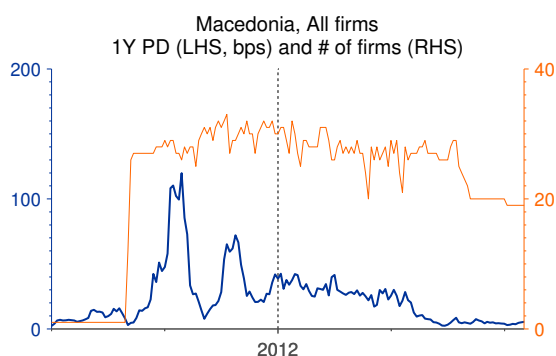
Latvia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Communications	1	16.2	—	25.2	—	9.1	—
Consumer Cyclical	3	83.2	38.9	78.5	37.2	-26.2	13.0
Consumer Non-cyclical	4	2.7	1.8	3.2	1.6	0.2	0.6
Industrial	2	170.7	202.6	128.4	141.3	-42.3	61.4
Utilities	1	15.4	—	8.7	—	-6.7	—



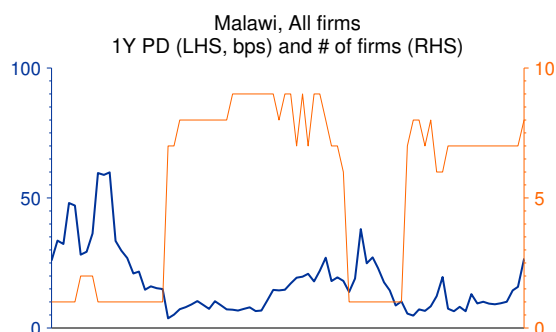
Lithuania	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	5	0.5	1.1	0.4	0.9	-0.1	0.3
Communications	1	0.1	—	0.0	—	-0.0	—
Consumer Cyclical	7	47.2	57.9	38.6	55.4	-2.7	6.4
Consumer Non-cyclical	6	6.7	3.9	8.2	3.8	-0.3	1.9
Energy	1	1.6	—	1.6	—	-0.1	—
Industrial	2	6.3	8.1	6.4	8.5	0.0	0.4
Utilities	4	11.4	14.7	11.3	15.2	0.5	0.7



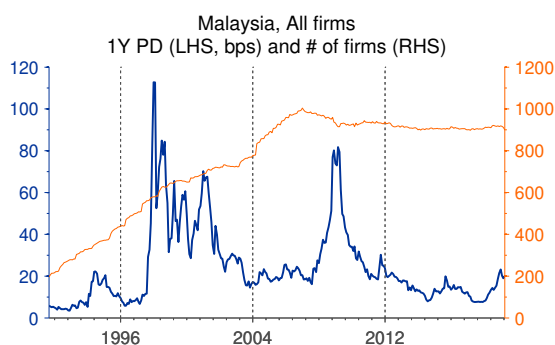
Luxembourg	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	12	3.1	9.7	2.4	60.8	-0.0	52.3
Basic Materials	4	7.8	7.7	12.7	8.1	5.9	3.6
Communications	4	18.1	36.2	22.6	168.8	4.5	133.4
Consumer Non-cyclical	5	12.8	9.4	14.0	18.7	0.9	10.3
Energy	1	2952.9	—	2811.5	—	-141.4	—
Industrial	8	14.1	48.5	13.5	66.2	0.1	18.6
Technology	2	8.4	10.0	9.0	10.9	0.6	0.9



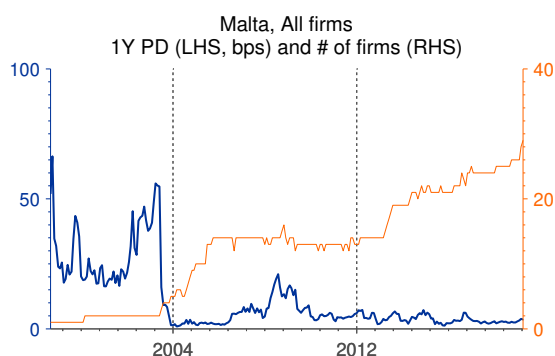
Macedonia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	5	6.7	1.9	5.5	3.0	0.9	2.2
Basic Materials	2	23.4	29.8	24.9	33.4	1.5	3.6
Communications	1	1.0	—	1.4	—	0.4	—
Consumer Cyclical	2	3.7	5.0	4.0	5.5	0.3	0.5
Consumer Non-cyclical	5	1.1	5.0	1.1	5.0	0.0	0.4
Energy	1	14.0	—	19.5	—	5.4	—
Industrial	3	10.5	9.3	11.1	8.7	0.6	0.6



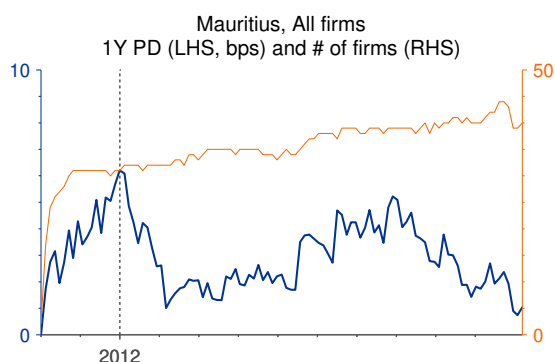
Malawi	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	5	19.1	11.3	26.2	10.1	3.3	3.2
Communications	1	1.7	—	2.4	—	0.7	—
Consumer Non-cyclical	1	11.0	—	98.7	—	87.7	—



Malaysia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	136	7.1	20.8	6.6	15.6	-0.2	7.6
Basic Materials	64	36.4	166.9	42.3	170.2	0.1	88.4
Communications	42	28.9	177.4	28.0	362.8	0.2	198.6
Consumer Cyclical	141	25.5	63.9	24.8	103.5	0.1	78.1
Consumer Non-cyclical	138	10.6	81.8	12.5	94.1	0.0	57.5
Diversified	11	42.7	24.4	39.1	26.5	-1.6	12.5
Energy	34	72.1	1019.9	43.5	1206.7	-0.0	200.2
Industrial	266	36.2	196.2	33.7	198.2	0.2	79.2
Technology	59	13.7	106.4	17.4	82.8	0.0	34.4
Utilities	6	19.5	19.6	20.8	16.7	1.8	4.8



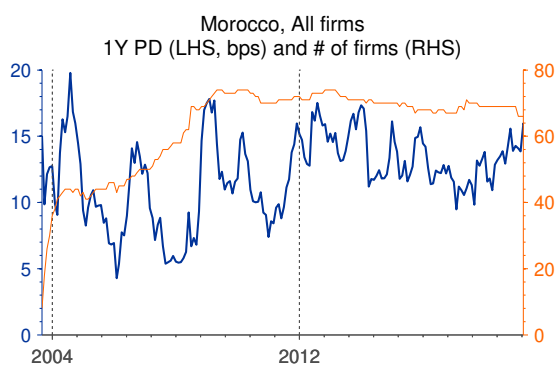
Malta	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	13	3.1	6.8	3.5	10.3	0.2	4.5
Communications	3	47.1	35.3	56.3	33.8	-0.1	8.8
Consumer Cyclical	6	5.8	6.4	7.6	4.5	0.6	2.5
Consumer Non-cyclical	2	0.3	0.1	0.5	0.2	0.3	0.3
Energy	1	19.4	—	19.4	—	-0.0	—
Industrial	1	0.0	—	0.0	—	-0.0	—



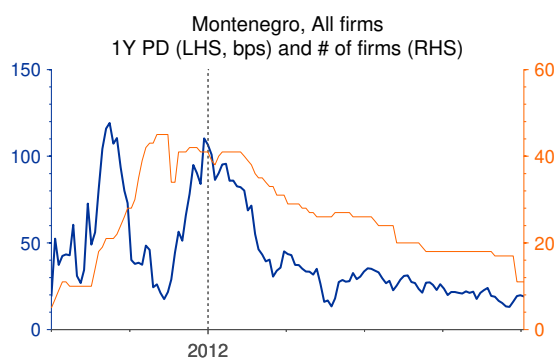
Mauritius	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	14	0.7	32.2	0.5	18.1	-0.0	14.8
Basic Materials	2	6.7	3.6	4.0	1.7	-2.7	5.3
Consumer Cyclical	8	1.2	67.1	1.0	67.5	-0.0	6.0
Consumer Non-cyclical	7	7.8	46.1	6.8	49.8	0.1	9.6
Diversified	1	0.0	—	0.0	—	0.0	—
Energy	1	0.0	—	0.0	—	0.0	—
Industrial	6	0.6	97.8	0.7	196.9	-0.1	102.1



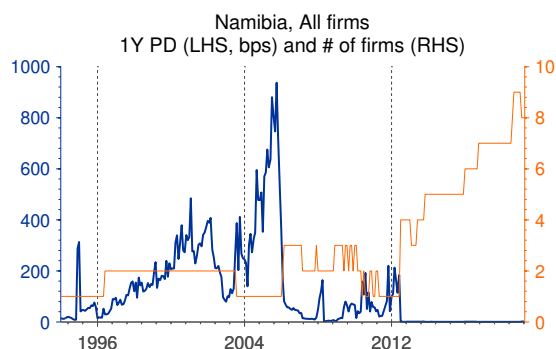
Mexico	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	35	1.8	5.9	2.1	5.0	-0.0	1.9
Basic Materials	10	11.3	24.6	17.7	37.6	3.8	13.6
Communications	6	40.4	31.1	48.0	57.3	11.0	32.8
Consumer Cyclical	23	7.3	49.6	8.4	61.0	0.5	13.7
Consumer Non-cyclical	16	4.1	9.8	4.4	7.5	0.0	6.0
Diversified	4	3.9	10.5	4.2	14.7	0.4	4.3
Energy	1	172.1	—	50.2	—	-121.9	—
Industrial	21	8.6	315.1	10.3	138.1	0.0	212.3
Utilities	2	11.3	10.6	12.2	10.3	0.9	0.3



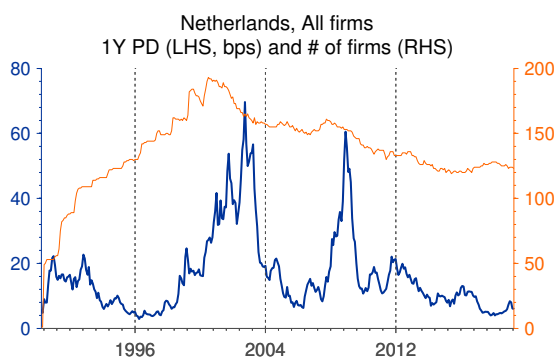
Morocco	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	18	12.5	12.7	11.1	14.6	-0.6	3.5
Basic Materials	10	13.6	28.0	18.6	34.1	5.7	6.6
Communications	1	0.1	—	0.0	—	-0.0	—
Consumer Cyclical	6	36.4	19.7	36.4	16.8	0.3	3.6
Consumer Non-cyclical	10	7.9	10.2	8.2	11.3	-0.0	4.1
Energy	1	15.4	—	18.2	—	2.8	—
Industrial	11	32.7	122.1	33.9	118.0	0.7	12.7
Technology	5	15.5	117.7	13.2	133.1	-2.2	15.5
Utilities	3	8.6	41.1	7.4	44.5	-0.5	3.4



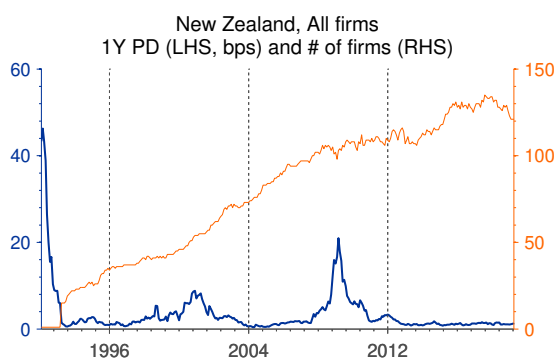
Montenegro	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Communications	1	13.7	—	14.3	—	0.5	—
Consumer Cyclical	3	9.2	24.0	9.0	21.0	-0.3	3.0
Consumer Non-cyclical	4	28.3	19.7	28.8	12.0	-0.4	8.8
Energy	1	19.1	—	19.1	—	0.1	—
Utilities	2	21.0	2.4	19.1	2.6	-1.9	5.0



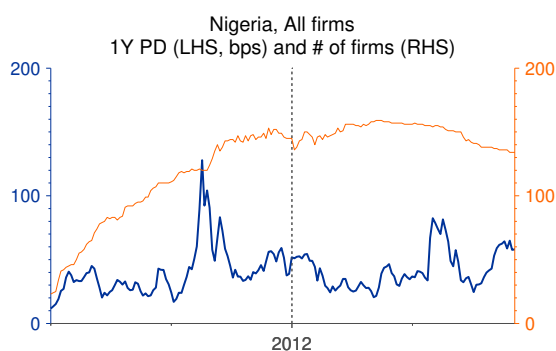
Namibia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	5	0.1	2.4	0.2	4.8	-0.0	3.1
Basic Materials	1	5.2	—	7.1	—	1.9	—
Consumer Non-cyclical	2	12.3	17.4	11.9	16.9	-0.4	0.5



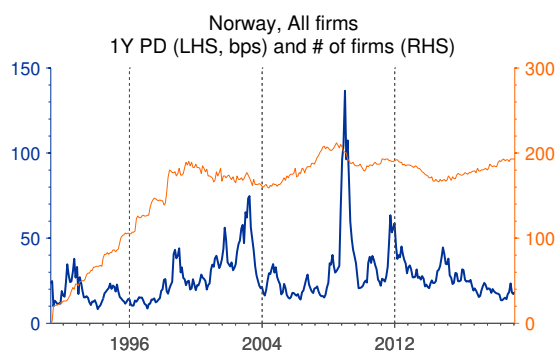
Netherlands	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	25	4.3	20.2	3.1	21.2	-0.3	4.0
Basic Materials	7	12.6	46.1	7.8	37.6	-0.4	16.4
Communications	11	12.6	82.3	10.8	43.7	-0.1	45.7
Consumer Cyclical	12	6.7	22.3	3.7	24.1	-0.5	9.9
Consumer Non-cyclical	28	4.5	167.4	5.5	65.8	-0.4	103.0
Energy	9	14.9	34.9	9.3	57.4	0.1	23.3
Industrial	15	14.0	9.8	11.1	7.3	-1.4	5.7
Technology	16	8.6	26.3	5.3	24.4	-1.6	3.2



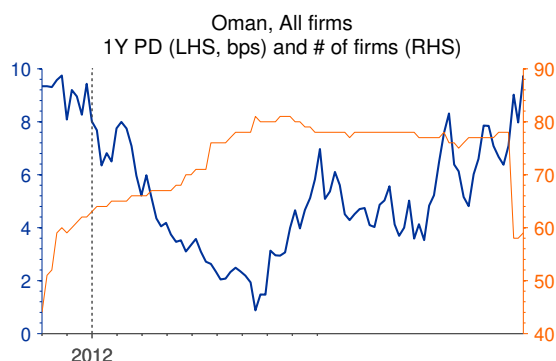
New Zealand	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	19	0.0	20.7	0.0	21.7	-0.0	6.4
Basic Materials	3	43.0	43.9	30.2	19.7	-12.8	26.2
Communications	7	0.8	5.9	0.4	8.0	-0.2	3.9
Consumer Cyclical	18	1.6	36.6	1.9	35.6	-0.0	12.6
Consumer Non-cyclical	35	1.5	20.9	1.6	19.6	-0.2	6.1
Energy	6	1.4	3.1	1.6	3.9	0.1	1.0
Industrial	14	3.3	45.3	3.5	39.8	-0.1	5.6
Technology	12	9.3	38.5	6.5	19.2	-0.3	23.8
Utilities	6	0.1	0.2	0.1	0.1	-0.0	0.1



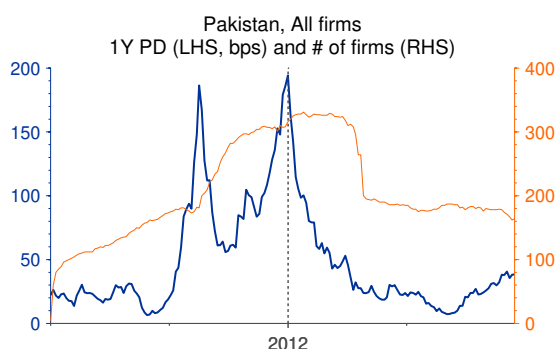
Nigeria	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	47	83.9	114.5	76.6	90.7	-10.4	31.3
Basic Materials	8	16.9	175.1	14.2	155.3	-0.5	20.9
Communications	3	25.0	18.6	30.7	18.9	5.1	0.6
Consumer Cyclical	14	70.4	368.2	67.5	354.9	-0.9	23.7
Consumer Non-cyclical	30	70.7	144.2	49.4	134.1	-0.4	49.6
Energy	9	104.6	194.3	92.3	159.5	-11.9	46.8
Industrial	19	50.4	206.5	43.7	188.5	-3.6	27.1
Technology	2	142.6	191.8	116.6	157.5	-26.0	34.3
Utilities	1	202.0	—	216.5	—	14.5	—



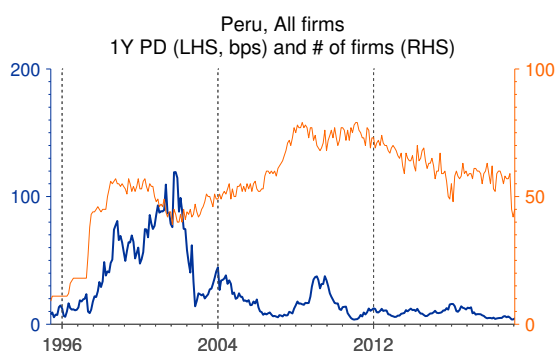
Norway	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	55	8.7	21.4	7.7	22.0	-0.4	9.5
Basic Materials	6	12.1	76.2	15.9	162.3	1.7	87.6
Communications	9	29.0	231.0	22.6	443.5	-1.1	213.5
Consumer Cyclical	5	12.1	106.0	6.7	131.5	-1.7	28.9
Consumer Non-cyclical	29	10.9	17.3	15.1	21.3	1.3	9.4
Energy	26	61.9	334.9	52.2	309.0	-9.0	45.9
Industrial	44	44.4	342.1	28.4	672.6	0.5	405.1
Technology	16	36.6	201.5	36.9	184.9	-2.7	88.5
Utilities	2	12.5	16.7	18.0	13.2	5.5	3.5



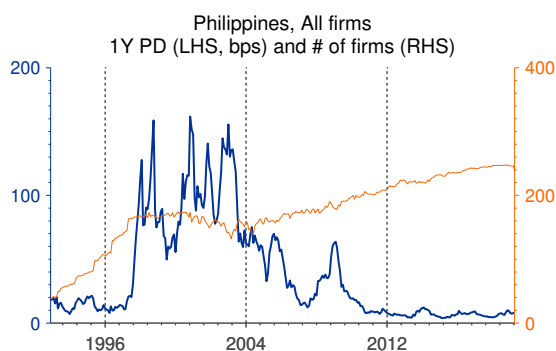
Oman	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	25	7.6	7.1	9.1	7.9	0.4	2.8
Basic Materials	4	7.5	9.6	6.4	10.7	0.8	2.7
Communications	2	125.7	175.5	120.5	168.4	-5.2	7.1
Consumer Non-cyclical	3	20.1	12.7	13.5	13.0	-0.0	4.7
Diversified	1	0.0	—	0.0	—	0.0	—
Energy	6	12.4	212.2	15.3	100.4	0.1	112.3
Industrial	11	11.5	12.5	17.3	10.8	0.2	3.7
Utilities	6	9.3	8.5	14.1	10.3	2.8	5.0



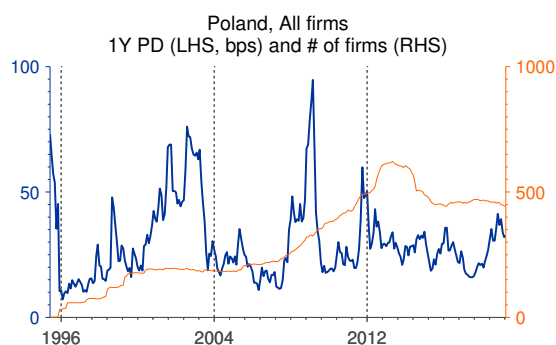
Pakistan	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	37	60.8	110.4	66.3	134.0	5.0	27.6
Basic Materials	21	14.6	207.9	15.8	266.9	0.0	59.5
Communications	4	87.1	146.3	103.8	287.1	16.7	143.5
Consumer Cyclical	26	34.1	145.4	45.8	194.6	0.5	51.4
Consumer Non-cyclical	29	10.5	61.1	11.1	116.0	0.0	59.1
Energy	12	55.5	89.2	70.2	112.1	7.3	58.3
Industrial	25	44.5	62.0	62.6	90.3	6.1	38.0
Technology	2	8.8	10.7	7.4	8.9	-1.4	1.8
Utilities	6	45.8	64.6	53.1	70.8	7.8	9.4



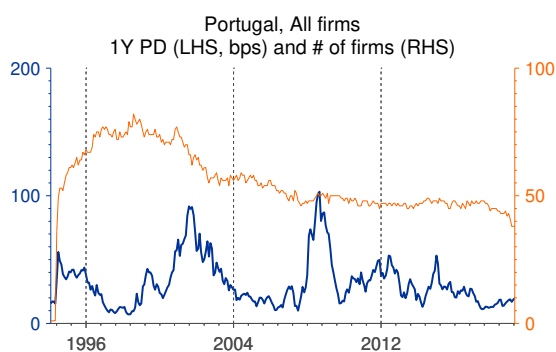
Peru	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	9	1.6	2.8	1.6	2.4	-0.1	1.0
Basic Materials	14	7.5	44.3	5.1	46.5	-0.5	8.9
Communications	1	108.0	—	90.0	—	-17.9	—
Consumer Cyclical	1	3.8	—	4.5	—	0.7	—
Consumer Non-cyclical	8	5.4	60.9	5.3	57.1	0.0	4.2
Diversified	1	103.5	—	81.1	—	-22.5	—
Energy	2	88.4	124.3	71.2	100.3	-17.2	24.0
Industrial	3	6.0	4.4	7.3	4.6	0.2	0.7
Utilities	4	1.3	2.9	0.6	2.7	-0.7	0.4



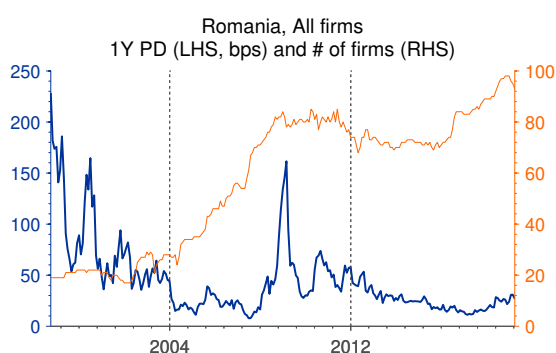
Philippines	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	82	6.1	11.1	5.5	10.1	0.0	3.8
Basic Materials	23	5.0	56.5	5.0	56.5	0.0	8.8
Communications	14	11.3	67.0	17.2	37.3	-0.0	32.5
Consumer Cyclical	30	5.8	44.9	5.1	41.4	-0.2	12.3
Consumer Non-cyclical	34	21.5	34.6	21.4	30.2	0.3	8.6
Diversified	7	18.4	10.6	13.5	11.5	-0.2	3.0
Energy	14	7.5	32.4	6.5	37.6	0.1	9.0
Industrial	16	17.8	33.6	22.2	28.5	-0.1	10.0
Technology	5	41.8	36.8	39.3	44.1	0.0	20.7
Utilities	13	16.7	29.0	16.7	27.8	-0.0	3.3



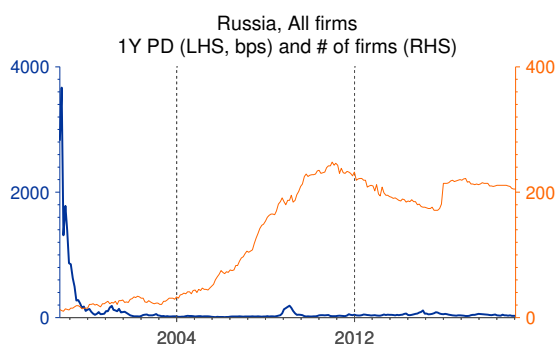
Poland	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	88	21.1	119.9	23.4	257.6	-0.5	213.4
Basic Materials	28	24.8	205.4	25.2	92.3	-0.9	129.8
Communications	37	26.5	118.8	28.9	90.8	-2.1	31.2
Consumer Cyclical	56	43.9	196.0	32.5	148.3	-3.4	69.0
Consumer Non-cyclical	64	41.9	140.5	38.3	127.3	-1.4	44.4
Energy	16	24.0	115.0	26.7	112.1	2.4	19.8
Industrial	102	48.2	523.6	41.0	385.3	-4.4	159.5
Technology	43	24.8	155.0	26.7	81.5	-3.1	79.2
Utilities	8	37.4	40.4	47.8	18.4	6.9	27.1



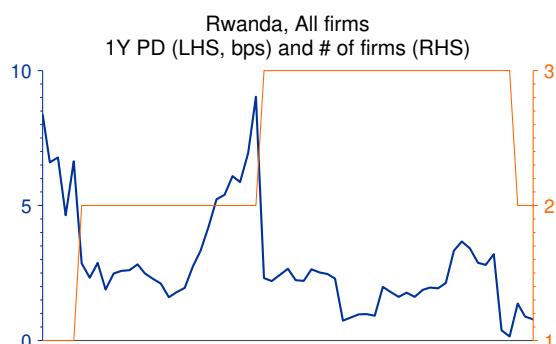
Portugal	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	38.2	34.2	27.4	19.5	-10.8	14.7
Basic Materials	6	8.0	17.1	9.3	15.7	0.4	2.0
Communications	6	11.0	46.9	9.4	51.1	0.1	26.8
Consumer Cyclical	7	66.3	127.0	25.5	67.0	-21.8	62.5
Consumer Non-cyclical	4	20.8	144.3	21.9	126.7	-1.9	18.0
Diversified	2	17.2	10.8	16.1	11.3	-1.2	0.5
Energy	1	2.2	—	1.8	—	-0.4	—
Industrial	5	58.8	52.2	42.2	40.3	-14.8	14.5
Technology	3	47.5	92.2	43.7	108.5	0.3	17.2
Utilities	2	9.9	8.8	3.0	1.1	-6.9	9.9



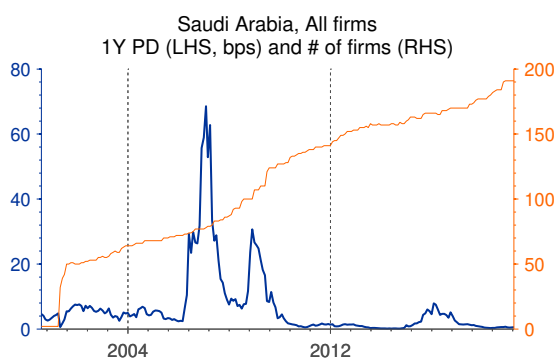
Romania	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	13	10.1	16.5	6.4	7.0	-2.6	10.3
Basic Materials	11	55.1	308.3	38.7	210.0	-22.5	106.1
Communications	2	19.4	8.0	18.4	11.0	-1.0	3.0
Consumer Cyclical	13	40.1	28.2	34.6	26.4	-1.2	15.4
Consumer Non-cyclical	11	15.5	46.6	18.6	46.4	0.8	6.0
Energy	9	19.1	83.8	18.3	80.5	-0.8	11.6
Industrial	30	56.1	106.2	46.1	92.0	-5.7	36.0
Utilities	4	5.4	7.2	5.6	4.7	-0.4	2.7



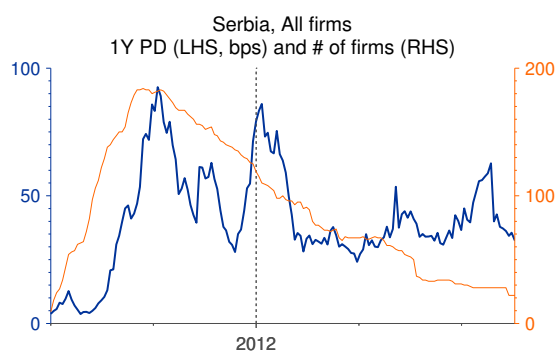
Russia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	22	24.6	19.3	22.0	21.7	-3.1	17.5
Basic Materials	33	14.5	70.0	15.4	53.6	-1.3	25.7
Communications	11	10.3	36.8	20.1	32.3	-0.4	6.1
Consumer Cyclical	17	36.9	43.3	41.2	43.6	0.7	27.0
Consumer Non-cyclical	18	23.2	46.0	24.4	36.6	-2.0	40.6
Diversified	1	115.1	—	136.6	—	21.6	—
Energy	21	13.7	37.6	14.5	36.6	-0.1	9.4
Industrial	24	34.2	89.5	33.1	74.6	0.4	19.8
Technology	3	22.5	11.7	19.0	49.3	6.0	41.3
Utilities	54	43.5	70.4	44.7	46.3	-2.9	51.3



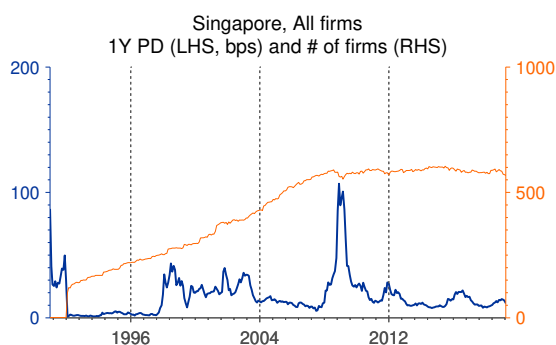
Rwanda	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	1.4	1.9	0.8	1.1	-0.6	0.8



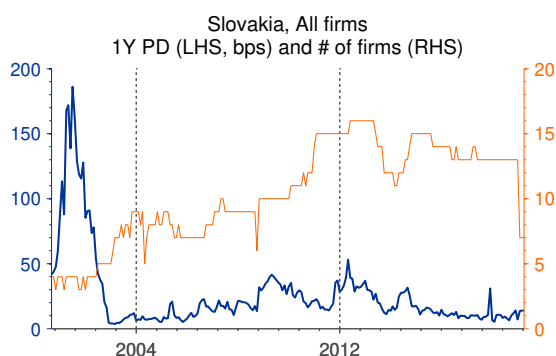
Saudi Arabia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	66	0.0	0.1	0.0	0.1	-0.0	0.1
Basic Materials	19	6.5	19.3	6.6	23.1	0.4	4.5
Communications	6	28.2	39.0	26.4	32.4	-4.7	9.7
Consumer Cyclical	27	3.3	9.5	2.7	10.8	-0.0	2.5
Consumer Non-cyclical	27	1.9	4.5	2.2	5.4	0.1	1.4
Diversified	4	16.1	6.5	14.5	6.8	-0.6	3.0
Energy	2	9.6	4.2	8.0	0.0	-1.6	4.2
Industrial	38	2.2	10.8	1.7	12.3	-0.0	3.5
Technology	1	4.1	—	3.5	—	-0.5	—
Utilities	1	36.9	—	52.0	—	15.0	—



Serbia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	20.4	16.0	14.7	9.1	-5.7	6.9
Basic Materials	3	0.9	20.0	1.0	22.5	0.1	2.5
Consumer Cyclical	2	64.2	89.5	67.9	94.5	3.7	5.0
Consumer Non-cyclical	3	153.5	99.4	147.8	97.3	-4.6	2.3
Diversified	2	54.2	5.0	40.7	12.9	-13.6	7.9
Energy	1	2.8	—	1.6	—	-1.2	—
Industrial	9	40.6	105.6	33.9	70.7	-2.7	38.6

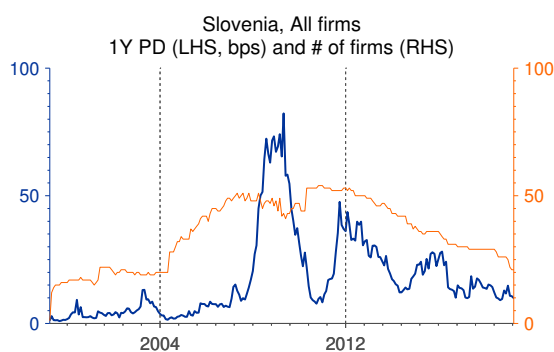


Singapore	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	130	3.0	26.0	3.0	26.5	-0.0	7.6
Basic Materials	21	21.9	63.5	24.9	71.3	0.1	26.7
Communications	20	11.4	28.8	6.9	50.1	-0.1	44.6
Consumer Cyclical	86	12.1	50.5	9.5	70.3	-0.0	30.0
Consumer Non-cyclical	76	10.5	64.2	9.7	67.8	-0.2	28.4
Diversified	5	3.3	34.5	2.1	28.2	-1.2	6.3
Energy	26	39.1	443.1	32.8	153.0	0.0	382.9
Industrial	164	28.9	70.7	23.4	80.6	-0.7	47.0
Technology	25	12.6	61.5	7.3	61.3	-0.4	25.6
Utilities	5	9.0	155.7	6.0	153.5	-4.7	12.9

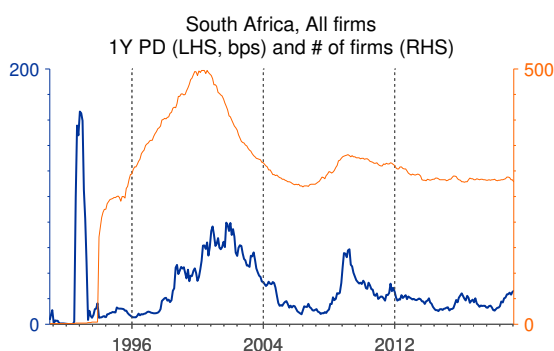


Slovakia	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	3	4.5	20.3	4.3	7.5	-0.8	12.8
Consumer Cyclical	1	0.1	—	0.1	—	-0.0	—
Consumer Non-cyclical	2	16.5	2.8	15.3	1.8	-1.2	1.0
Energy	1	13.6	—	20.2	—	6.5	—

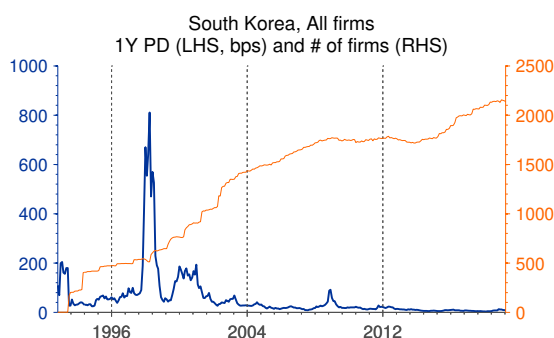




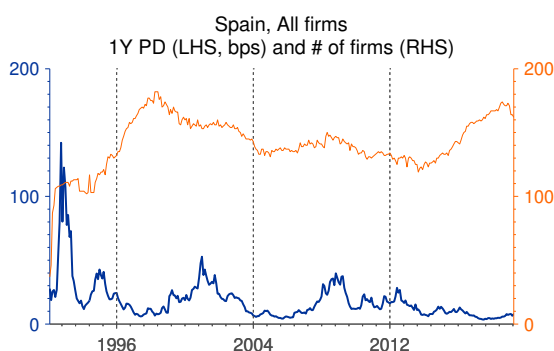
Slovenia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	5	8.4	10.7	9.5	10.6	-0.6	1.0
Basic Materials	2	9.6	10.0	5.6	4.2	-4.1	5.8
Communications	1	17.1	—	15.0	—	-2.1	—
Consumer Cyclical	3	11.0	20.8	8.5	15.9	-2.5	5.0
Consumer Non-cyclical	5	5.1	94.0	4.9	90.0	-0.1	4.1
Diversified	1	27.5	—	28.7	—	1.2	—
Industrial	2	74.4	44.3	91.2	69.0	16.8	24.7
Technology	1	7.2	—	13.5	—	6.3	—
Utilities	1	14.0	—	12.4	—	-1.7	—



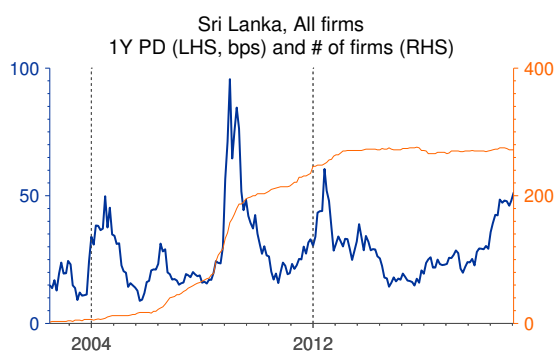
South Africa	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	84	9.7	62.5	14.0	78.0	1.2	18.0
Basic Materials	34	35.6	156.8	36.2	108.0	-1.2	96.2
Communications	12	26.6	82.7	35.1	95.6	3.2	20.7
Consumer Cyclical	39	23.7	83.9	21.4	76.9	1.7	31.6
Consumer Non-cyclical	44	17.5	155.7	19.0	119.8	1.6	63.4
Diversified	4	7.7	14.9	7.2	14.3	-0.5	0.8
Energy	7	32.1	77.9	70.2	143.3	20.9	66.0
Industrial	42	40.9	695.5	56.7	708.1	6.3	95.3
Technology	11	35.1	473.7	48.1	194.2	2.5	321.5



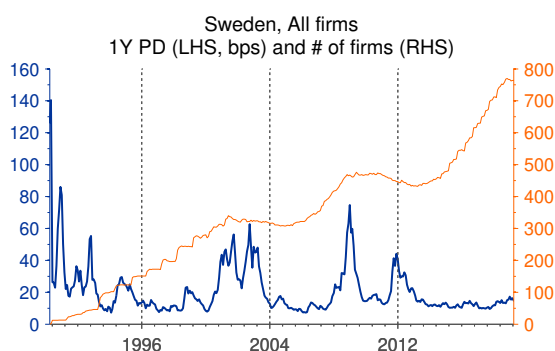
South Korea	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	94	21.1	34.1	16.3	32.2	-1.9	19.6
Basic Materials	183	9.4	37.7	9.8	104.7	0.0	80.2
Communications	179	5.7	37.1	4.2	32.5	-0.3	9.9
Consumer Cyclical	363	12.7	87.7	12.2	41.3	-0.2	64.7
Consumer Non-cyclical	414	5.6	25.9	5.0	27.3	-0.3	14.6
Diversified	32	0.0	5.8	0.0	5.8	-0.0	2.4
Energy	22	13.0	28.3	13.3	47.0	-0.2	26.1
Industrial	540	14.0	47.1	13.1	46.4	-0.0	19.4
Technology	291	7.5	36.8	5.8	39.1	-0.3	22.0
Utilities	17	28.8	43.9	26.5	40.6	-1.0	10.2



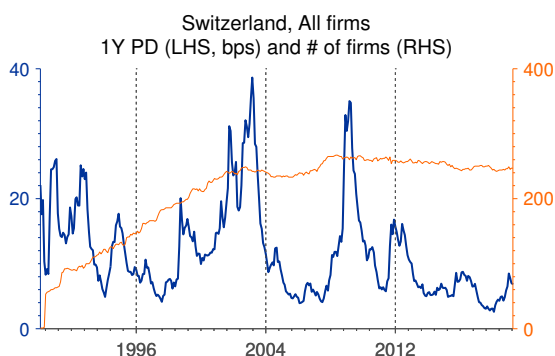
Spain	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	36	2.9	6.9	2.8	9.7	0.0	6.1
Basic Materials	8	9.2	38.5	17.8	37.3	1.8	7.5
Communications	15	12.9	21.4	10.5	17.1	0.4	7.4
Consumer Cyclical	18	7.6	51.6	8.9	30.6	-0.2	43.1
Consumer Non-cyclical	36	11.7	113.4	11.5	73.2	-0.2	53.0
Energy	6	11.8	7.2	13.0	29.9	2.4	23.7
Industrial	28	12.0	99.8	11.1	59.9	-0.1	65.3
Technology	8	10.7	7.4	7.2	9.1	-1.1	5.1
Utilities	7	0.9	1.4	1.1	1.3	-0.0	0.5



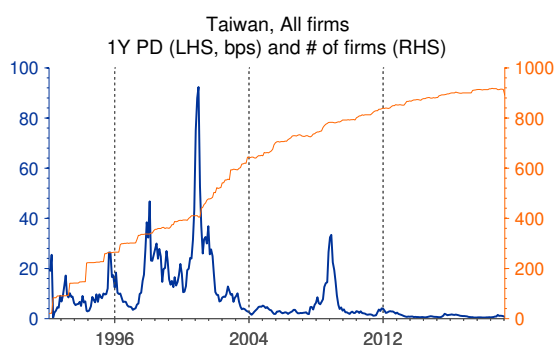
Sri Lanka	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	88	64.7	74.7	58.8	91.7	-0.4	26.6
Basic Materials	11	33.5	28.1	27.4	39.6	0.2	22.2
Communications	4	8.5	26.2	9.7	35.3	2.4	9.3
Consumer Cyclical	65	37.6	112.7	52.1	128.0	2.6	32.5
Consumer Non-cyclical	64	29.1	90.0	32.7	110.8	2.5	32.8
Diversified	6	18.5	25.8	24.2	44.2	2.4	20.3
Energy	4	7.8	8.9	8.5	12.4	1.5	4.0
Industrial	23	53.8	218.6	56.9	234.9	8.8	37.3
Technology	2	14.0	5.5	41.8	38.6	27.8	44.1
Utilities	5	16.0	98.6	23.7	106.4	0.4	8.8



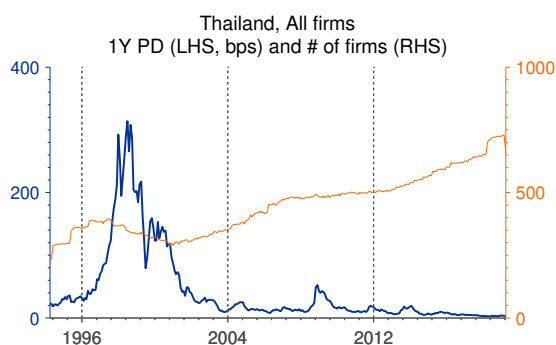
Sweden	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	102	3.4	45.8	3.6	109.9	-0.0	68.0
Basic Materials	29	16.3	59.3	14.9	46.4	0.2	33.7
Communications	74	35.3	124.4	44.9	127.9	-0.2	96.7
Consumer Cyclical	90	24.8	79.4	20.2	74.0	-1.0	37.3
Consumer Non-cyclical	223	14.8	53.0	13.9	75.1	-0.1	43.8
Diversified	2	13.5	19.1	6.0	8.5	-7.5	10.6
Energy	22	17.5	143.5	18.8	128.9	-0.2	48.5
Industrial	138	17.3	330.4	16.4	157.1	-1.1	183.7
Technology	78	22.4	201.0	25.3	189.0	-0.0	68.1
Utilities	2	4.4	2.7	4.7	5.2	0.3	2.5



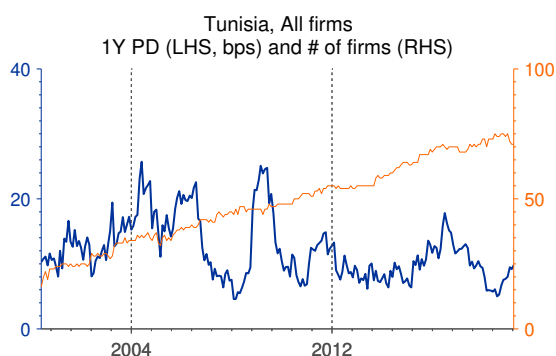
Switzerland	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	69	4.1	24.4	2.1	15.1	-0.6	10.9
Basic Materials	14	8.6	130.3	8.0	245.1	0.2	115.2
Communications	11	12.4	242.1	13.6	368.6	2.9	129.6
Consumer Cyclical	23	13.5	39.8	12.4	46.1	-0.6	30.6
Consumer Non-cyclical	49	8.0	63.7	6.6	47.9	-0.6	26.2
Diversified	2	3.0	2.8	4.3	3.5	1.3	0.7
Energy	4	39.6	940.9	49.1	1105.9	12.6	165.4
Industrial	55	9.3	143.9	9.0	451.3	-0.4	308.8
Technology	10	18.0	30.7	18.7	62.0	1.7	34.4
Utilities	6	14.8	51.7	18.9	43.1	0.5	11.2



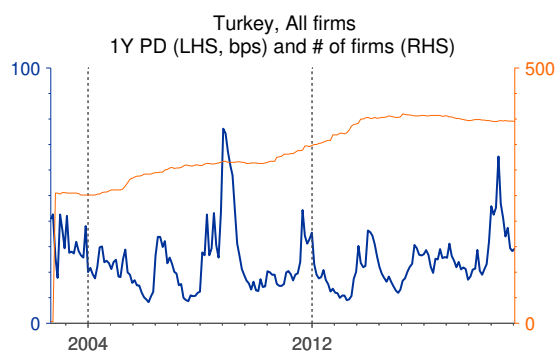
Taiwan	2018Q4			2019Q1		Q1-Q4	
	#	Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	87	0.5	3.7	0.3	2.3	-0.1	2.0
Basic Materials	71	0.5	6.3	0.3	5.1	-0.1	3.0
Communications	42	1.6	8.5	1.1	11.1	-0.2	3.5
Consumer Cyclical	153	0.6	6.1	0.5	5.6	-0.1	1.5
Consumer Non-cyclical	62	0.1	4.7	0.1	4.9	-0.0	0.7
Diversified	1	0.0	—	0.0	—	-0.0	—
Energy	9	2.0	6.1	1.4	5.6	-0.2	1.5
Industrial	314	1.8	17.8	1.2	16.0	-0.4	7.5
Technology	147	2.2	13.9	1.4	32.4	-0.3	20.8
Utilities	5	0.0	0.1	0.0	0.1	-0.0	0.0



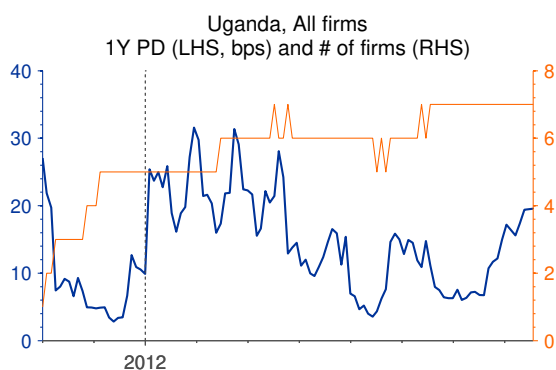
Thailand	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	154	0.3	6.5	0.2	3.4	-0.1	3.2
Basic Materials	48	7.2	119.9	7.3	123.8	0.1	13.8
Communications	40	13.9	50.3	15.2	37.7	-0.1	25.5
Consumer Cyclical	128	5.2	45.4	5.0	46.2	0.1	21.2
Consumer Non-cyclical	98	2.3	136.5	2.4	131.2	-0.0	14.8
Diversified	6	4.1	60.6	3.7	80.6	0.8	20.0
Energy	28	8.4	27.5	8.9	22.9	0.1	13.0
Industrial	127	7.9	35.8	7.4	39.0	0.1	11.8
Technology	10	6.0	27.8	12.0	33.0	1.7	12.2
Utilities	18	2.2	14.5	1.9	17.0	0.0	7.3



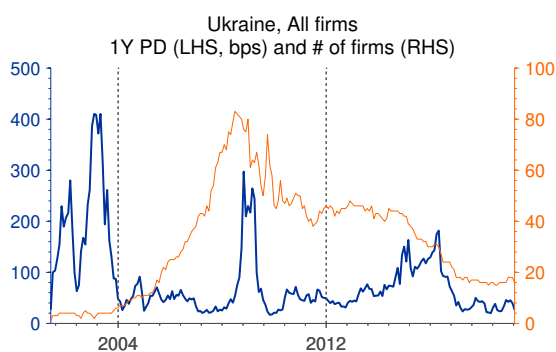
Tunisia	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	24	10.7	21.6	10.8	18.0	0.1	10.7
Basic Materials	2	0.8	0.2	0.9	0.2	0.1	0.4
Communications	5	40.3	35.0	28.0	60.2	0.1	28.3
Consumer Cyclical	13	5.9	115.7	6.4	114.7	0.2	9.5
Consumer Non-cyclical	9	9.9	189.2	11.1	161.7	-0.0	30.4
Diversified	1	2.0	—	7.6	—	5.7	—
Energy	1	0.5	—	0.5	—	0.0	—
Industrial	14	11.1	200.3	9.6	216.6	0.0	19.6
Technology	2	139.0	195.6	171.6	242.0	32.6	46.4



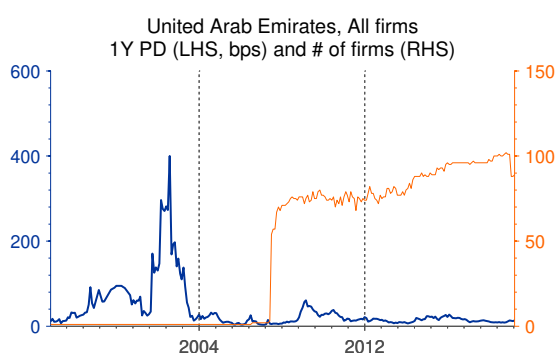
Turkey	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	105	28.3	63.4	21.5	54.8	-0.2	23.3
Basic Materials	35	23.1	31.8	28.1	33.0	0.4	9.4
Communications	11	36.2	15.3	29.6	10.5	-0.5	11.9
Consumer Cyclical	90	40.2	89.4	40.0	80.5	0.8	36.3
Consumer Non-cyclical	56	26.6	63.9	31.3	63.5	-0.7	44.4
Diversified	4	85.5	129.0	67.3	198.9	3.1	77.5
Energy	6	28.1	24.6	29.8	21.3	0.8	4.6
Industrial	75	25.3	60.7	25.8	79.7	0.7	33.6
Technology	5	12.3	25.3	7.5	15.6	-4.8	11.1
Utilities	8	82.4	58.2	105.4	57.9	10.9	18.8



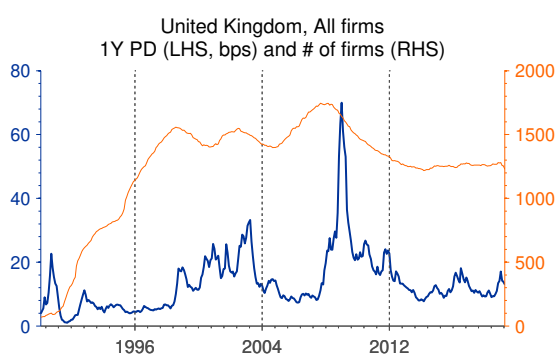
Uganda	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	16.7	7.1	19.3	8.1	0.2	2.9
Consumer Non-cyclical	1	0.5	—	0.5	—	0.1	—
Industrial	1	34.2	—	46.3	—	12.1	—
Utilities	1	91.0	—	106.0	—	15.0	—



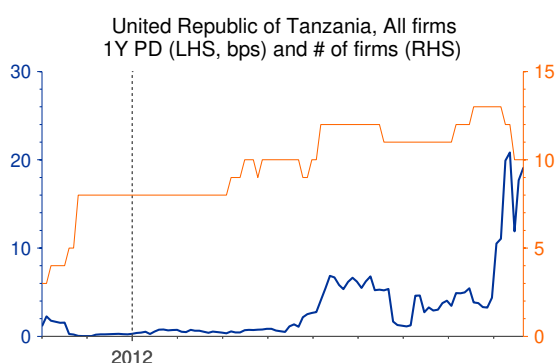
Ukraine	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	2	27.2	36.4	30.2	33.8	3.0	2.6
Consumer Non-cyclical	8	24.1	109.3	19.3	61.7	-2.0	48.8
Energy	2	203.4	209.0	139.3	163.0	-64.1	46.1
Industrial	2	62.6	35.9	56.6	38.0	-6.0	2.1
Utilities	2	41.9	46.7	49.3	45.8	7.4	1.0



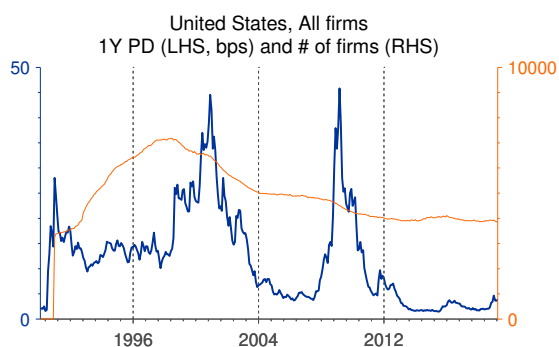
United Arab Emirates	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	47	7.8	11.7	6.9	11.0	-0.2	7.3
Communications	2	0.2	0.2	0.2	0.2	-0.0	0.0
Consumer Cyclical	5	24.9	71.2	32.8	93.8	7.9	44.4
Consumer Non-cyclical	10	39.0	227.9	45.7	129.8	4.7	153.0
Energy	7	42.9	73.7	35.6	81.4	0.3	11.6
Industrial	16	32.8	122.0	34.5	97.3	-1.2	36.0
Utilities	1	136.2	—	149.4	—	13.3	—



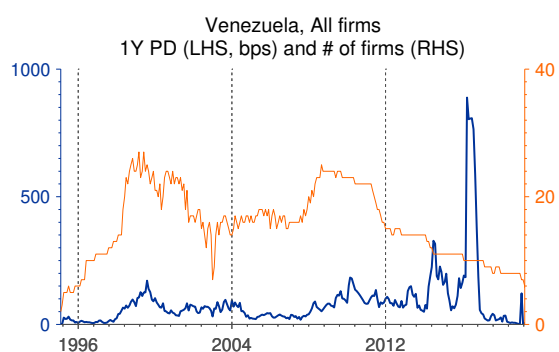
United Kingdom	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	242	3.2	45.3	2.8	14.9	-0.1	35.6
Basic Materials	90	34.8	283.5	36.2	277.9	0.7	108.8
Communications	99	32.2	230.3	28.5	223.4	-1.1	41.5
Consumer Cyclical	149	17.9	296.3	20.8	401.2	-0.1	114.5
Consumer Non-cyclical	240	13.7	165.9	13.6	215.9	-0.4	159.9
Diversified	7	20.7	47.3	23.2	64.0	0.1	19.2
Energy	100	35.1	235.9	37.9	272.9	1.8	119.0
Industrial	170	15.6	329.1	14.1	264.6	-0.4	111.4
Technology	108	14.5	60.9	13.7	104.0	-0.4	67.2
Utilities	13	11.4	131.6	22.9	122.4	-0.1	14.9



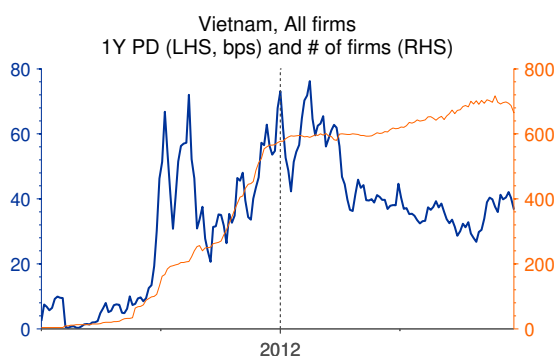
United Republic of Tanzania	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	40.4	25.7	31.5	21.6	-8.6	5.1
Communications	1	34.7	—	24.2	—	-10.5	—
Consumer Non-cyclical	2	1.8	2.4	2.1	2.6	0.3	0.2
Industrial	3	7.7	6.0	14.4	117.4	6.7	111.6



United States	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	907	1.2	20.9	1.3	28.2	0.0	14.6
Basic Materials	114	3.4	294.5	3.7	200.0	0.1	120.6
Communications	257	5.6	295.6	6.1	518.7	0.1	407.2
Consumer Cyclical	451	8.0	239.6	8.5	205.5	0.0	149.1
Consumer Non-cyclical	957	10.4	295.8	10.6	254.1	0.0	176.2
Diversified	18	0.0	32.8	0.0	26.1	-0.0	6.7
Energy	267	20.9	355.5	20.4	754.5	-0.0	493.2
Industrial	474	3.6	235.8	3.8	294.3	-0.0	253.3
Technology	315	3.1	115.2	3.2	122.2	-0.0	90.1
Utilities	73	0.2	137.3	0.2	140.9	-0.0	104.5



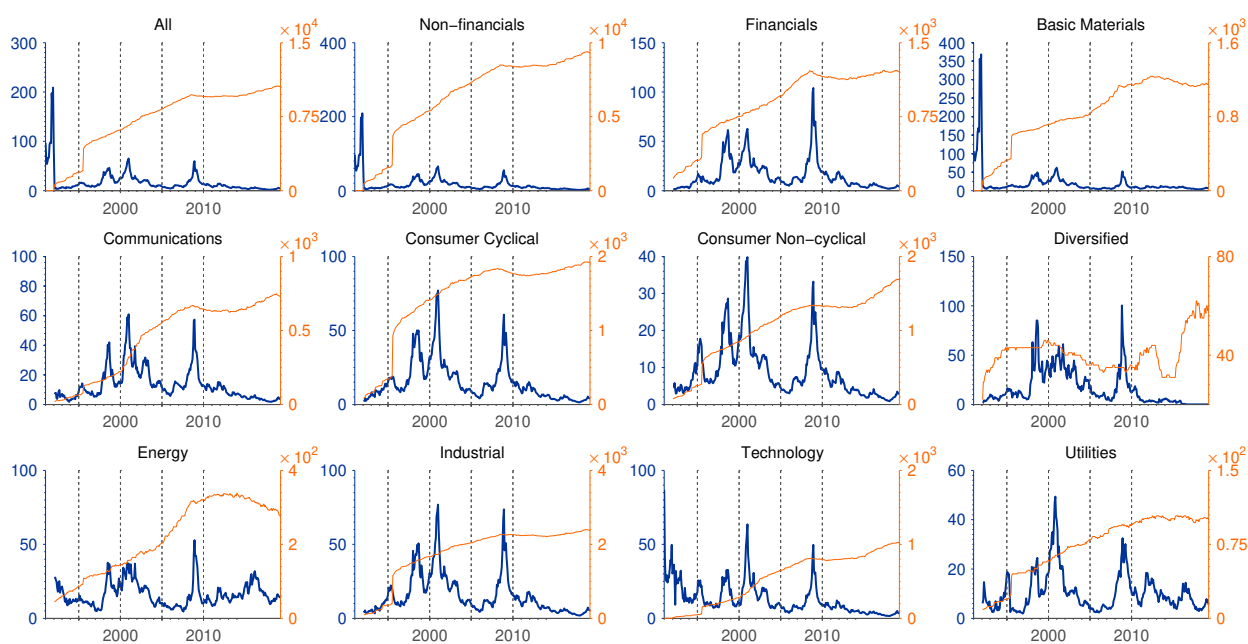
Venezuela	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	4	125.9	103.5	2.5	3.5	-123.4	100.7
Basic Materials	1	19.7	—	78.7	—	59.0	—
Industrial	1	140.6	—	5.2	—	-135.4	—



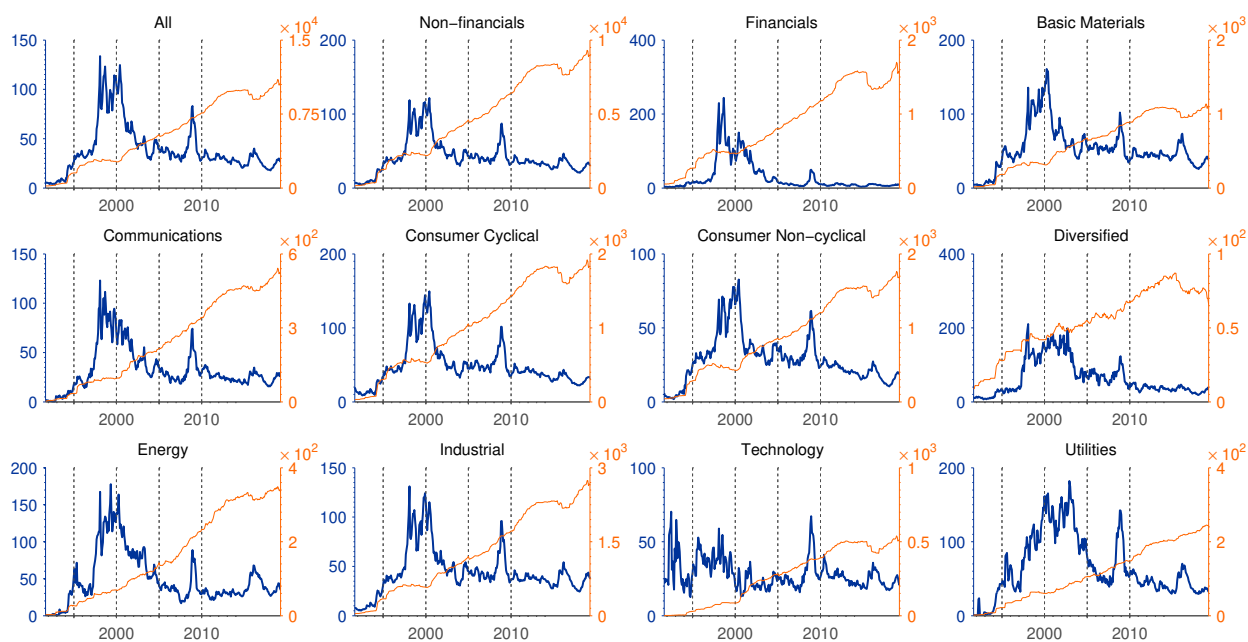
Vietnam	#	2018Q4		2019Q1		Q1-Q4	
		Median	St.Dev.	Median	St.Dev.	Median	St.Dev.
Financials	99	23.3	36.4	15.1	31.6	-5.2	11.2
Basic Materials	70	43.4	193.5	48.3	210.6	-1.5	74.6
Communications	21	28.5	69.5	43.1	68.5	0.6	27.1
Consumer Cyclical	77	37.5	72.9	30.8	65.9	-2.8	35.6
Consumer Non-cyclical	105	35.8	123.9	26.6	125.4	-0.7	21.6
Diversified	6	42.1	68.7	38.6	19.3	-8.7	66.3
Energy	20	91.5	123.7	72.3	89.7	-1.0	52.6
Industrial	221	65.1	122.5	59.3	99.3	-0.7	60.1
Technology	5	47.9	60.6	37.9	35.7	-10.0	25.9
Utilities	24	21.9	32.9	25.7	24.9	-0.4	12.1

## B PD by regions

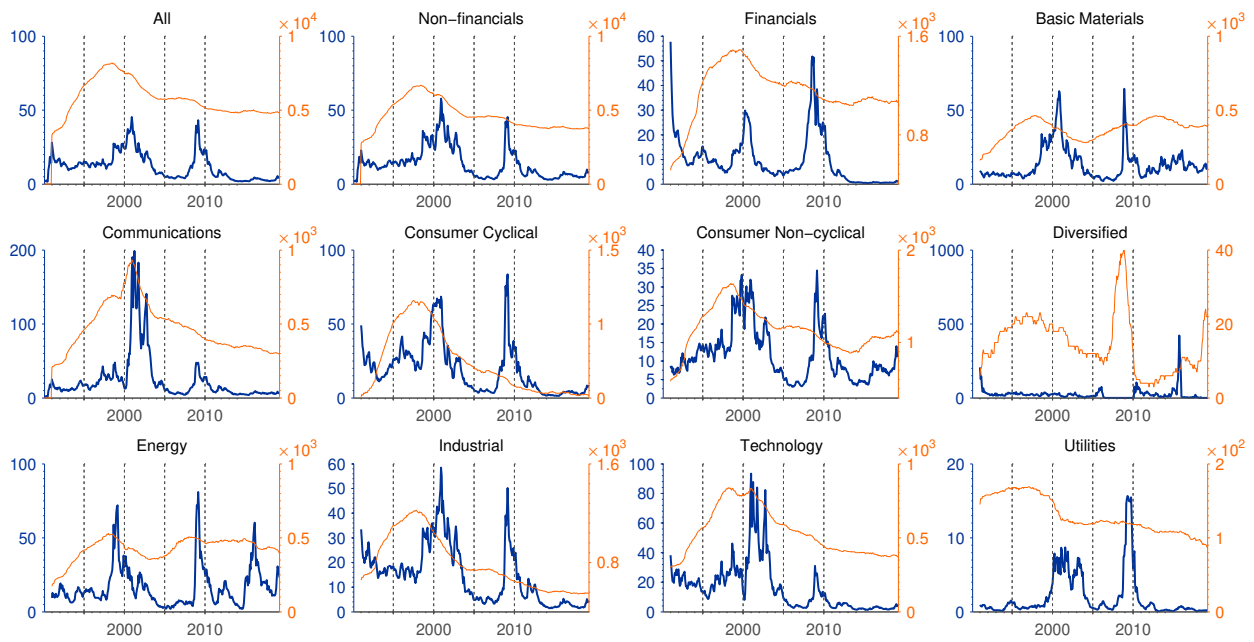
### Asia Pacific - developed economies



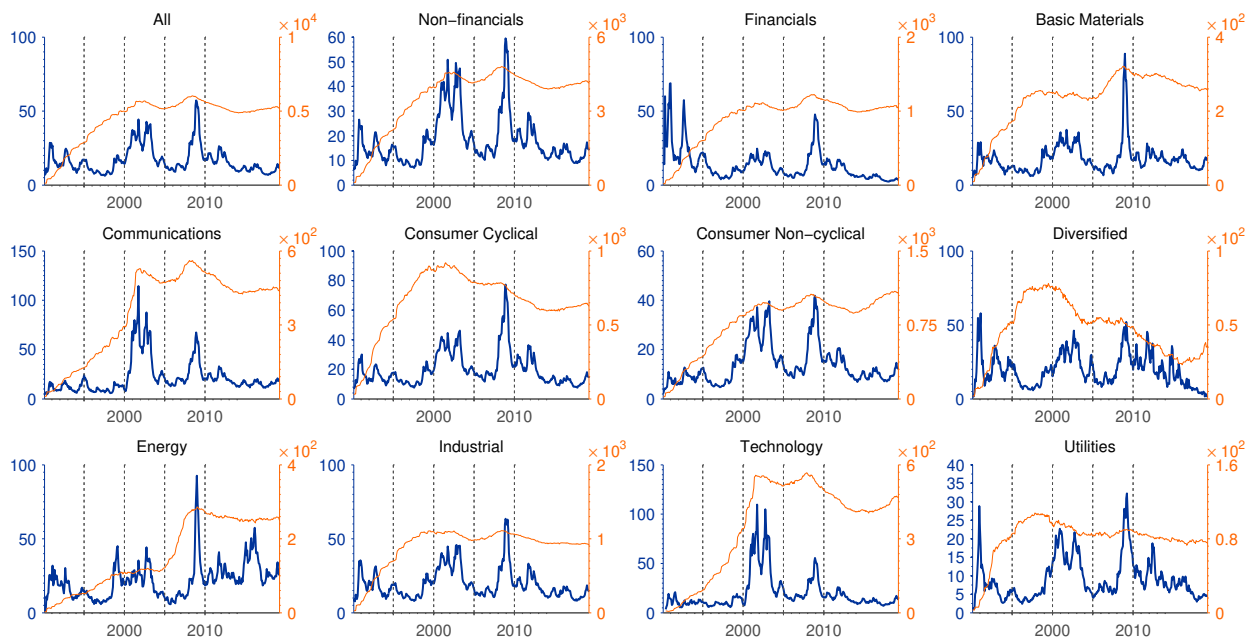
### Asia Pacific - emerging economies



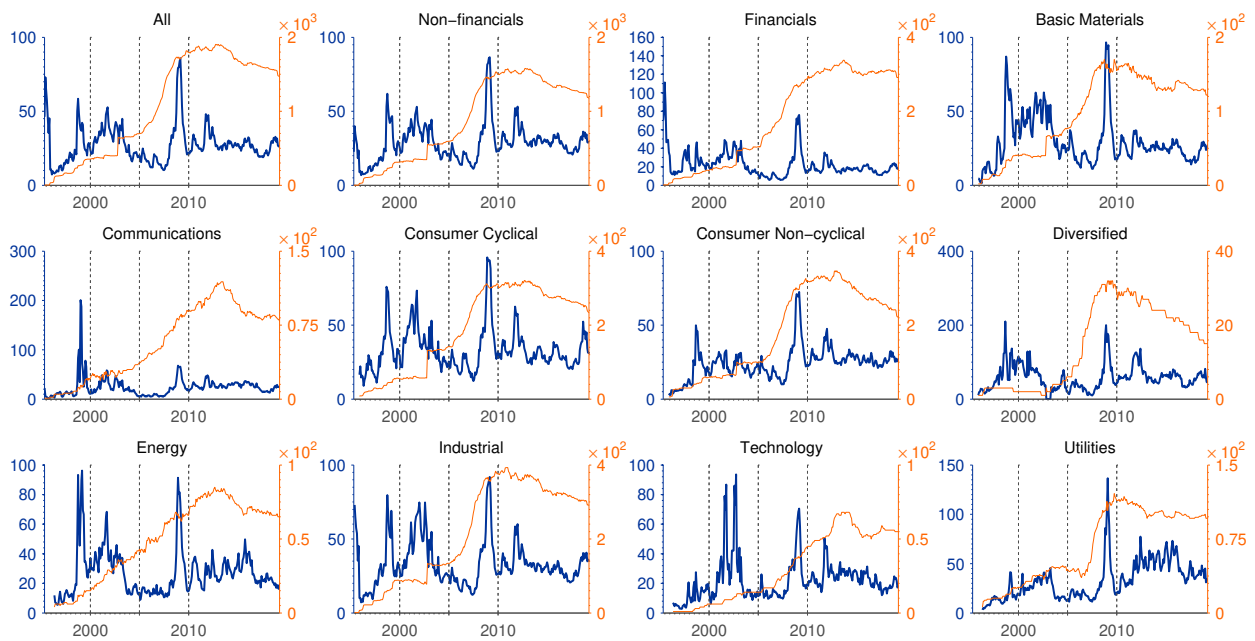
## North America



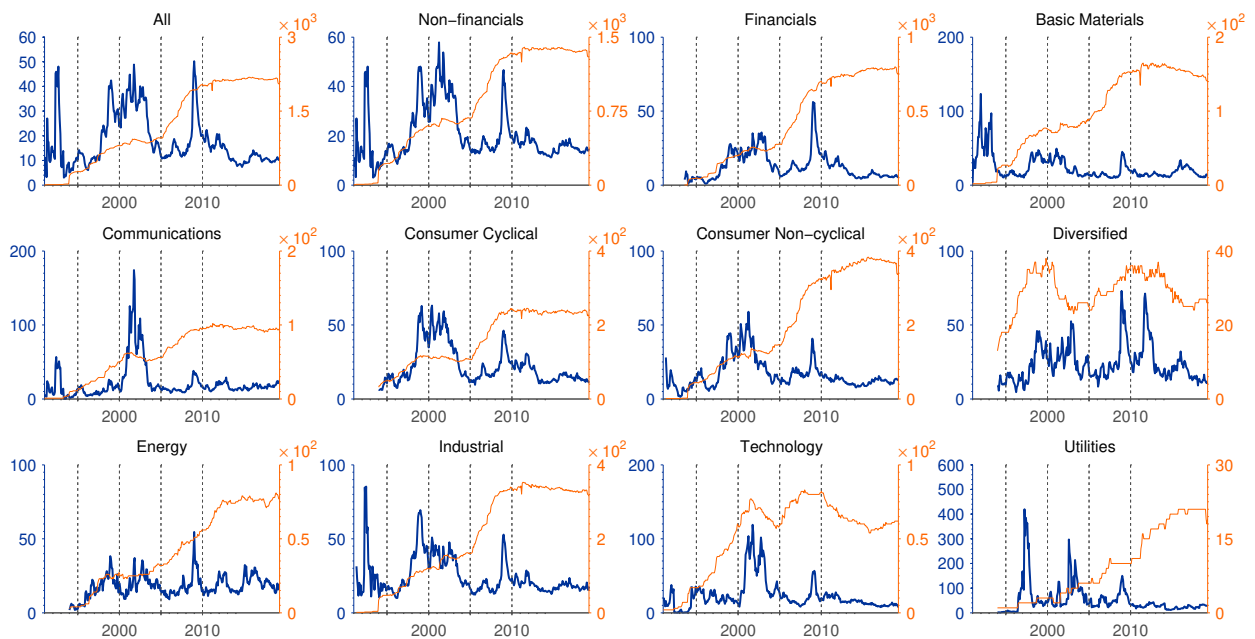
## Western Europe



## Eastern Europe

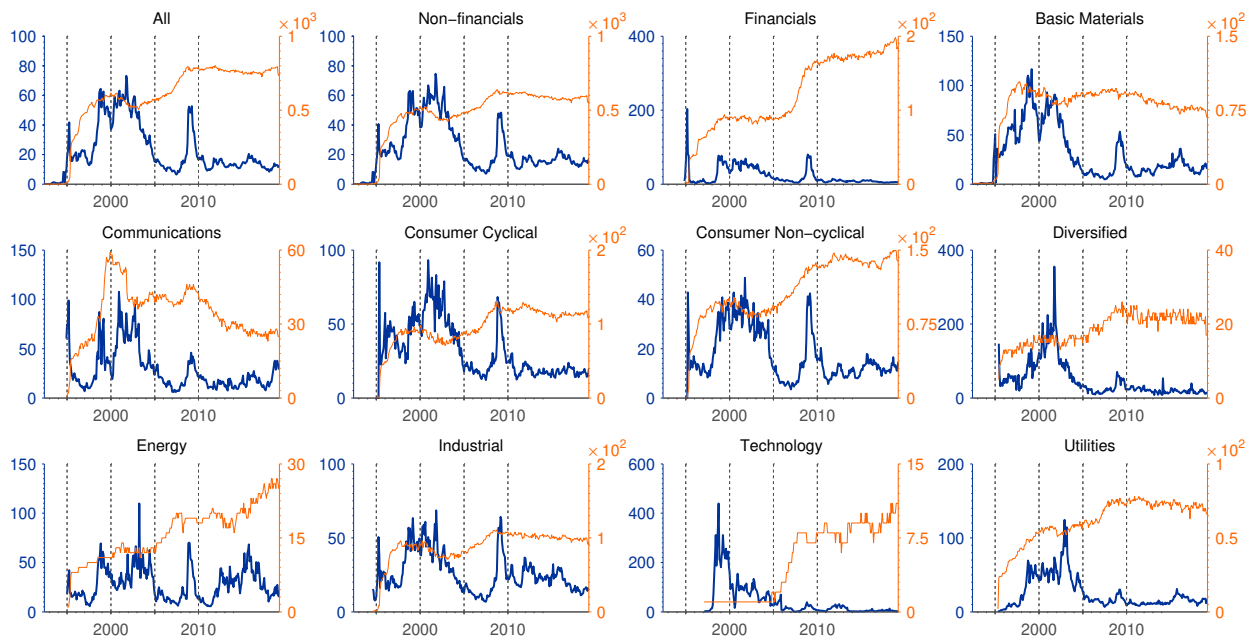


## Africa ME



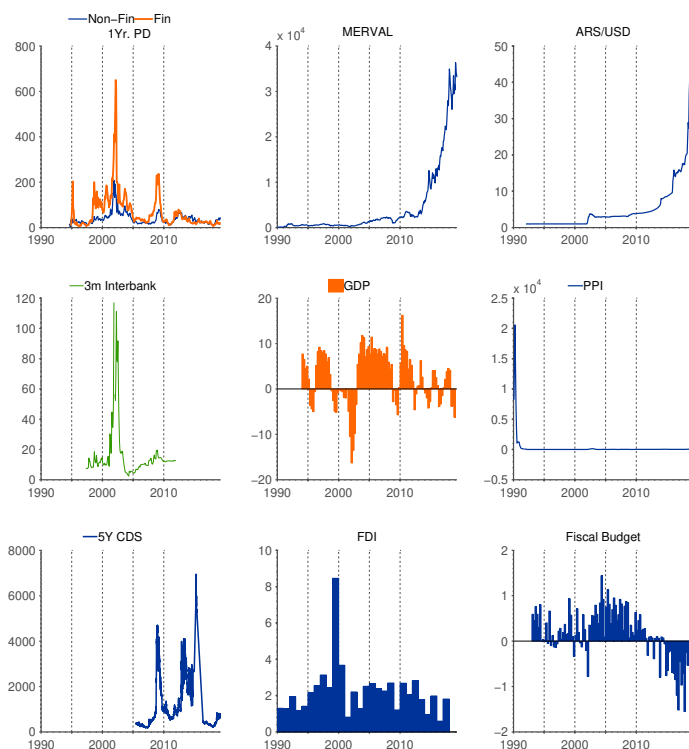


## Latin America

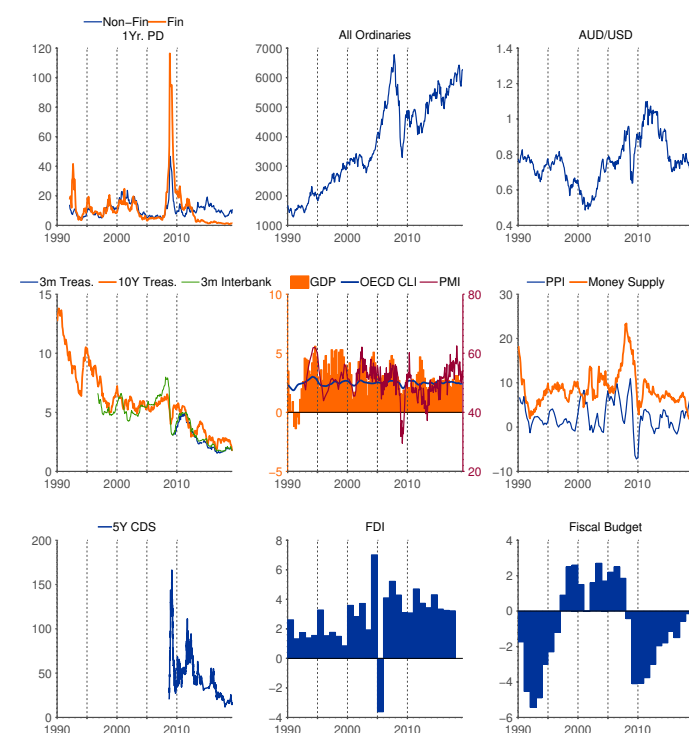


## C Macroeconomic Indicators

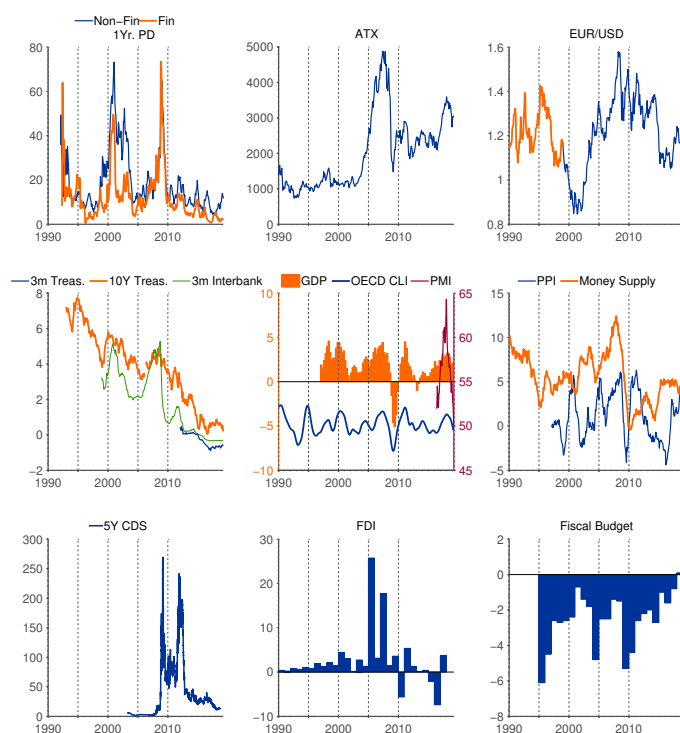
Descriptions of the data contained in this section are provided in Appendix D.



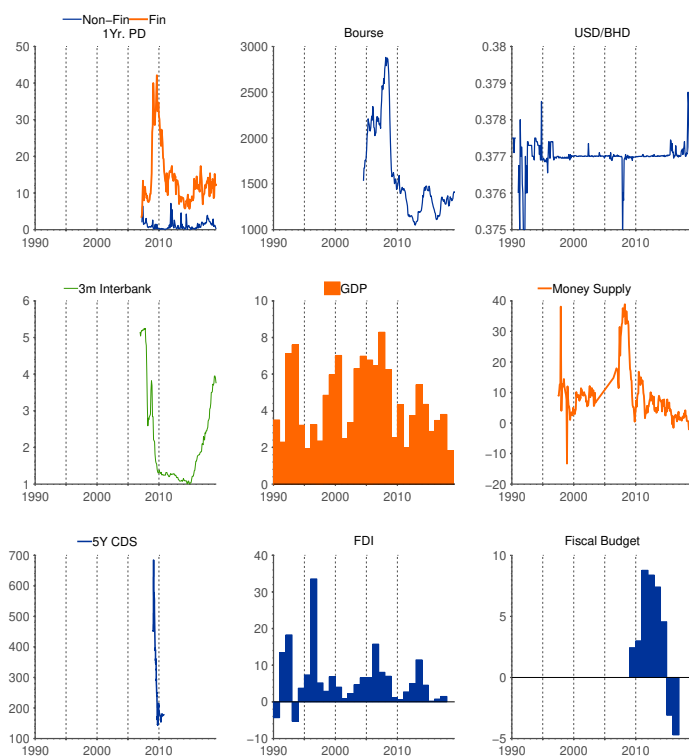
Argentina	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	14.91	34.36	31.43	42.71	43.00
1Yr. PD, Fin.	11.47	17.68	20.12	19.72	18.82
MERVAL	31115	26037	33462	30293	33466
ARS/USD	20.14	28.93	41.31	37.67	43.32
GDP (YoY%)	4.1	-3.8	-3.7	-6.2	-
PPI (YoY%)	29.9	32.4*	77.8	79.6*	64.5*
5Y CDS (bps)	272.14	450.36	586.17	793.91	781.15
Fiscal Budget (%GDP)	-0.25	-0.53	-0.32	-1.11	-



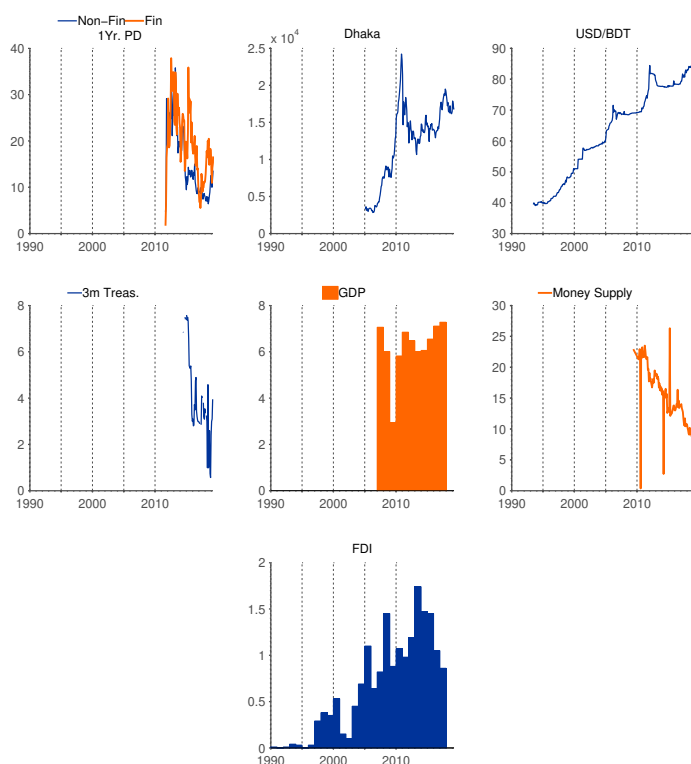
Australia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.31	6.92	8.08	10.29	10.69
1Yr. PD, Fin.	1.43	1.40	0.63	1.35	1.25
All Ordinaries	5869	6290	6326	5709	6262
AUD/USD	0.77	0.74	0.72	0.70	0.71
3m Treas. Yield (%)	2.03	1.92	1.89	2.01	1.80
10Y Treas. Yield (%)	2.60	2.63	2.67	2.32	1.77
3m Interbank (%)	2.02	2.10	1.93	2.09	1.77
GDP (YoY%)	3.1	3.1	2.7	2.3	-
OECD CLI	99.84	99.90	99.76	99.64	99.79*
PMI	62.5	55.6	57.1	50.0	51.0
PPI (YoY%)	3.3	5.2	6.9	5.4	-
Money Supply (YoY%)	3.7	1.9	2.2	2.5	3.2*
5Y CDS (bps)	14.48	-	16.60	21.46	16.44
Fiscal Budget (%GDP)	-	-	-	-0.15	-



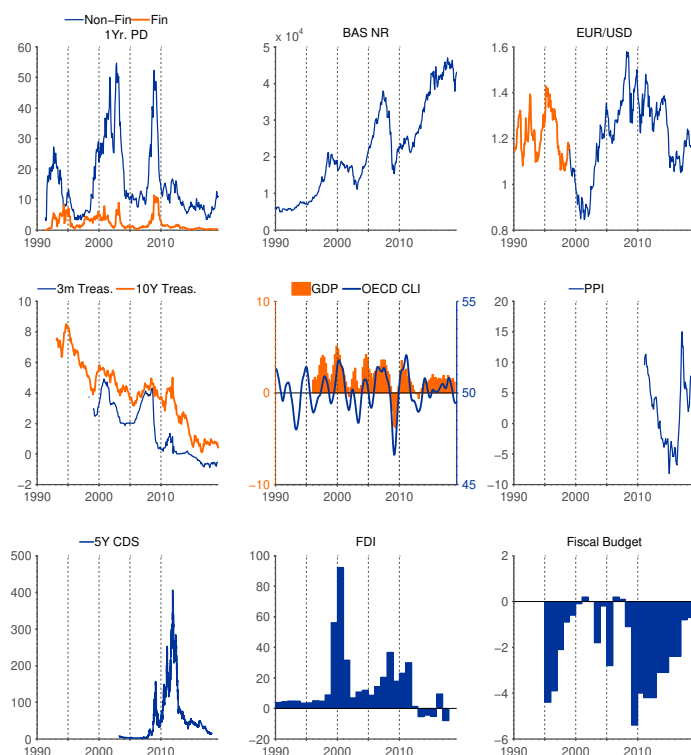
Austria	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.77	9.36	7.55	12.30	12.07
1Yr. PD, Fin.	3.51	2.80	1.29	2.58	1.94
ATX	3429	3256	3344	2746	3034
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.69	-0.69	-0.63	-0.67	-0.61
10Y Treas. Yield (%)	0.70	0.58	0.68	0.50	0.24
3m Interbank (%)	-0.33	-0.32	-0.32	-0.31	-0.31
GDP (YoY%)	3.2	3.2	2.8	2.1	—
OECD CLI	101.24	101.01	100.71	100.08	99.54*
PMI	58.0	56.6	55.0	53.9	50.0
PPI (YoY%)	1.7	3.6	4.2	2.3	2.4*
Money Supply (YoY%)	3.7	4.5	3.5	4.0	4.2*
5Y CDS (bps)	12.1	14.0	13.4	—	—
Fiscal Budget (%GDP)	—	—	—	0.10	—



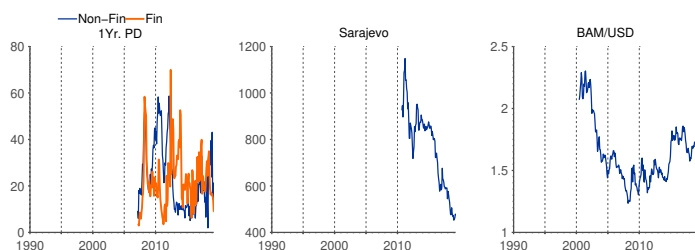
Bahrain	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.18	1.63	2.91	1.21	0.30
1Yr. PD, Fin.	15.42	12.94	13.07	15.20	12.24
Bourse	1318	1311	1339	1337	1413
USD/BHD	0.38	0.38	0.38	0.38	0.38
3m Interbank (%)	3.05	3.50	3.73	3.95	3.77
GDP (YoY%)	—	—	—	1.83	—
Money Supply (YoY%)	0.64	0.19	0.59	0.81	3.07*



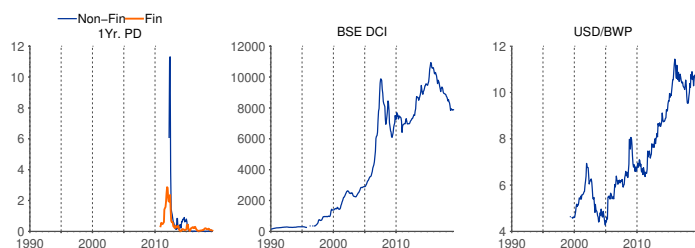
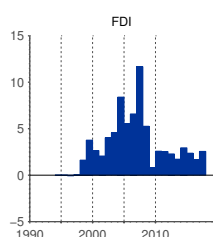
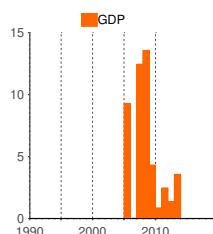
Bangladesh	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.95	6.43	8.90	11.48	13.36
1Yr. PD, Fin.	17.83	18.98	18.08	13.46	15.32
Dhaka	17252	16540	16483	16450	16803
USD/BDT	83.22	83.78	83.97	83.60	83.92
3m Treas. Yield (%)	3.25	4.58	2.59	2.40	3.95
Money Supply (YoY%)	9.3	9.2	8.8	9.4	10.4*



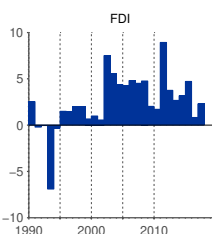
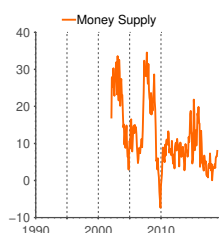
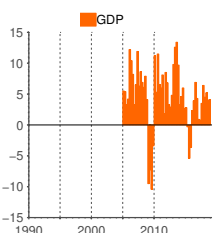
Belgium	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.69	7.03	7.98	12.65	11.01
1Yr. PD, Fin.	0.28	0.24	0.28	0.31	0.13
BAS NR	44075.4	44656.8	43923.4	37906.2	42925.4
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.61	-0.61	-0.58	-0.80	-0.54
10Y Treas. Yield (%)	0.77	0.69	0.83	0.78	0.41
GDP (YoY%)	1.5	1.4	1.6	1.2	—
OECD CLI	100.61	100.24	99.73	99.45	99.48*
PPI (YoY%)	2.6	7.1	6.8	4.4	4.2*
5Y CDS (bps)	14.05	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-0.70	—

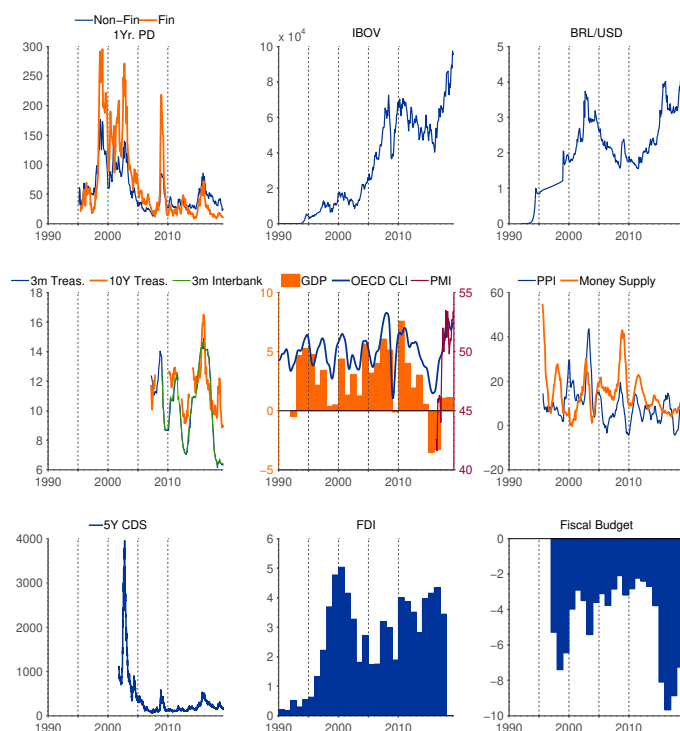


Bosnia and Herzegovina	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	11.44	30.48	29.32	43.10	21.25
1Yr. PD, Fin.	24.32	34.93	16.32	16.45	9.01
Sarajevo	545	476	482	452	479
BAM/USD	1.59	1.69	1.69	1.73	1.74

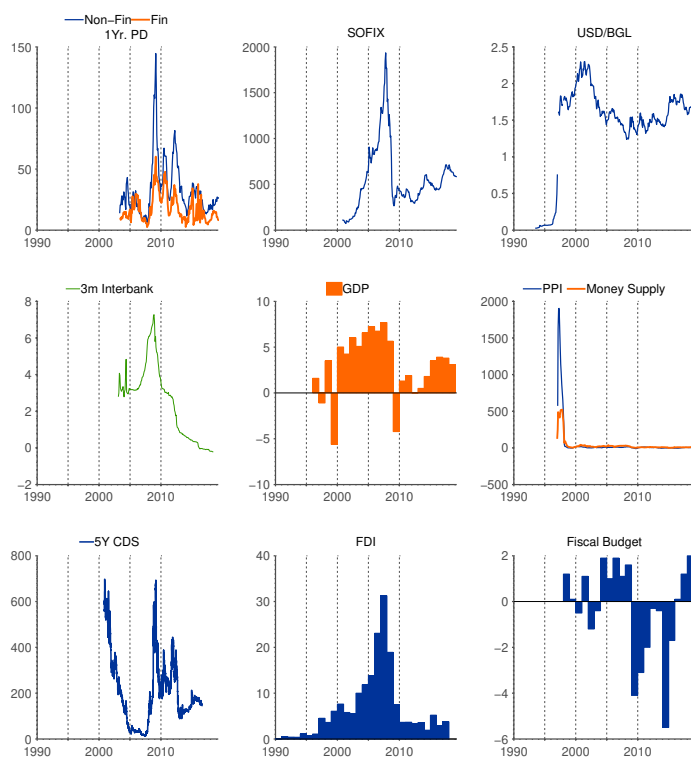


Botswana	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	0.00	0.01	0.01	0.09	0.04
1Yr. PD, Fin.	0.14	0.16	0.11	0.07	0.04
BSE DCI	8590	8403	7837	7852	7886
USD/BWP	9.56	10.39	10.59	10.71	10.75
GDP (YoY%)	4.5	5.2	4.0	4.1	—
Money Supply (YoY%)	2.1	3.4	6.0	8.2	—

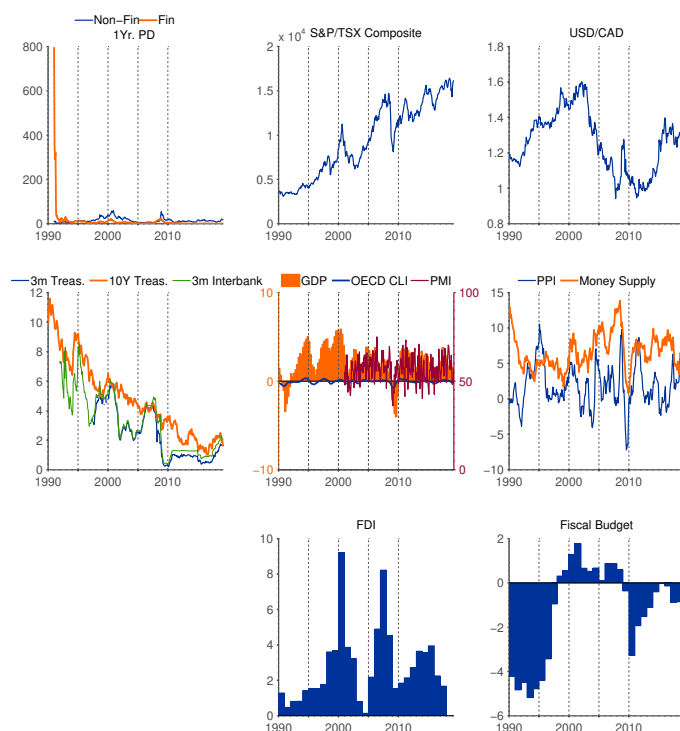




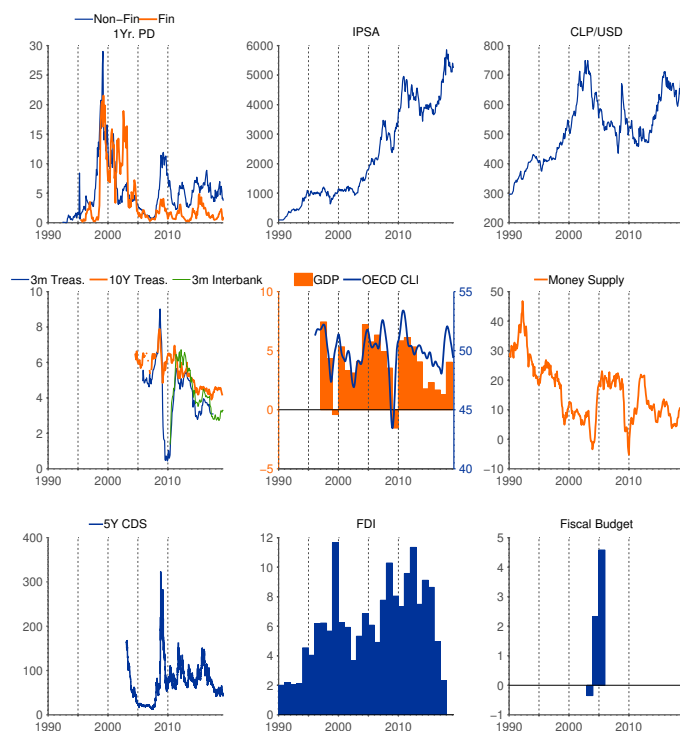
Brazil	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	31.08	40.63	42.45	30.18	24.90
1Yr. PD, Fin.	10.80	18.11	14.93	13.01	10.04
IBOV	85365.6	72762.5	79342.4	87887.3	95414.6
BRL/USD	3.31	3.88	4.05	3.87	3.92
3m Treas. Yield (%)	6.49	6.45	6.58	6.37	6.31
10Y Treas. Yield (%)	9.49	11.68	11.76	9.23	8.96
3m Interbank (%)	6.31	6.52	6.69	6.43	6.43
GDP (YoY%)	—	—	—	1.1	—
OECD CLI	102.80	102.32	101.85	102.18	102.49*
PMI	53.4	49.8	50.9	52.6	52.8
PPI (YoY%)	-1.2	8.7	13.3	9.4	10.3
Money Supply (YoY%)	8.2	7.6	9.5	10.3	8.9*
5Y CDS (bps)	164.20	269.96	262.96	207.52	179.98
Fiscal Budget (%GDP)	—	—	—	-7.26	—



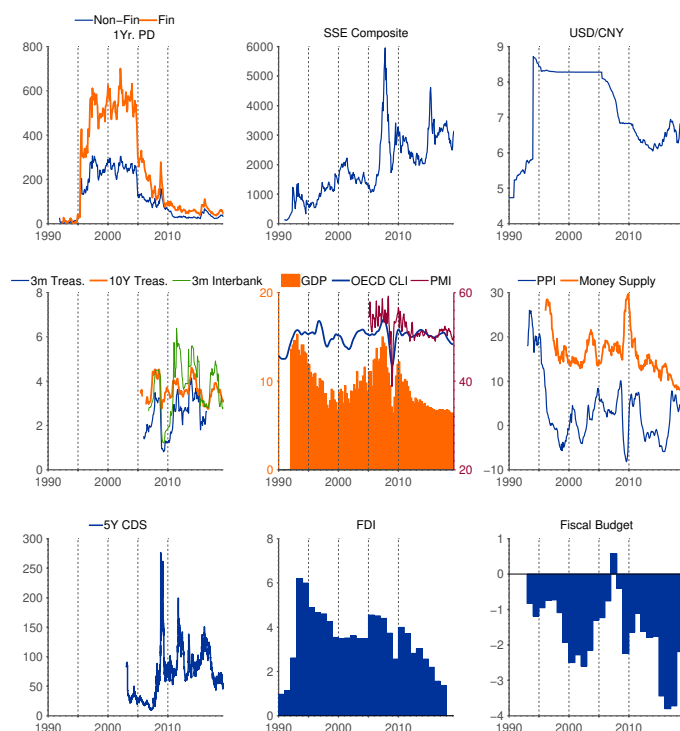
Bulgaria	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	18.04	20.00	21.12	23.47	26.13
1Yr. PD, Fin.	13.17	13.93	14.52	10.61	8.12
SOFIX	649	634	624	594	584
USD/BGL	1.59	1.67	1.69	1.71	1.74
3m Interbank (%)	-0.19	-0.23	—	—	—
GDP (YoY%)	—	—	—	3.1	—
PPI (YoY%)	3.0	5.7	3.1	2.9	4.1*
Money Supply (YoY%)	8.3	9.9	9.2	8.8	10.4
Fiscal Budget (%GDP)	—	—	—	2.00	—



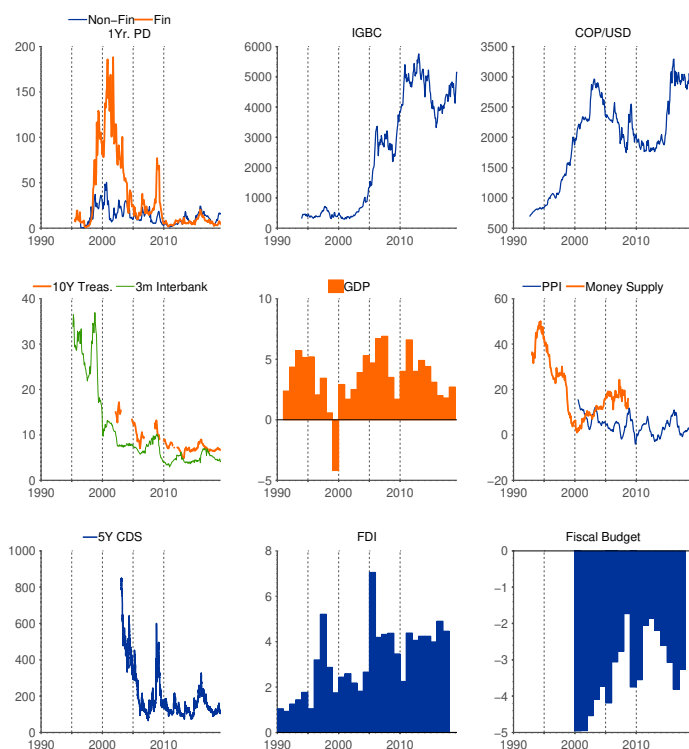
Canada	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.64	10.99	10.48	21.09	18.07
1Yr. PD, Fin.	0.43	0.42	0.50	0.91	0.47
S&P/TSX Composite	15367	16278	16073	14323	16102
USD/CAD	1.29	1.31	1.29	1.36	1.33
3m Treas. Yield (%)	1.15	1.26	1.58	1.65	1.67
10Y Treas. Yield (%)	2.09	2.17	2.43	1.97	1.62
3m Interbank (%)	1.73	1.77	2.02	2.31	2.02
GDP (YoY%)	2.2	1.7	1.9	1.6	—
OECD CLI	100.35	100.08	99.66	99.04	98.80*
PMI	64.7	65.1	56.5	48.2	57.6
PPI (YoY%)	2.4	5.4	6.2	2.0	1.2*
Money Supply (YoY%)	4.7	4.3	5.7	6.3	6.2*
Fiscal Budget (%GDP)	—	—	—	-0.85	—



Chile	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.32	5.78	4.71	5.45	3.76
1Yr. PD, Fin.	0.88	1.45	1.93	1.74	0.87
IPSA	5542.2	5301.3	5283.5	5105.4	5259.4
CLP/USD	603.9	654.4	656.9	693.6	679.7
10Y Treas. Yield (%)	4.49	4.58	4.50	4.34	4.14*
3m Interbank (%)	2.81	2.83	2.83	3.24	3.29
GDP (YoY%)	—	—	—	4.0	—
OECD CLI	102.00	101.46	100.72	99.93	99.37*
Money Supply (YoY%)	7.41	10.57	9.91	10.71	8.01
5Y CDS (bps)	51.06	60.78	44.23	62.71	45.40

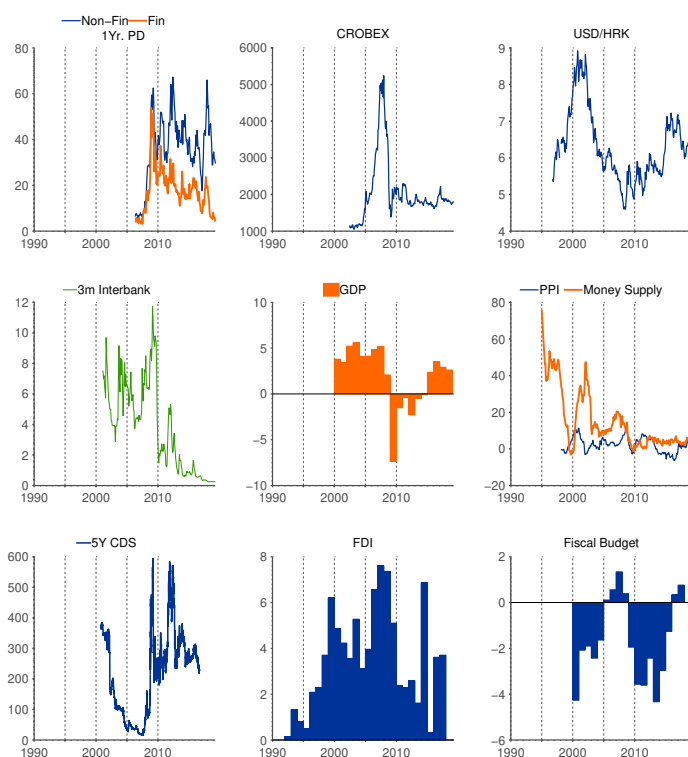


China	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	24.69	30.61	34.26	38.43	32.35
1Yr. PD, Fin.	44.01	49.75	58.58	62.08	45.70
SSE Composite	3169	2847	2821	2494	3091
USD/CNY	6.28	6.62	6.87	6.88	6.71
10Y Treas. Yield (%)	3.75	3.48	3.63	3.31	3.07
3m Interbank (%)	4.46	4.16	2.85	3.35	2.80
GDP (YoY%)	6.8	6.7	6.5	6.4	6.4
OECD CLI	99.48	99.03	98.59	98.36	98.30*
PMI	51.5	51.5	50.8	49.4	50.5
PPI (YoY%)	3.10	4.70	3.60	0.90	0.40
Money Supply (YoY%)	8.20	8.00	8.30	8.10	8.60
5Y CDS (bps)	63.80	67.64	55.96	66.85	49.81
Fiscal Budget (%GDP)	—	—	—	-2.19	—

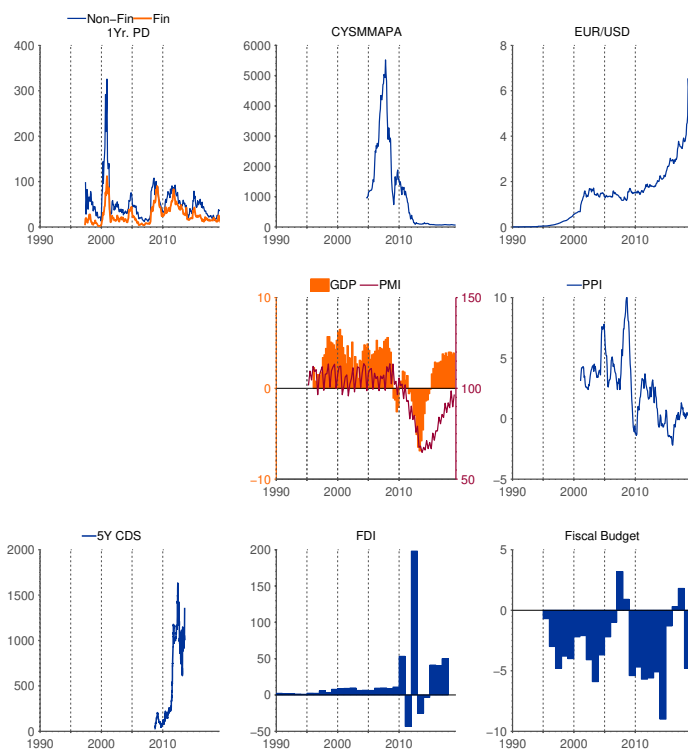


Colombia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	3.57	6.71	8.18	16.59	16.40
1Yr. PD, Fin.	2.50	3.37	3.22	7.50	3.93
IGBC	4340	4832	4777	4126	5153
COP/USD	2795	2931	2972	3250	3186
10Y Treas. Yield (%)	6.51	6.58	6.89	6.75	6.62
3m Interbank (%)	5.04	4.52	4.66	4.28	4.06
GDP (YoY%)	—	—	—	2.7	—
PPI (YoY%)	1.65	3.08	3.77	3.09	3.64
5Y CDS (bps)	106.7	125.2	110.1	157.1	110.9

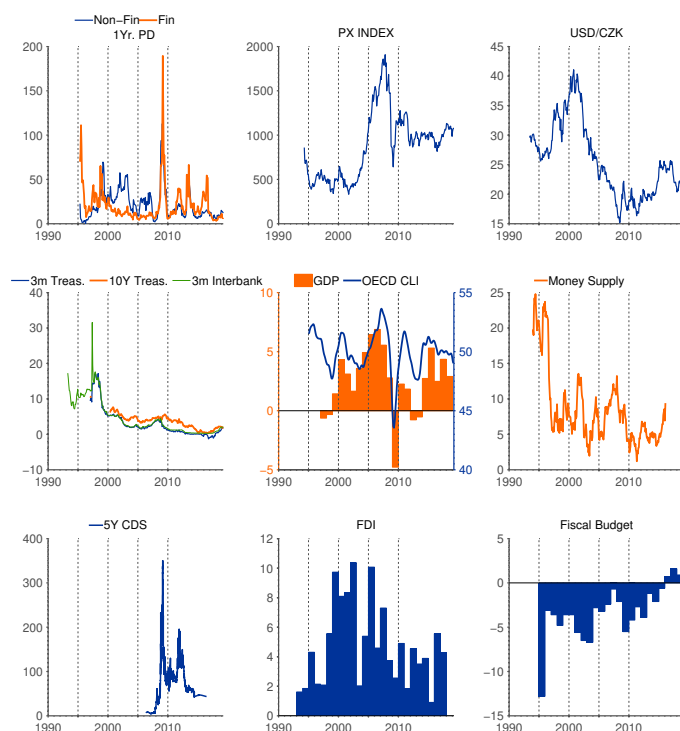




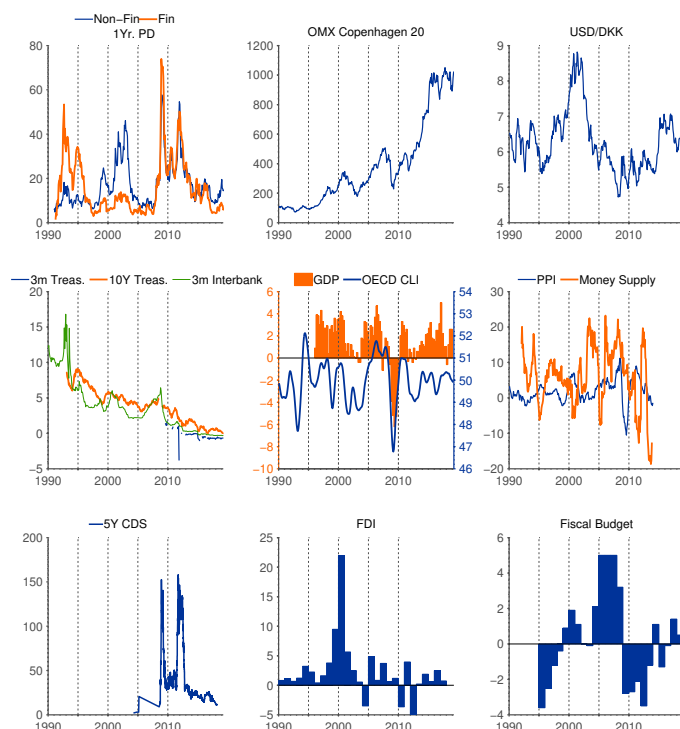
Croatia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	41.80	46.88	29.04	34.55	30.07
1Yr. PD, Fin.	12.95	6.20	5.46	5.70	4.18
CROBEX	1805	1816	1782	1749	1798
USD/HRK	6.03	6.32	6.41	6.46	6.63
3m Interbank (%)	0.25	0.25	0.26	0.24	0.25
GDP (YoY%)	—	—	—	2.6	—
PPI (YoY%)	1.3	3.5	3.4	0.2	2.2
Money Supply (YoY%)	4.4	4.7	5.0	5.5	5.9*



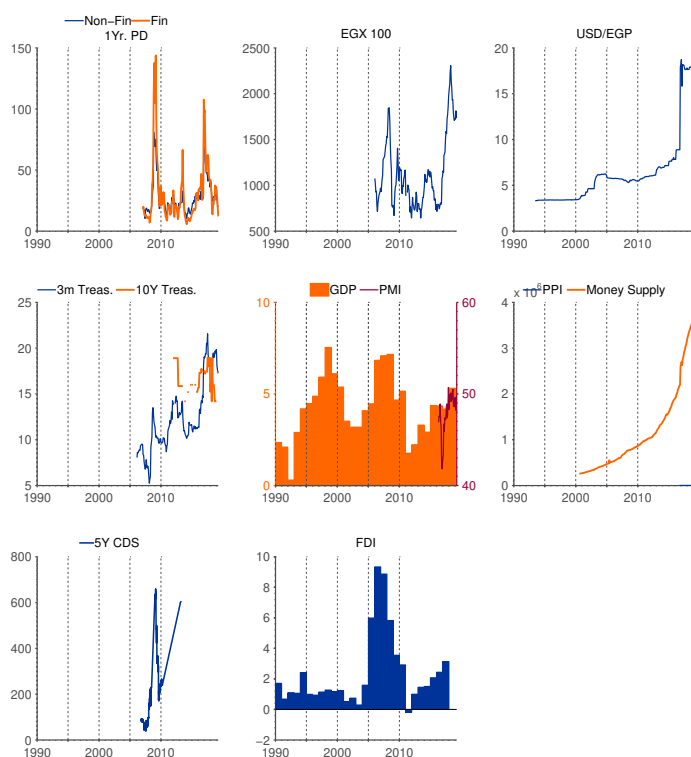
Cyprus	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	25.85	14.49	19.73	26.20	35.81
1Yr. PD, Fin.	19.72	15.05	11.50	18.58	11.63
CYMMAPA	66.9	75.0	72.6	66.8	65.2
EUR/USD	3.96	4.59	6.06	5.29	5.57
GDP (YoY%)	4.00	4.00	3.70	3.90	—
PMI	89.3	98.6	89.8	96.6	—
PPI (YoY%)	0.1	0.3	0.3	0.0	1.1*
Fiscal Budget (%GDP)	—	—	—	-4.80	—



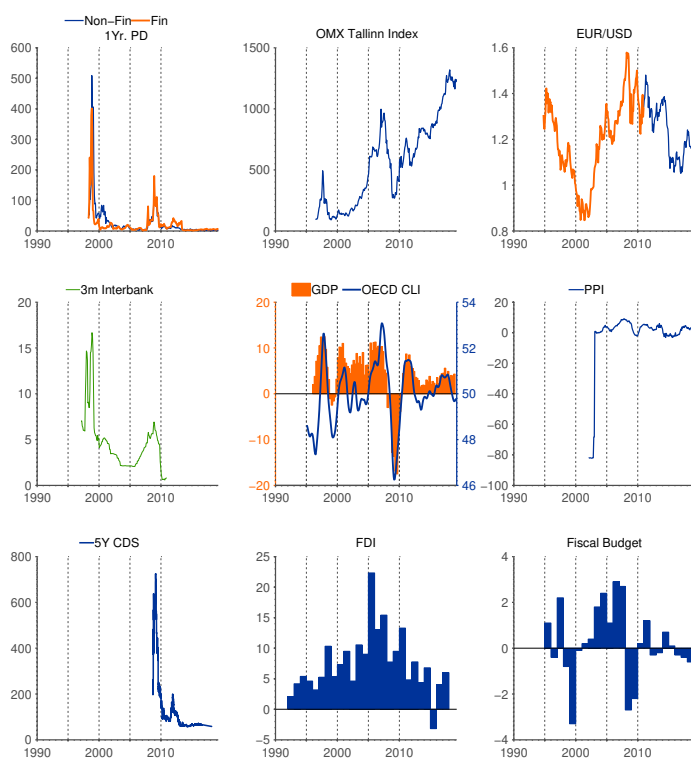
Czech Republic	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.49	9.91	9.52	14.03	12.20
1Yr. PD, Fin.	4.25	8.01	6.90	11.13	6.26
PX INDEX	1124	1064	1102	987	1074
USD/CZK	20.56	22.24	22.21	22.43	23.02
3m Treas. Yield (%)	0.46	0.66	1.06	1.46	1.79
10Y Treas. Yield (%)	1.85	2.20	2.19	2.04	1.90
3m Interbank (%)	0.90	1.16	1.70	2.01	2.02
GDP (YoY%)	—	—	—	2.9	—
OECD CLI	99.85	99.75	99.85	99.48	99.01*
Fiscal Budget (%GDP)	—	—	—	0.90	—



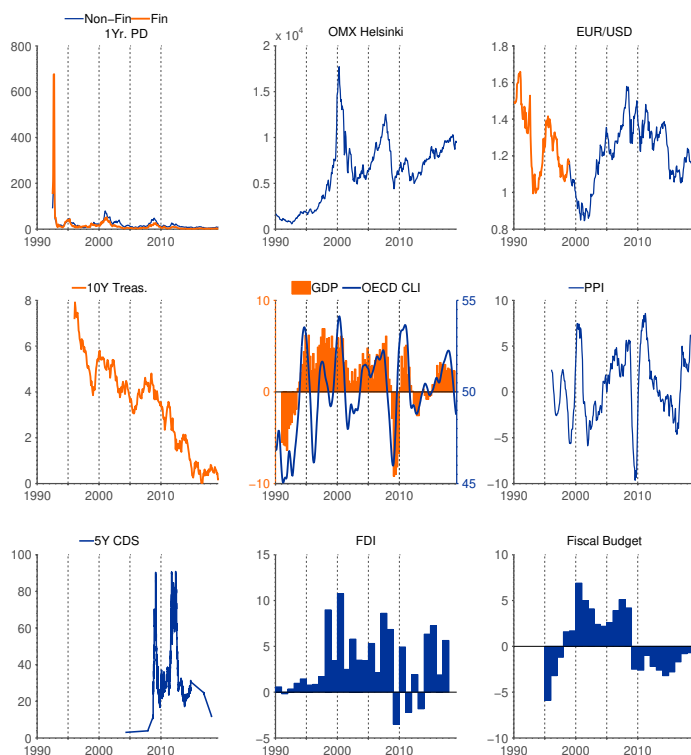
Denmark	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.22	11.41	11.95	19.55	14.41
1Yr. PD, Fin.	6.68	5.53	7.61	8.40	5.85
OMX Copenhagen 20	976.6	961.8	978.9	891.6	1017.2
USD/DKK	6.05	6.38	6.43	6.51	6.65
3m Treas. Yield (%)	-0.68	-0.65	-0.66	-0.69	-0.66
10Y Treas. Yield (%)	0.55	0.32	0.41	0.23	0.00
3m Interbank (%)	-0.30	-0.30	-0.30	-0.28	-0.32
GDP (YoY%)	-0.6	1.2	2.6	2.6	—
OECD CLI	100.31	100.27	100.07	99.96	99.91*
5Y CDS (bps)	11.47	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	0.50	—



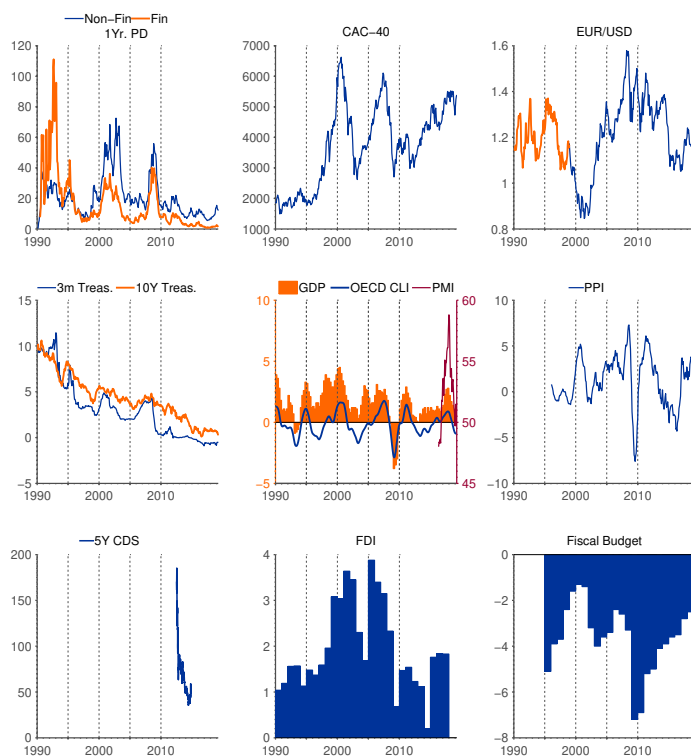
Egypt	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	26.12	27.96	29.51	26.49	20.26
1Yr. PD, Fin.	15.14	21.61	37.40	32.71	12.30
EGX 100	2238.3	2062.1	1810.8	1727.2	1738.2
USD/EGP	17.65	17.92	17.91	17.92	17.32
3m Treas. Yield (%)	18.00	19.47	19.62	19.85	17.25
10Y Treas. Yield (%)	14.18	16.00	14.18	14.18	17.50
GDP (YoY%)	—	—	—	5.3	—
PMI	49.2	49.4	48.7	49.6	49.9
PPI (YoY%)	180.5	196.6	207.6	191.9	104.6*
Money Supply (YoY%)	3343484.0	3454321.0	3549306.0	3628732.0	3643134.0*



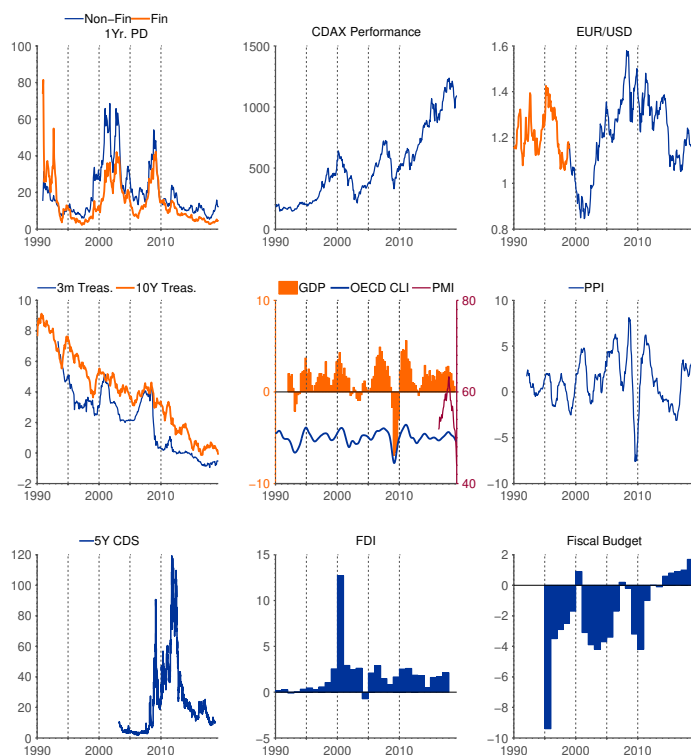
Estonia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	1.26	1.56	2.20	2.98	1.56
1Yr. PD, Fin.	4.68	6.35	4.99	5.79	5.26
OMX Tallinn Index	1269	1262	1216	1163	1238
EUR/USD	1.23	1.17	1.16	1.15	1.12
GDP (YoY%)	3.4	4.0	3.9	4.3	—
OECD CLI	100.34	100.00	99.72	99.70	99.79*
PPI (YoY%)	2.9	2.9	2.9	1.6	0.4
5Y CDS (bps)	58.2	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-0.60	—



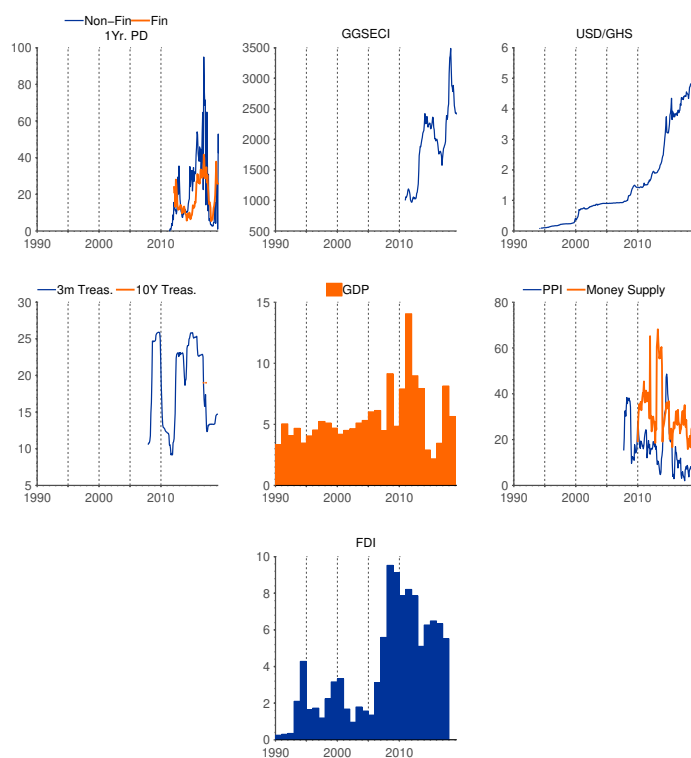
Finland	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.68	5.63	6.12	9.16	7.80
1Yr. PD, Fin.	1.96	2.19	1.81	3.46	2.68
OMX Helsinki	9590	9996	10212	8710	9449
EUR/USD	1.23	1.17	1.16	1.15	1.12
10Y Treas. Yield (%)	0.60	0.48	0.72	0.55	0.17
GDP (YoY%)	2.5	2.3	2.2	2.3	—
OECD CLI	101.90	101.15	100.23	99.21	98.76*
PPI (YoY%)	3.1	6.2	6.0	3.8	2.3
5Y CDS (bps)	11.9	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-0.70	—



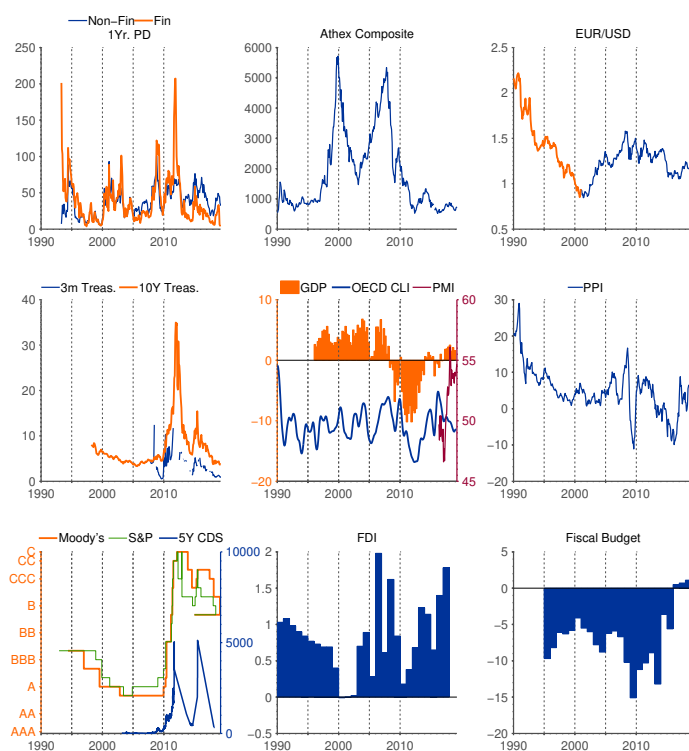
France	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.97	8.51	10.23	15.44	12.27
1Yr. PD, Fin.	1.57	1.51	1.53	2.60	1.49
CAC-40	5167	5324	5493	4731	5351
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.58	-0.63	-0.56	-0.86	-0.53
10Y Treas. Yield (%)	0.72	0.67	0.80	0.71	0.32
GDP (YoY%)	2.2	1.7	1.4	1.0	—
OECD CLI	100.48	100.03	99.49	99.12	99.06*
PMI	53.7	52.5	52.5	49.7	49.7
PPI (YoY%)	2.2	3.3	3.8	1.4	2.1*
Fiscal Budget (%GDP)	—	—	—	-2.50	—



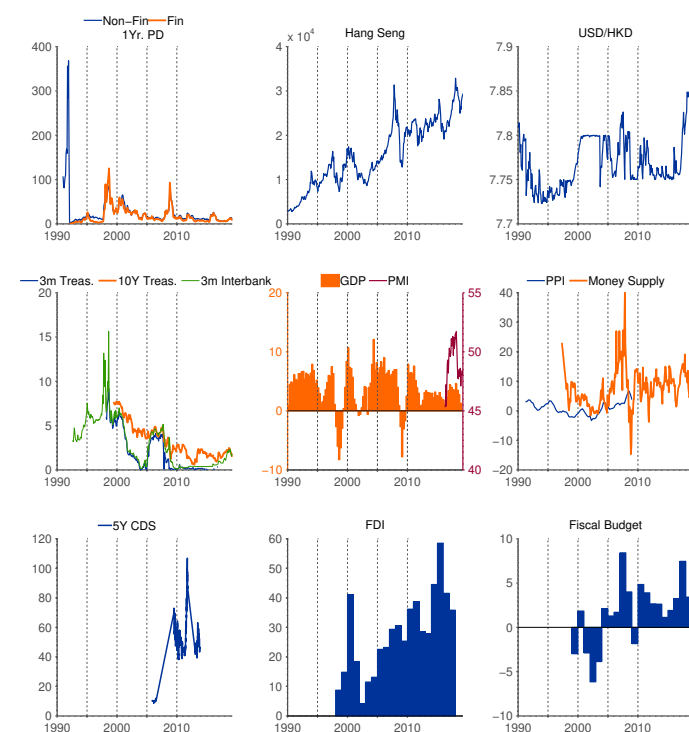
Germany	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.70	10.24	10.76	15.87	12.19
1Yr. PD, Fin.	3.40	4.05	4.06	5.31	4.33
CDAX Performance	1145	1162	1160	990	1084
EUR/USD	1	1	1	1	1
3m Treas. Yield (%)	-0.75	-0.59	-0.56	-0.77	-0.53
10Y Treas. Yield (%)	0.50	0.30	0.47	0.24	-0.07
GDP (YoY%)	2.1	2.0	1.2	0.6	—
OECD CLI	100.84	100.47	100.22	99.66	99.17*
PMI	58.2	55.9	53.7	51.5	44.1
PPI (YoY%)	1.8	2.9	3.2	2.8	2.4
5Y CDS (bps)	10.5	11.6	10.6	—	—
Fiscal Budget (%GDP)	—	—	—	1.70	—



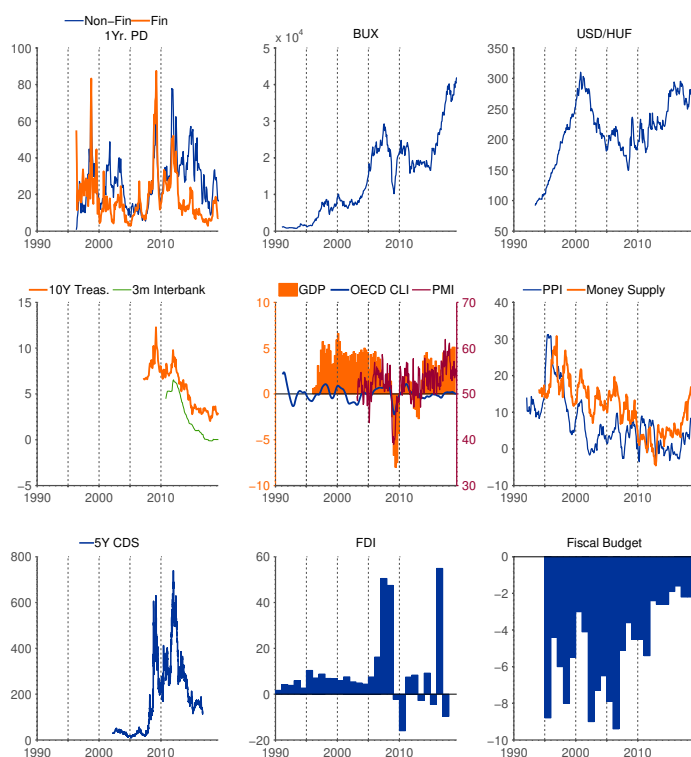
Ghana	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.65	4.59	15.45	20.22	52.87
1Yr. PD, Fin.	6.29	12.55	19.45	28.68	25.66
GGSECI	3367	2879	2883	2499	2417
USD/GHS	4.34	4.73	4.84	4.92	5.16
3m Treas. Yield (%)	13.32	13.33	13.41	14.59	14.73
GDP (YoY%)	—	—	—	5.6	—
PPI (YoY%)	3.7	7.7	5.8	4.4	6.7
Money Supply (YoY%)	20.2	16.6	25.3	16.1	21.6*



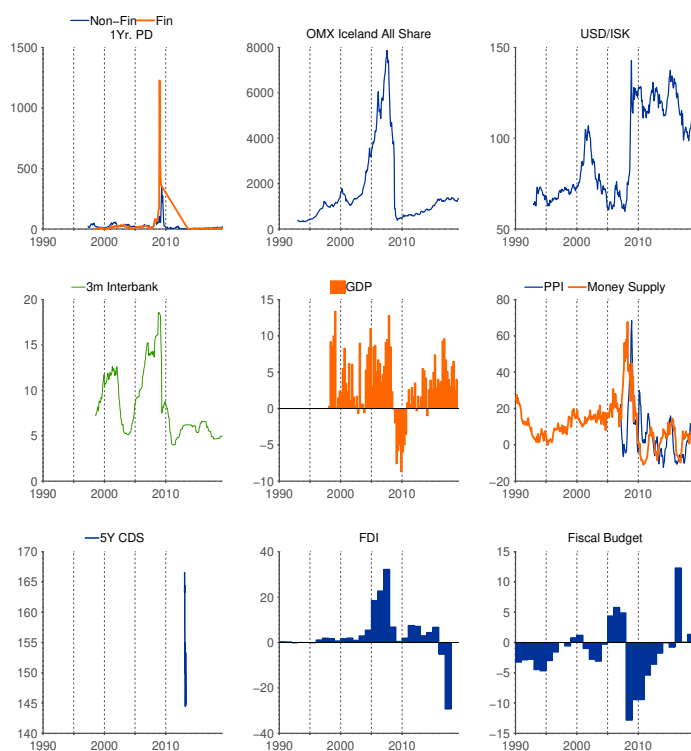
Greece	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	26.37	42.94	42.12	45.54	33.20
1Yr. PD, Fin.	5.76	19.74	24.43	28.25	4.24
Athex Composite	780.5	757.6	691.7	613.3	721.4
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	1.30	1.04	1.12	1.30	0.87
10Y Treas. Yield (%)	4.32	3.96	4.18	4.40	3.74
GDP (YoY%)	2.5	1.5	2.1	1.6	—
OECD CLI	99.85	99.48	99.12	99.25	99.27*
PMI	55.0	53.5	53.6	53.8	54.7
PPI (YoY%)	-0.2	6.2	5.3	-0.1	2.6*
Sov. Rating, Moody's	B1	B1	B1	B1	B1
Sov. Rating, S&P	B+	B+	B+	B+	B+
5Y CDS (bps)	317.43	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	1.10	—



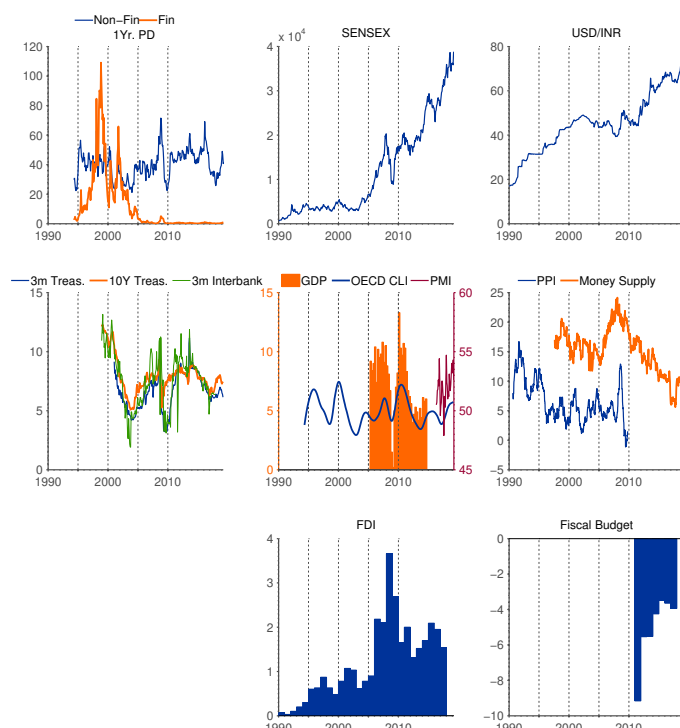
Hong Kong	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	6.44	7.48	10.82	13.69	10.73
1Yr. PD, Fin.	6.85	8.42	10.92	11.73	8.59
Hang Seng	30093	28955	27789	25846	29051
USD/HKD	7.85	7.85	7.83	7.83	7.85
10Y Treas. Yield (%)	1.99	2.25	2.47	2.01	1.47
3m Interbank (%)	1.21	2.10	2.28	2.33	1.76
GDP (YoY%)	4.6	3.5	2.8	1.3	—
PMI	50.6	47.7	47.9	48.0	48.0
Money Supply (YoY%)	9.60	6.30	4.30	3.70	1.40*
Fiscal Budget (%GDP)	—	—	—	3.42	—



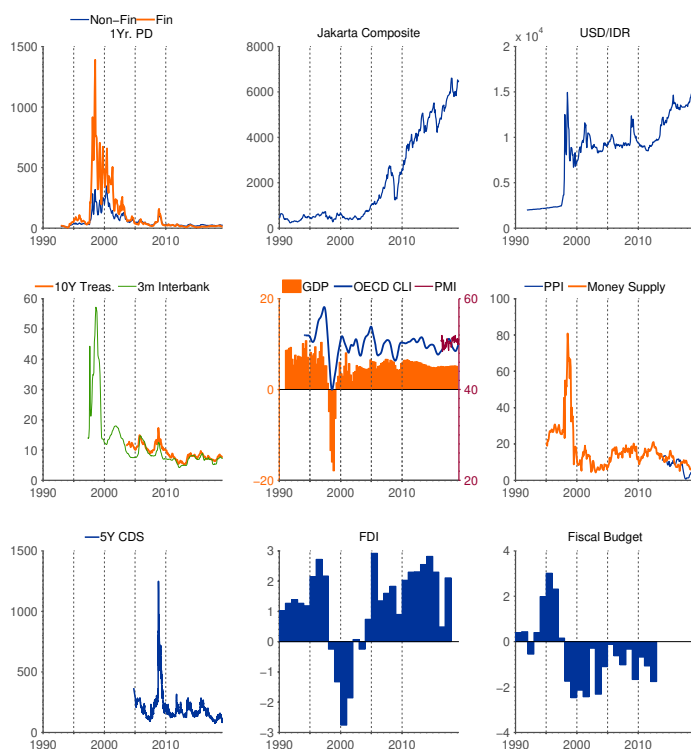
Hungary	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	16.41	28.13	28.49	26.52	16.39
1Yr. PD, Fin.	7.61	16.64	17.52	13.12	6.97
BUX	37259	36128	37171	39139	41684
USD/HUF	253.55	281.79	278.82	279.94	286.26
10Y Treas. Yield (%)	2.39	3.62	3.54	2.97	2.87
3m Interbank (%)	-0.13	0.05	0.02	0.01	0.01
GDP (YoY%)	4.60	4.90	5.10	5.10	—
OECD CLI	100.35	100.42	100.31	100.08	99.99*
PMI	56.6	52.9	54.1	54.3	52.4
PPI (YoY%)	3.5	7.5	6.7	4.7	2.7*
Money Supply (YoY%)	13.72	15.73	13.15	11.82	9.51*
Fiscal Budget (%GDP)	—	—	—	-2.20	—



Iceland	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.01	14.17	11.32	12.12	20.12
1Yr. PD, Fin.	2.77	4.46	5.67	6.63	6.36
OMX Iceland All Share	1361	1325	1252	1218	1349
USD/ISK	98.61	105.45	110.87	116.21	122.72
3m Interbank (%)	4.65	4.70	4.70	4.92	4.97
GDP (YoY%)	5.8	6.5	2.5	4.0	—
PPI (YoY%)	3.70	11.70	5.50	9.50	5.60*
Money Supply (YoY%)	0.57	5.01	7.32	6.99	6.92*
Fiscal Budget (%GDP)	—	—	—	1.35	—

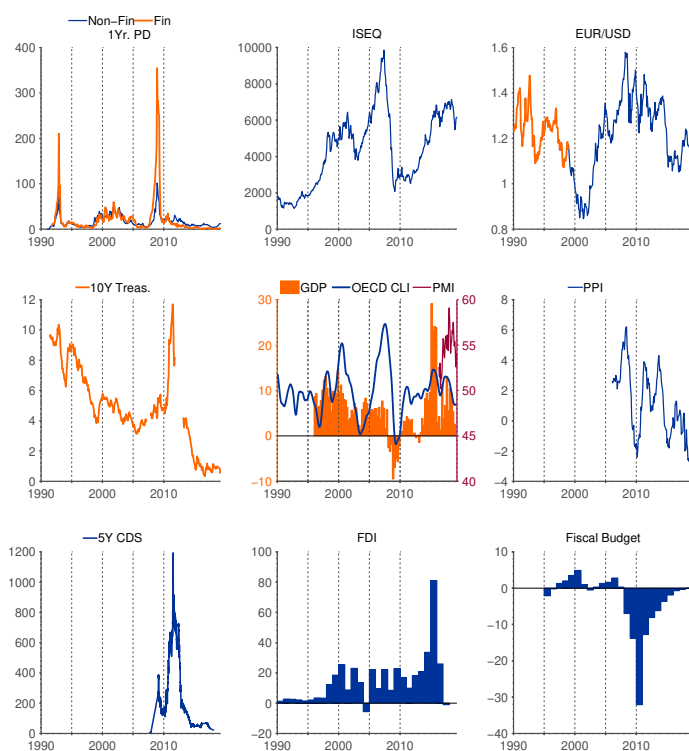


India	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	34.50	33.92	37.18	43.84	40.70
1Yr. PD, Fin.	0.22	0.24	0.36	0.53	0.49
SENSEX	32969	35423	36227	36068	38673
USD/INR	65.18	68.47	72.49	69.77	69.16
3m Treas. Yield (%)	6.11	6.46	6.99	6.75	6.14
10Y Treas. Yield (%)	7.40	7.90	8.02	7.37	7.35
OECD CLI	100.23	100.49	100.62	100.69	100.73*
PMI	51.0	53.1	52.2	53.2	52.6
Money Supply (YoY%)	9.2	9.8	9.4	10.2	10.6

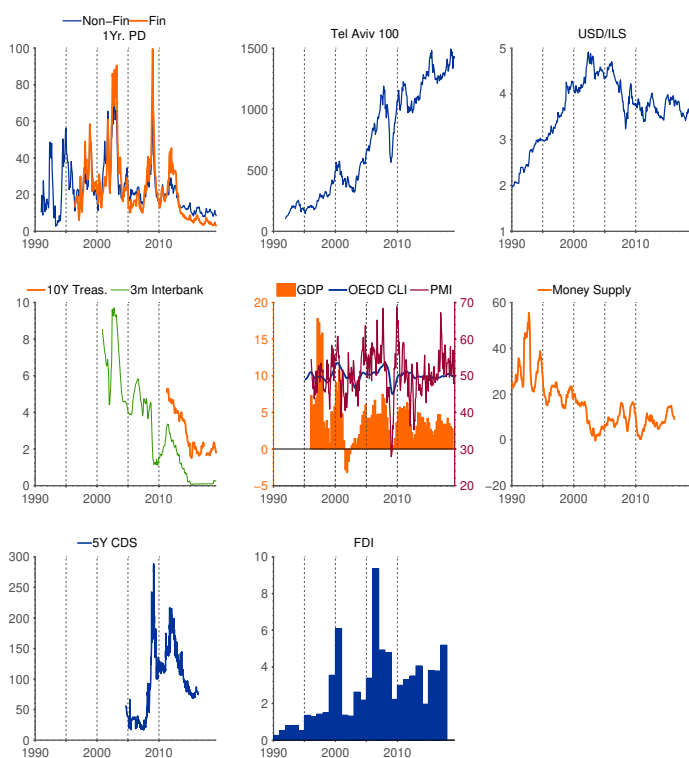


Indonesia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	21.61	22.81	25.00	25.20	23.80
1Yr. PD, Fin.	16.21	19.22	19.46	16.52	12.24
Jakarta Composite	6189	5799	5977	6194	6469
USD/IDR	13728.00	14330.00	14903.00	14390.00	14243.00
10Y Treas. Yield (%)	6.67	7.80	8.12	8.03	7.63
3m Interbank (%)	5.36	7.10	7.35	7.70	7.21
GDP (YoY%)	5.2	5.2	5.2	5.1	—
OECD CLI	99.23	98.66	98.47	99.20	99.78*
PMI	50.7	50.3	50.7	51.2	51.2
PPI (YoY%)	1.6	3.5	4.1	3.2	1.9*
Money Supply (YoY%)	7.5	5.9	6.7	6.3	6.0*
5Y CDS (bps)	102.01	136.20	130.12	137.45	91.77

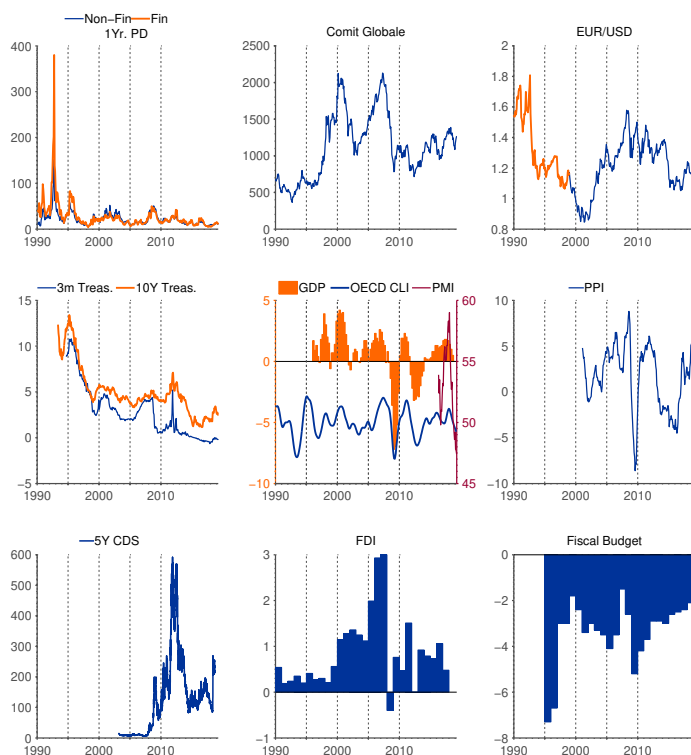




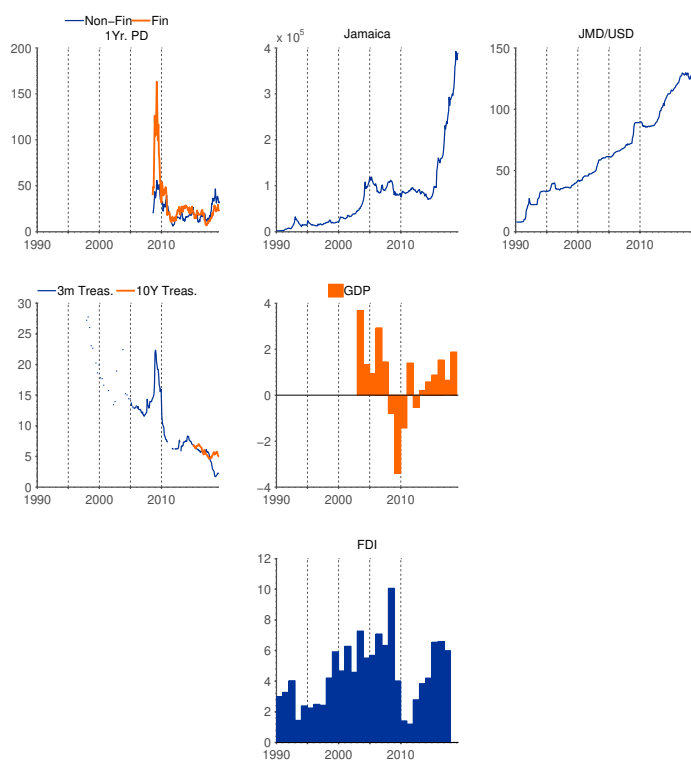
Ireland	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.04	4.32	6.50	11.05	11.68
1Yr. PD, Fin.	0.55	1.51	1.49	1.81	2.03
ISEQ	6594	6983	6522	5480	6139
EUR/USD	1.23	1.17	1.16	1.15	1.12
10Y Treas. Yield (%)	0.91	0.81	0.99	0.90	0.55
GDP (YoY%)	10.5	9.4	5.4	2.6	—
OECD CLI	100.29	99.38	98.55	98.42	98.52*
PMI	54.1	56.6	56.3	54.5	53.9
PPI (YoY%)	-1.6	-2.5	-2.7	-0.4	1.1
5Y CDS (bps)	19.99	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	0.00	—



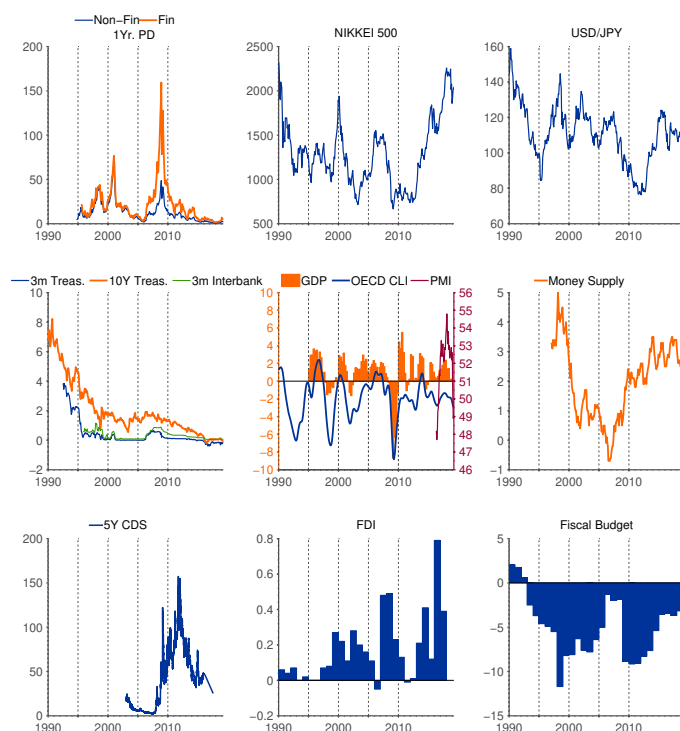
Israel	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.08	10.20	8.10	11.33	8.31
1Yr. PD, Fin.	3.98	3.86	3.36	4.84	2.81
Tel Aviv 100	1310	1363	1485	1333	1418
USD/ILS	3.49	3.66	3.64	3.74	3.63
10Y Treas. Yield (%)	1.65	1.99	2.00	2.32	1.80
3m Interbank (%)	0.10	0.10	0.12	0.29	0.25
GDP (YoY%)	4.2	3.5	3.0	2.7	—
OECD CLI	100.52	100.28	99.98	99.85	99.67*
PMI	54.7	52.6	50.0	57.0	52.2



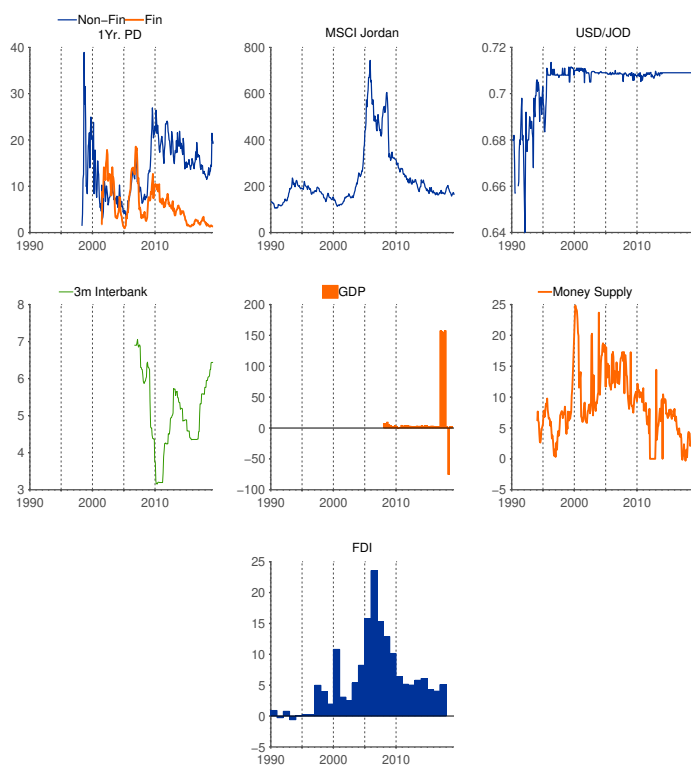
Italy	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.68	9.47	10.54	13.08	10.64
1Yr. PD, Fin.	7.00	9.84	11.33	15.56	12.09
Comit Globale	1308	1284	1243	1086	1259
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.43	-0.12	0.01	-0.06	-0.20
10Y Treas. Yield (%)	1.79	2.68	3.15	2.74	2.49
GDP (YoY%)	1.4	1.0	0.5	0.0	—
OECD CLI	100.84	100.33	99.86	99.51	99.24*
PMI	55.1	53.3	50.0	49.2	47.4
PPI (YoY%)	2.2	3.2	5.6	5.2	3.9*
5Y CDS (bps)	102.31	229.00	221.22	—	—
Fiscal Budget (%GDP)	—	—	—	-2.10	—



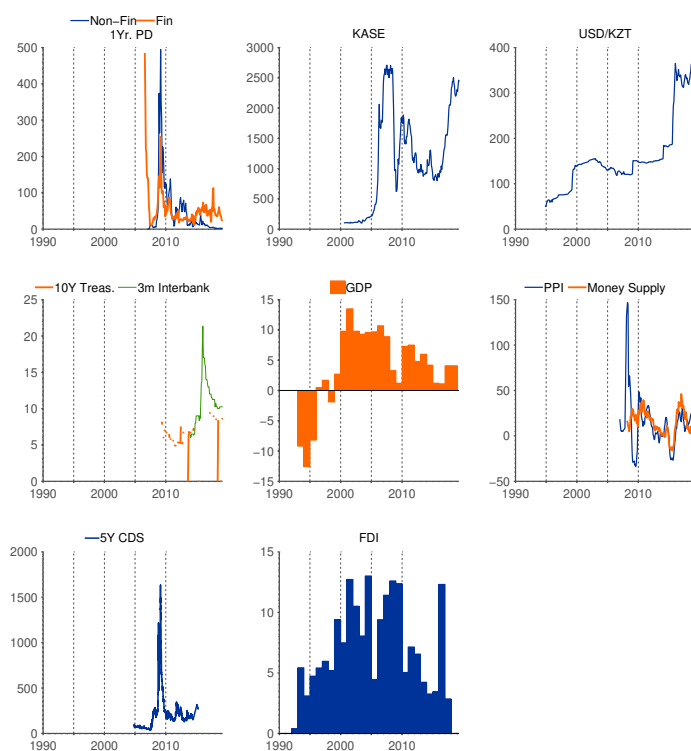
Jamaica	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	36.49	36.19	35.58	38.61	31.29
1Yr. PD, Fin.	17.74	28.74	22.03	24.98	22.88
Jamaica	294533	305736	358320	379791	388277
JMD/USD	126.22	130.15	134.54	128.59	125.83
3m Treas. Yield (%)	2.98	2.54	1.71	2.05	2.19
10Y Treas. Yield (%)	5.20	5.72	5.46	5.75	5.01
GDP (YoY%)	—	—	—	1.9	—



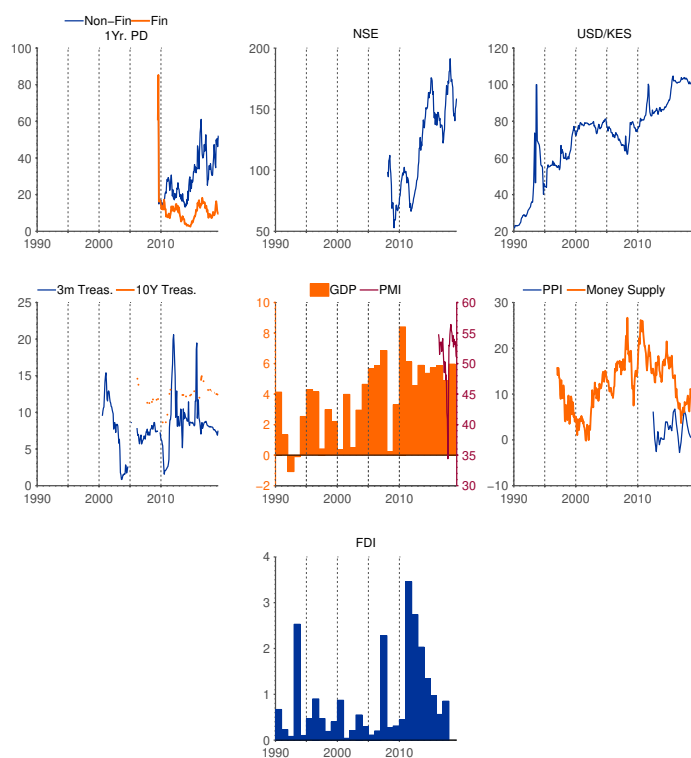
Japan	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	1.10	1.35	1.41	3.05	2.24
1Yr. PD, Fin.	2.18	2.43	2.79	6.95	5.46
NIKKEI 500	2165	2174	2246	1859	2030
USD/JPY	106.28	110.76	113.70	109.69	110.86
3m Treas. Yield (%)	-0.16	-0.14	-0.13	-0.15	-0.17
10Y Treas. Yield (%)	0.05	0.04	0.13	0.00	-0.08
3m Interbank (%)	0.07	0.07	0.07	0.07	0.07
GDP (YoY%)	1.4	1.4	0.2	0.3	—
OECD CLI	100.11	100.08	100.05	99.80	99.53*
PMI	53.1	53.0	52.5	52.6	49.2
Money Supply (YoY%)	2.60	2.70	2.50	2.10	2.10
Fiscal Budget (%GDP)	—	—	—	-3.16	—



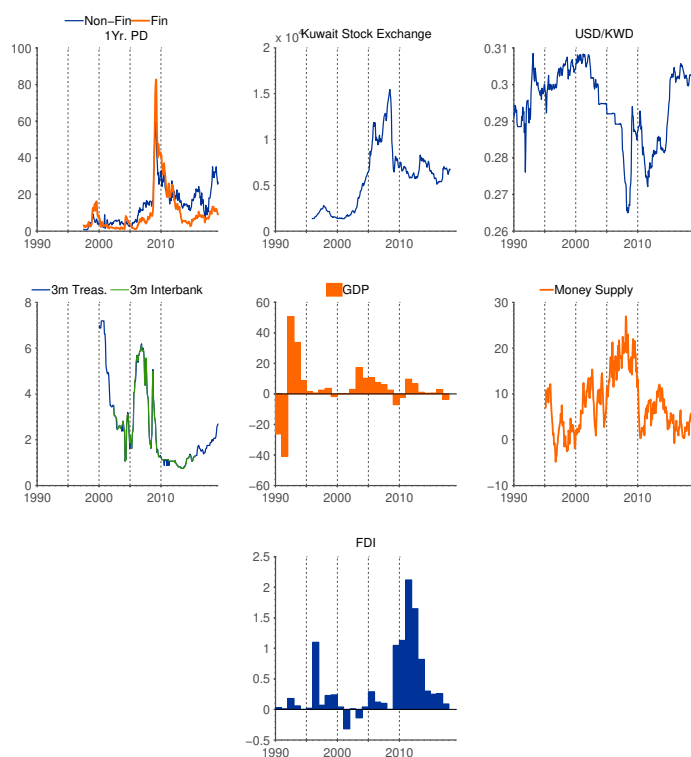
Jordan	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	11.46	13.22	13.08	14.27	19.52
1Yr. PD, Fin.	1.47	1.71	1.25	1.53	1.31
MSCI Jordan	199	187	171	164	170
USD/JOD	0.71	0.71	0.71	0.71	0.71
3m Interbank (%)	5.95	6.03	6.09	6.42	6.44
GDP (YoY%)	2.0	-75.2	2.0	1.9	—
Money Supply (YoY%)	4.36	2.09	2.37	1.22	0.32*



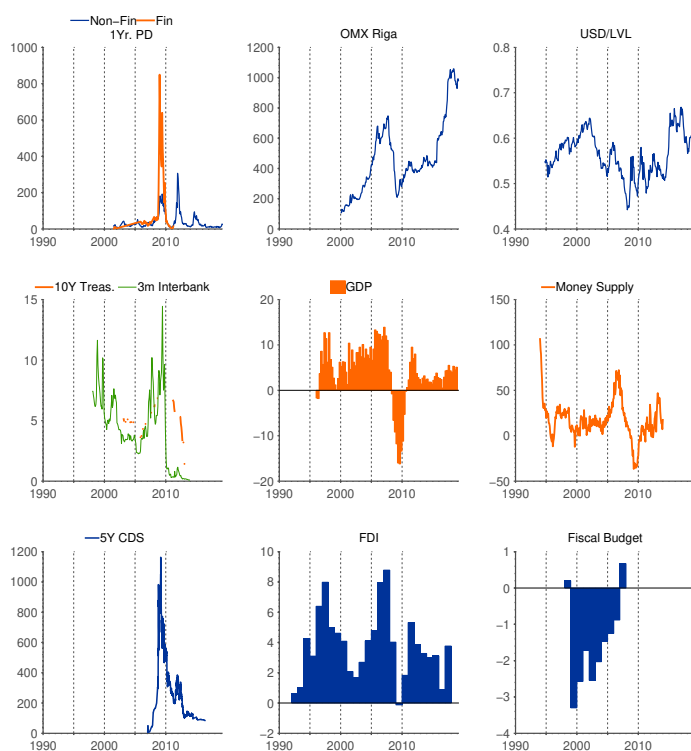
Kazakhstan	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	1.97	1.69	2.19	2.11	2.08
1Yr. PD, Fin.	36.15	45.28	51.94	36.19	24.58
KASE	2437	2412	2195	2305	2461
USD/KZT	318.73	341.28	363.11	380.88	379.66
10Y Treas. Yield (%)	8.52	0.00	8.43*	—	8.61
3m Interbank (%)	10.50	10.00	10.00	10.25	10.25
GDP (YoY%)	—	—	—	4.1	—
PPI (YoY%)	13.5	22.2	23.9	12.4	11.2
Money Supply (YoY%)	4.75	6.03	-2.97	7.05	11.46*



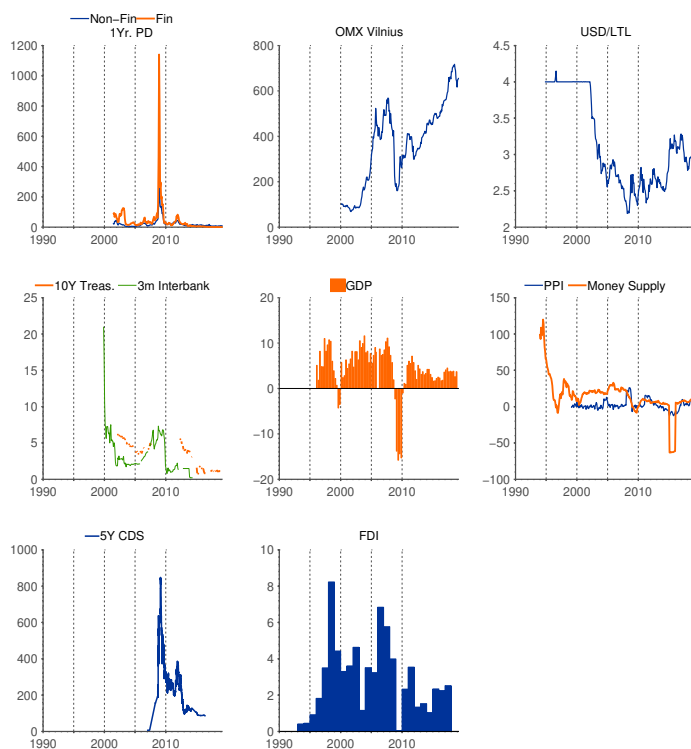
Kenya	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	30.44	40.37	36.87	47.31	52.02
1Yr. PD, Fin.	7.51	9.87	10.66	14.41	9.36
NSE	191	174	150	140	158
USD/KES	101.25	101.01	100.85	101.85	100.82
3m Treas. Yield (%)	8.00	7.73	7.61	7.34	7.50
10Y Treas. Yield (%)	12.91	—	12.66	12.50	12.44*
GDP (YoY%)	—	—	—	6.0	—
PMI	55.7	55.0	52.7	53.6	51.0
PPI (YoY%)	1.5	0.7	0.4	1.5	-0.4
Money Supply (YoY%)	6.63	11.12	9.20	10.86	10.30*



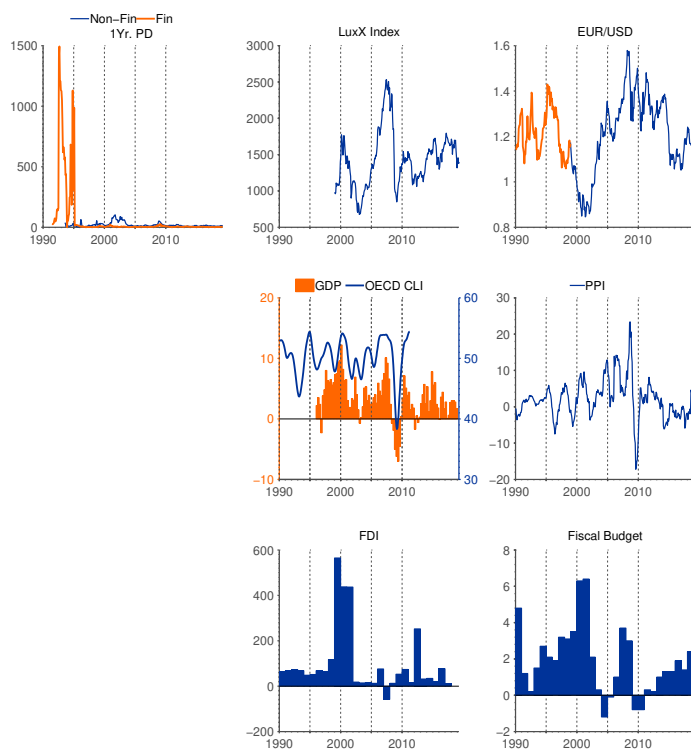
Kuwait	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	27.95	32.32	32.55	30.53	26.88
1Yr. PD, Fin.	11.89	13.21	10.83	11.64	8.87
Kuwait Stock Exchange	6633	—	—	—	—
USD/KWD	0.30	0.30	0.30	0.30	0.30
3m Treas. Yield (%)	2.00	2.00	2.06	2.31	2.69
Money Supply (YoY%)	1.02	5.25	4.81	3.97	4.68*



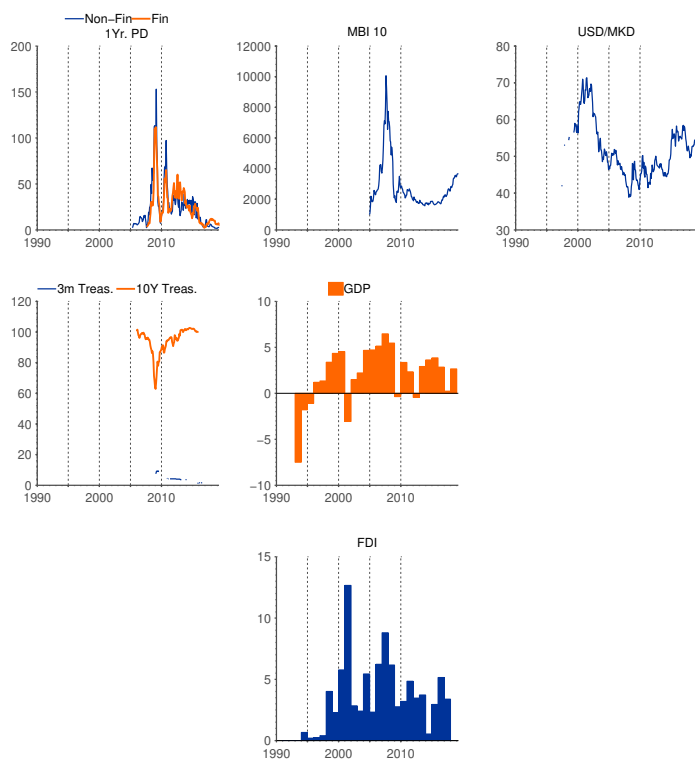
Latvia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.40	11.28	6.51	13.84	25.24
OMX Riga	1046	1057	978	929	979
USD/LVL	0.57	0.60	0.61	0.61	0.63
GDP (YoY%)	4.0	5.3	4.5	5.1	—



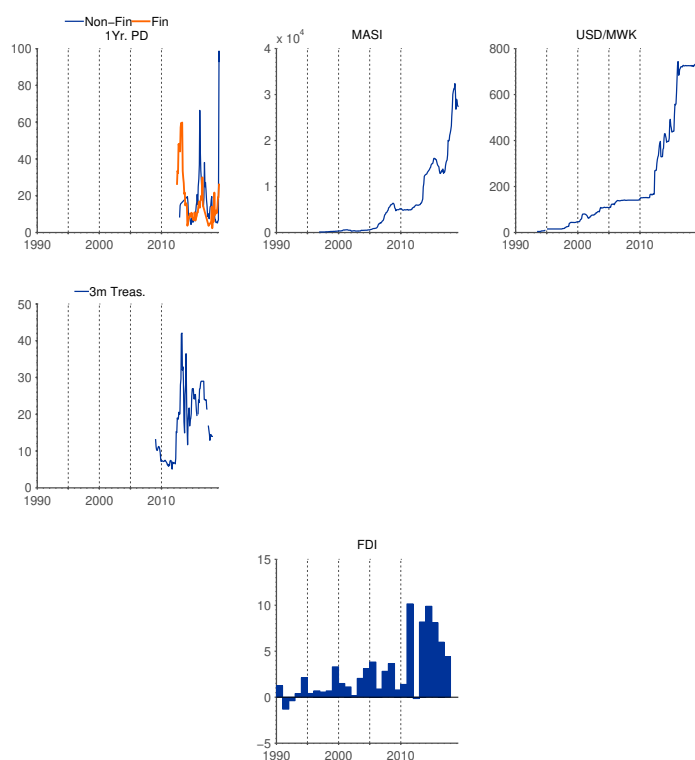
Lithuania	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.38	5.68	7.39	9.96	8.72
1Yr. PD, Fin.	0.45	0.57	0.43	0.47	0.36
OMX Vilnius	702	710	689	617	655
USD/LTL	2.80	2.96	2.98	3.01	3.08
10Y Treas. Yield (%)	1.16*	1.08	1.10	1.14*	—
GDP (YoY%)	3.7	3.8	2.6	3.7	—
PPI (YoY%)	1.3	8.8	9.0	1.0	3.7
Money Supply (YoY%)	6.50	9.30	9.50	11.40	11.20*



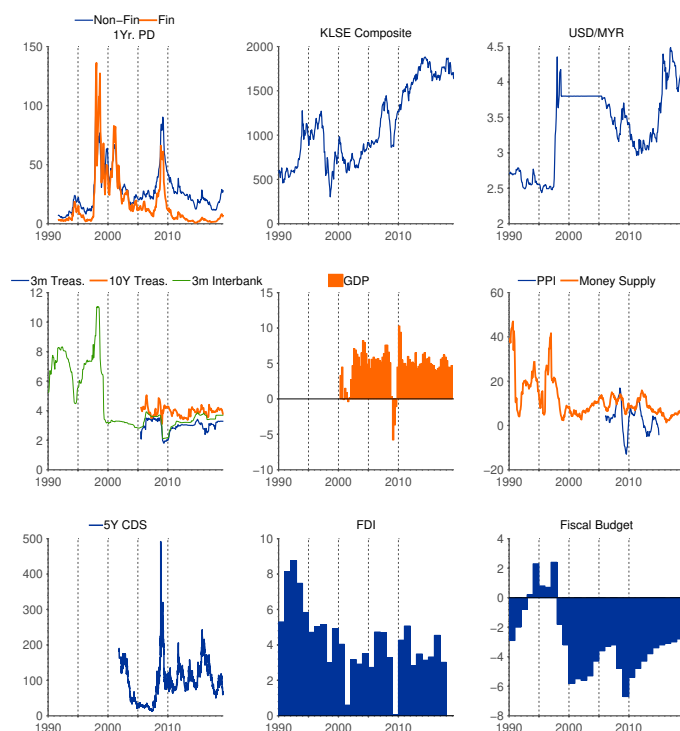
Luxembourg	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	8.20	9.02	9.09	14.14	14.21
1Yr. PD, Fin.	2.00	2.50	2.31	3.40	2.38
LuxX Index	1506	1590	1698	1317	1378
EUR/USD	1.23	1.17	1.16	1.15	1.12
GDP (YoY%)	3.0	3.0	2.8	1.7	—
PPI (YoY%)	-2.0	-1.9	2.9	2.0	2.8*
Fiscal Budget (%GDP)	—	—	—	2.40	—



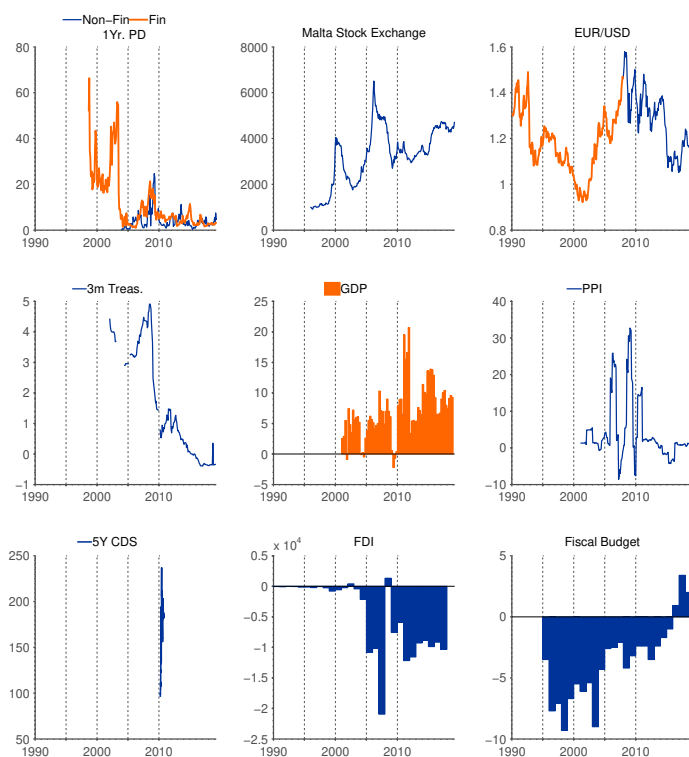
Macedonia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	3.42	2.81	1.88	1.91	2.49
1Yr. PD, Fin.	11.49	9.59	6.19	5.87	5.46
MBI 10	2766	3333	3530	3469	3665
USD/MKD	50.01	52.78	53.06	53.65	54.84
GDP (YoY%)	—	—	—	2.7	—



Malawi	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	9.97	11.45	5.39	5.11	98.69
1Yr. PD, Fin.	6.40	21.68	11.91	14.21	26.19
MASI	25287	30737	32373	28984	27441
USD/MWK	726.50	726.28	727.78	736.78	728.96
3m Treas. Yield (%)	14.00	14.00*	—	—	—

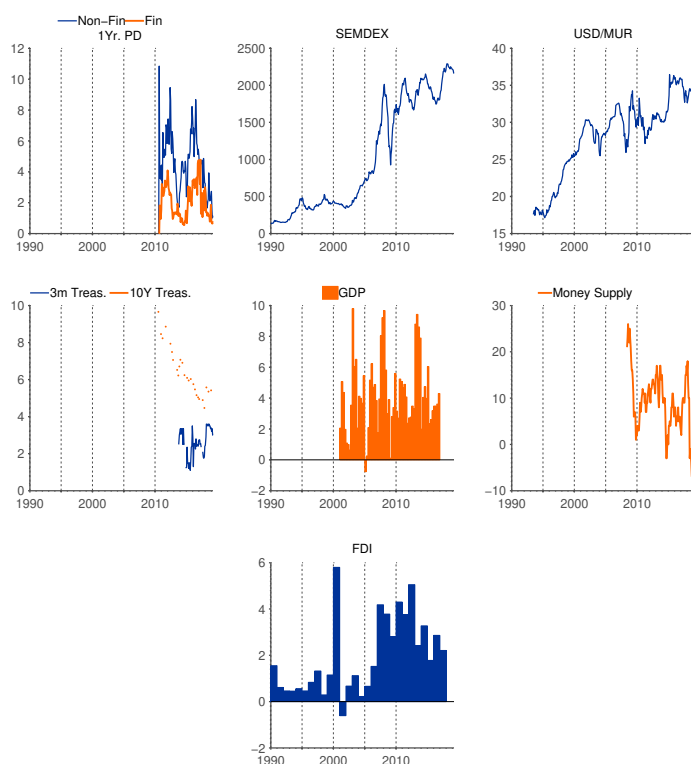


Malaysia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	15.21	18.55	20.94	28.98	28.16
1Yr. PD, Fin.	2.80	4.20	5.40	8.19	6.61
KLSE Composite	1863	1692	1793	1691	1644
USD/MYR	3.86	4.04	4.14	4.13	4.08
3m Treas. Yield (%)	3.19	3.28	3.27	3.29	3.28
10Y Treas. Yield (%)	3.95	4.20	4.07	4.08	3.77
3m Interbank (%)	3.69	3.69	3.69	3.69	3.69
GDP (YoY%)	5.4	4.5	4.4	4.7	—
Money Supply (YoY%)	6.10	6.20	6.30	8.00	6.00*
5Y CDS (bps)	73.09	107.56	92.57	109.81	65.90
Fiscal Budget (%GDP)	—	—	—	-2.80	—

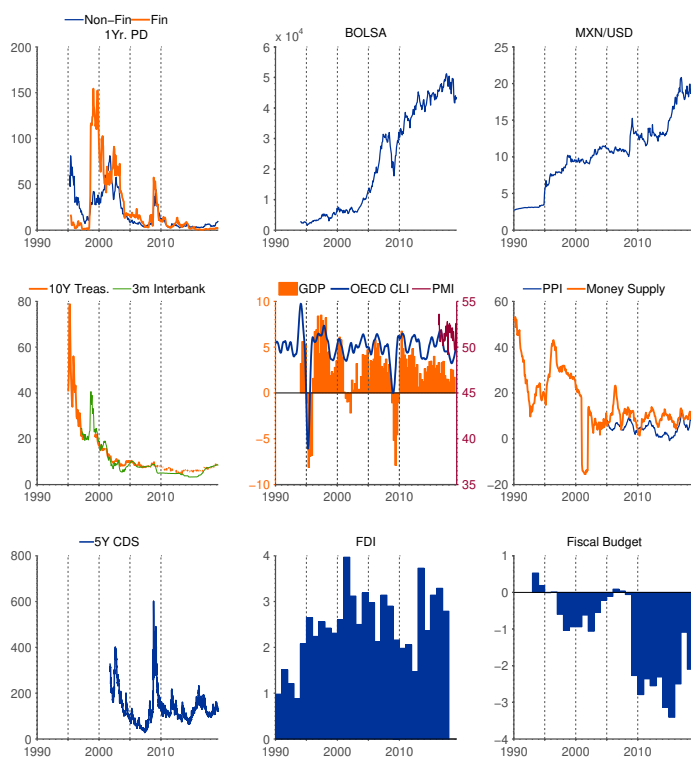


Malta	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.95	2.52	3.01	5.43	4.68
1Yr. PD, Fin.	2.68	2.78	2.42	2.84	3.48
Malta Stock Exchange	4474	4361	4383	4514	4709
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.35	-0.35	0.35	-0.35	-0.35
GDP (YoY%)	7.5	9.1	9.6	9.3	—
PPI (YoY%)	0.6	1.2	1.2	0.8	0.8*
Fiscal Budget (%GDP)	—	—	—	2.00	—

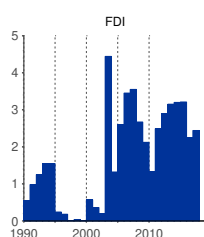
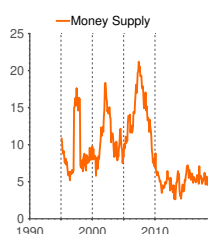
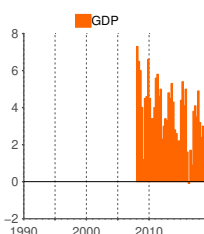
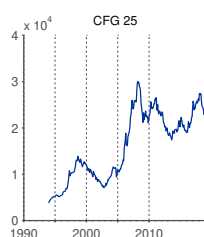
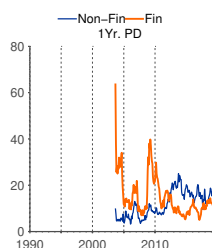




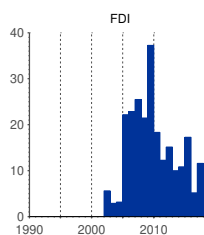
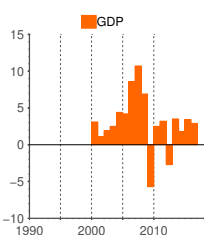
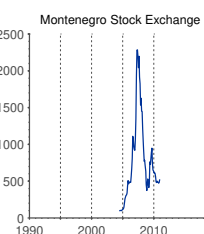
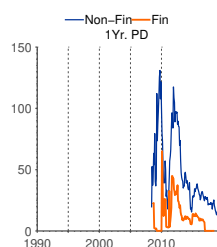
Mauritius	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.03	2.22	2.11	2.73	1.11
1Yr. PD, Fin.	1.39	1.17	0.77	0.77	0.73
SEMDEX	2288	2245	2251	2219	2165
USD/MUR	33.45	34.56	34.37	34.30	34.93
3m Treas. Yield (%)	3.60	3.60	3.50	3.40	3.00
10Y Treas. Yield (%)	5.58	—	5.35*	5.42	—
Money Supply (YoY%)	10.00	-1.00	-7.00	—	—



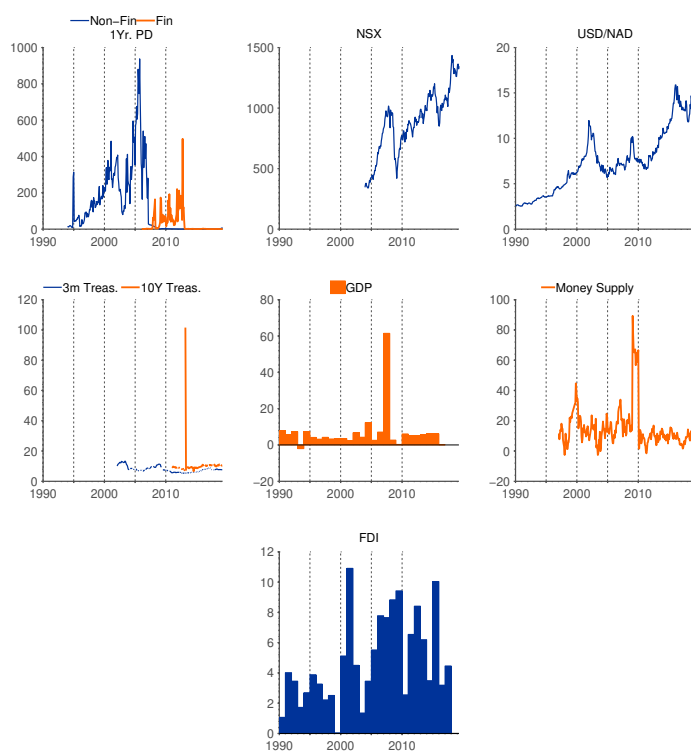
Mexico	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.24	5.07	4.73	8.18	9.71
1Yr. PD, Fin.	1.27	1.70	1.42	2.53	2.03
BOLSA	46125	47663	49504	41640	43281
MXN/USD	18.18	19.91	18.72	19.65	19.43
10Y Treas. Yield (%)	7.52	7.88	7.83*	9.11*	8.49*
3m Interbank (%)	7.87	8.14	8.17	8.64	8.49
GDP (YoY%)	1.2	2.6	2.5	1.7	—
OECD CLI	98.56	98.25	98.69	99.45	100.11*
PMI	52.4	52.1	51.7	49.7	49.8
PPI (YoY%)	4.6	9.2	8.6	6.1	4.4
Money Supply (YoY%)	10.30	11.60	8.10	5.40	5.10*
5Y CDS (bps)	109.35	134.23	112.97	154.73	124.81
Fiscal Budget (%GDP)	—	—	—	-2.10	—



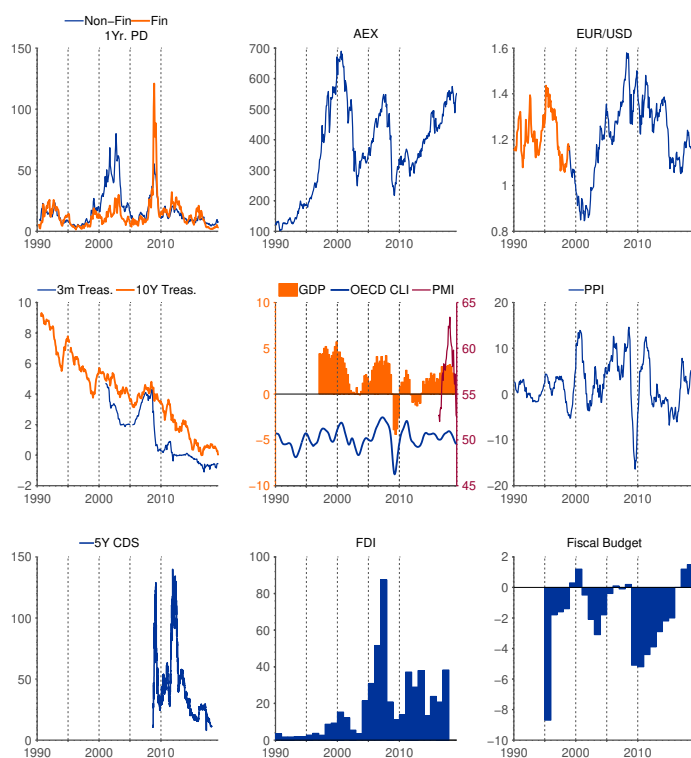
Morocco	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	11.92	13.37	16.45	16.67	19.13
1Yr. PD, Fin.	10.87	13.61	14.10	12.39	11.10
CFG 25	27191	24763	23808	23804	22861
USD/MAD	9.20	9.48	9.43	9.56	9.67
GDP (YoY%)	3.2	2.4	3.0	2.9	—
Money Supply (YoY%)	5.70	4.55	3.60	4.10	4.57*



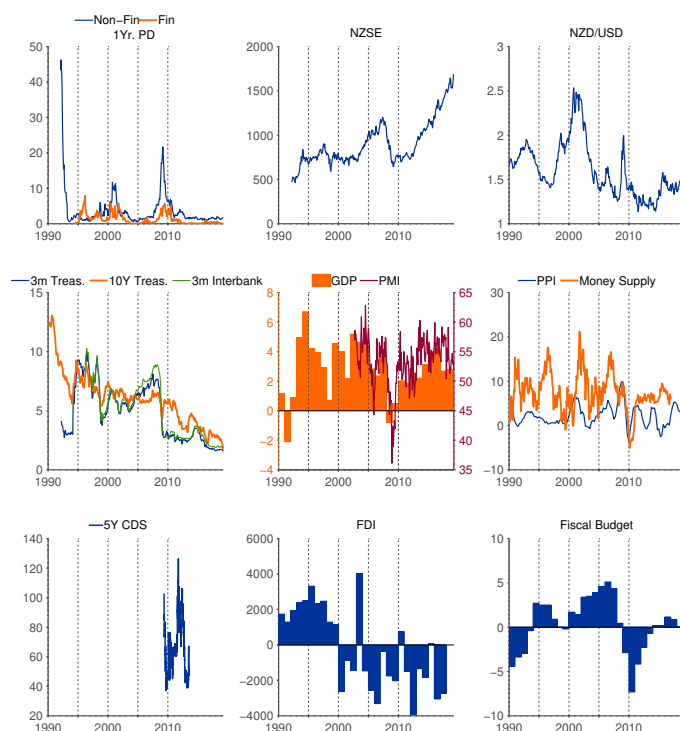
Montenegro	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	21.76	20.81	15.30	16.08	19.14
1Yr. PD, Fin.	0.00	0.00	—	—	—
EUR/USD	0.81	0.86	0.86	0.87	0.89



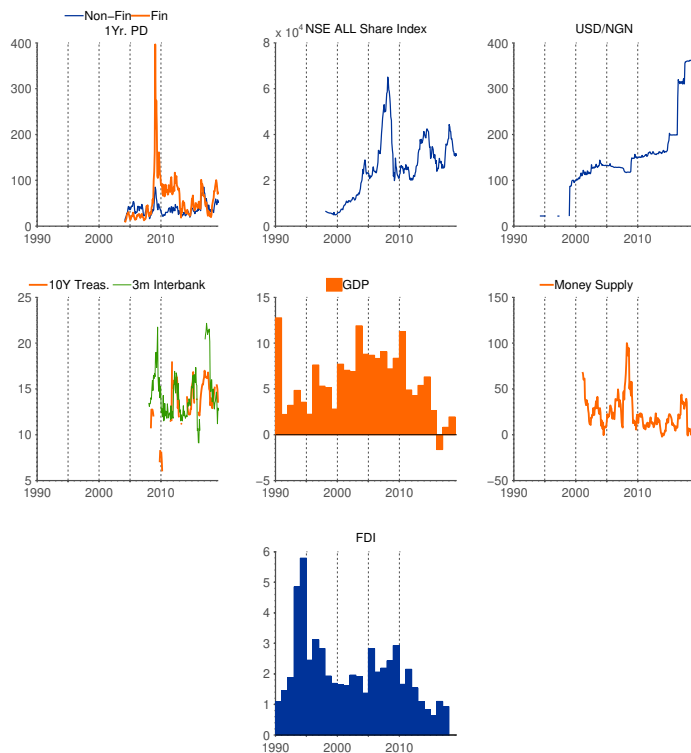
Namibia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	0.04	0.03	0.57	2.92	7.08
1Yr. PD, Fin.	0.48	0.83	0.03	0.09	0.19
NSX	1378	1284	1303	1307	1324
USD/NAD	11.84	13.73	14.14	14.35	14.50
3m Treas. Yield (%)	7.87	7.94	7.68	7.69	7.65
10Y Treas. Yield (%)	9.75	10.72	11.19	10.80	10.32
Money Supply (YoY%)	11.61	10.92	12.53	6.40	10.50*



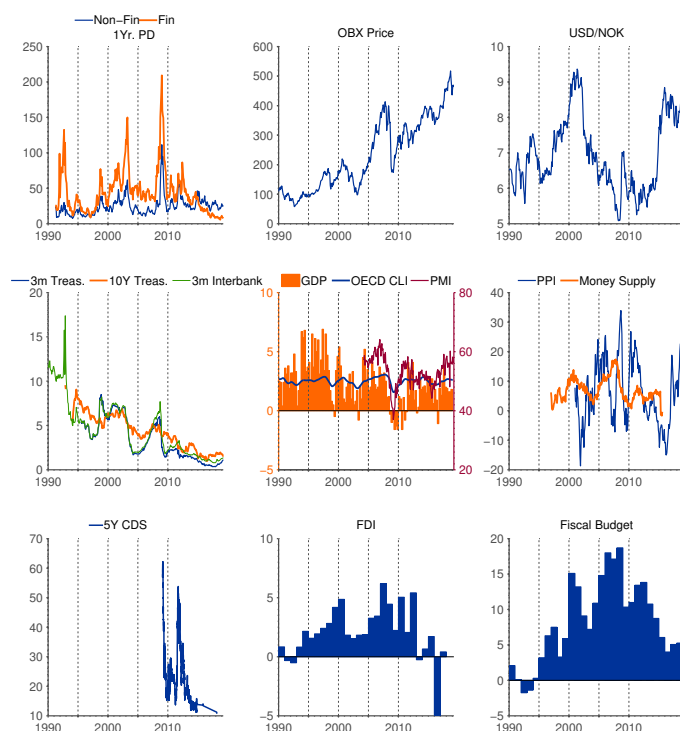
Netherlands	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.10	4.99	5.76	9.40	7.61
1Yr. PD, Fin.	2.29	2.37	2.93	5.19	3.06
AEX	530	552	550	488	549
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.62	-0.63	-0.60	-0.85	-0.56
10Y Treas. Yield (%)	0.64	0.46	0.58	0.39	0.03
GDP (YoY%)	3.2	3.0	2.3	2.0	—
OECD CLI	100.84	100.57	100.17	99.74	99.53*
PMI	61.5	60.1	59.8	57.2	52.5
PPI (YoY%)	1.0	4.5	5.0	1.9	4.0*
5Y CDS (bps)	11.11	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	1.50	—



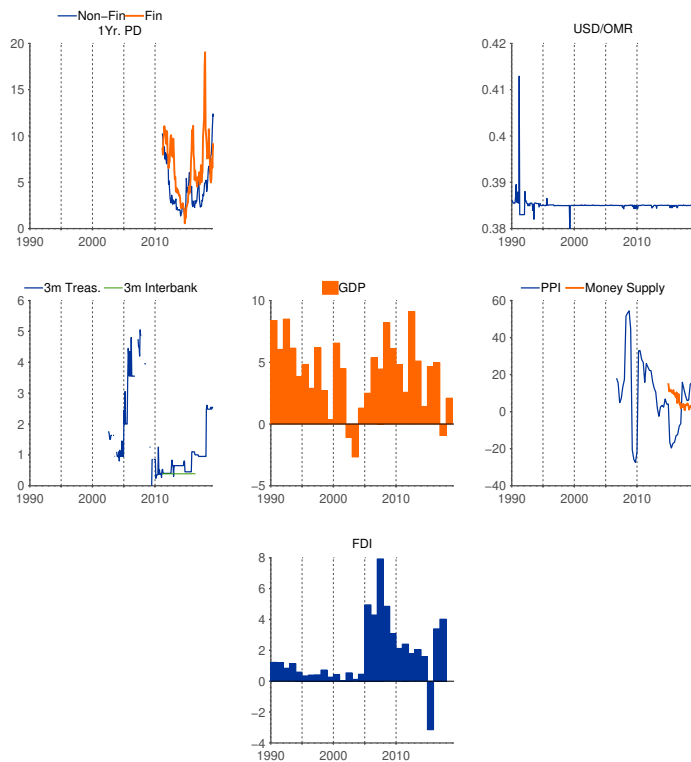
New Zealand	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	1.94	1.65	1.18	1.47	1.71
1Yr. PD, Fin.	0.65	0.06	0.13	0.02	0.01
NZSE	1482	1583	1636	1531	1684
NZD/USD	1.38	1.48	1.51	1.49	1.47
3m Treas. Yield (%)	1.65	1.67	1.70	1.71	1.58
10Y Treas. Yield (%)	2.72	2.85	2.61	2.37	1.80
3m Interbank (%)	1.96	2.00	1.92	1.97	1.85
GDP (YoY%)	—	—	—	2.8	—
PMI	53.7	52.7	52.0	54.7	51.9
PPI (YoY%)	3.5	3.1	3.6	3.4	—
Fiscal Budget (%GDP)	—	—	—	0.03	—



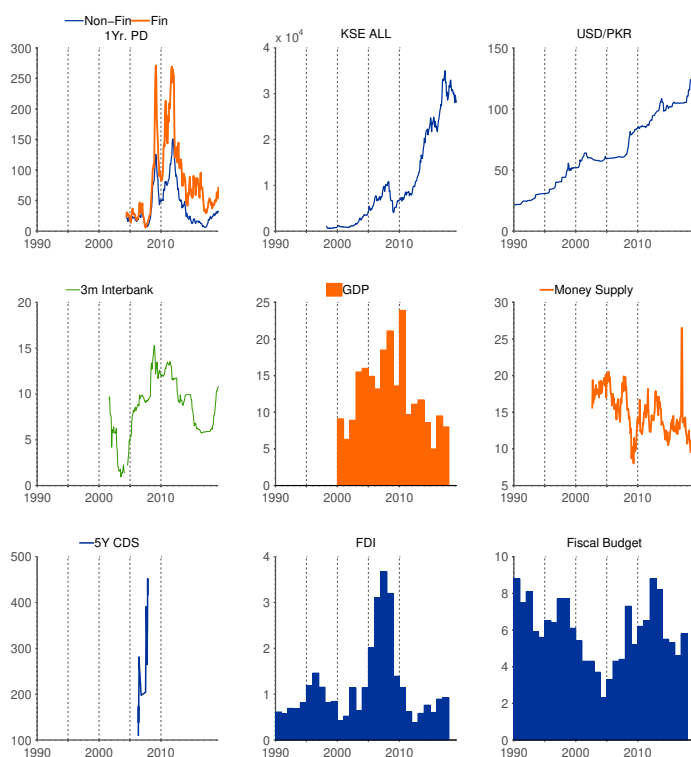
Nigeria	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	36.33	29.53	53.40	46.77	51.67
1Yr. PD, Fin.	44.12	60.68	86.65	93.74	73.76
NSE ALL Share Index	41505	38279	32766	31431	31041
USD/NGN	360.00	361.24	362.79	362.59	360.23
10Y Treas. Yield (%)	13.60	13.81	15.25	15.50	13.50
3m Interbank (%)	16.01	15.00	13.47	14.66	12.92
GDP (YoY%)	—	—	—	1.9	—
Money Supply (YoY%)	4.08	3.62	3.37	16.36	17.40*



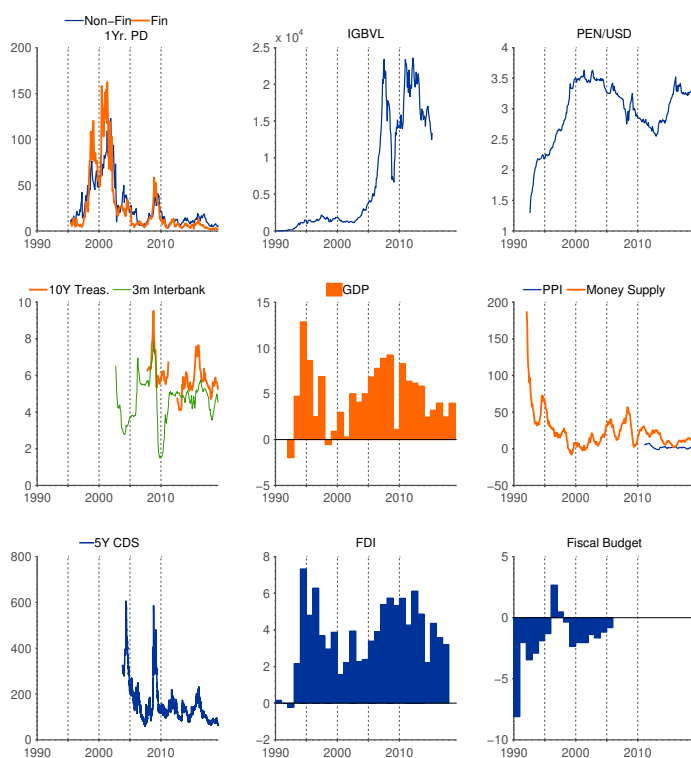
Norway	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	26.76	19.12	21.07	28.04	25.57
1Yr. PD, Fin.	9.97	7.23	5.59	11.30	7.73
OBX Price	451	486	517	436	465
USD/NOK	7.84	8.15	8.15	8.64	8.63
3m Treas. Yield (%)	0.50	0.61	0.72	0.80	1.09
10Y Treas. Yield (%)	1.85	1.78	1.94	1.77	1.55
3m Interbank (%)	1.17	0.98	1.10	1.27	1.34
GDP (YoY%)	1.9	1.6	1.6	1.8	—
OECD CLI	100.71	100.62	100.51	100.46	100.44*
PMI	54.7	56.0	56.2	55.7	56.8
PPI (YoY%)	6.4	20.1	21.0	7.7	5.2
5Y CDS (bps)	10.71	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	5.26	—



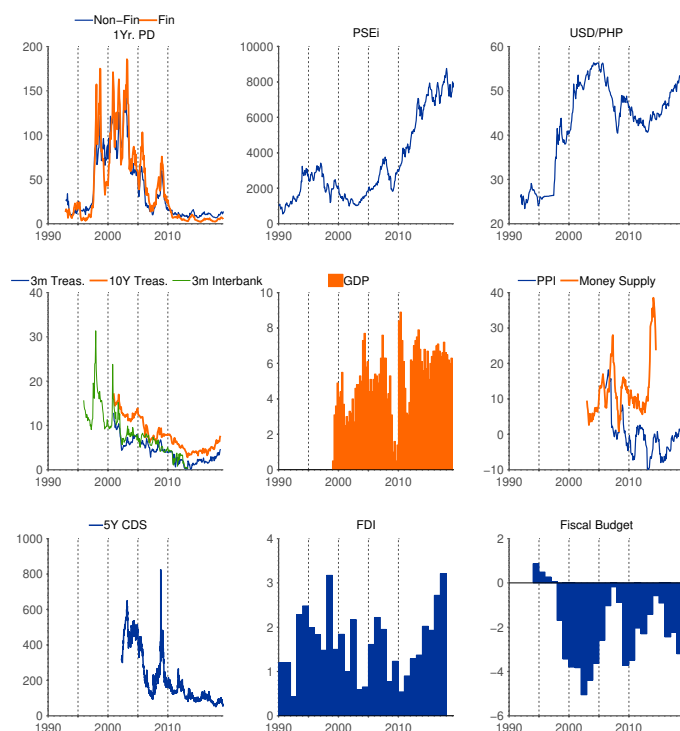
Oman	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.00	6.35	5.97	8.10	12.38
1Yr. PD, Fin.	9.15	7.61	7.40	5.36	9.14
USD/OMR	0.38	0.38	0.38	0.39	0.39
3m Treas. Yield (%)	2.48	2.48	2.48	2.55	2.54
GDP (YoY%)	—	—	—	2.1	—
PPI (YoY%)	6.2	14.7	15.8	12.6	—
Money Supply (YoY%)	2.77	3.02	2.62	8.26	2.58*



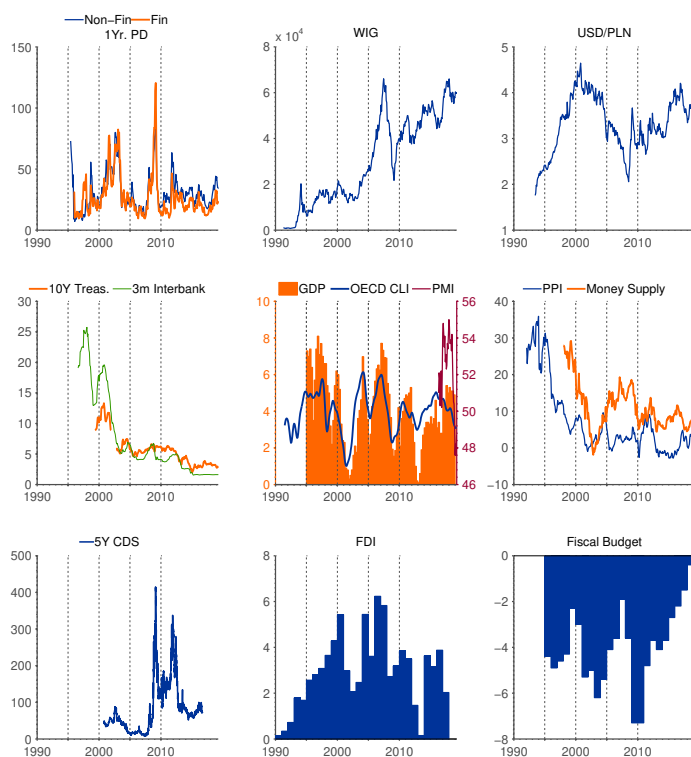
Pakistan	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	22.73	28.31	28.32	31.43	31.46
1Yr. PD, Fin.	37.06	44.60	50.96	63.58	66.26
KSE ALL	32727	30583	29944	28043	28279
USD/PKR	115.58	121.51	124.25	138.87	140.79
3m Interbank (%)	6.25	6.67	8.07	10.30	10.74
Money Supply (YoY%)	12.50	9.70	10.50	11.10	10.30*



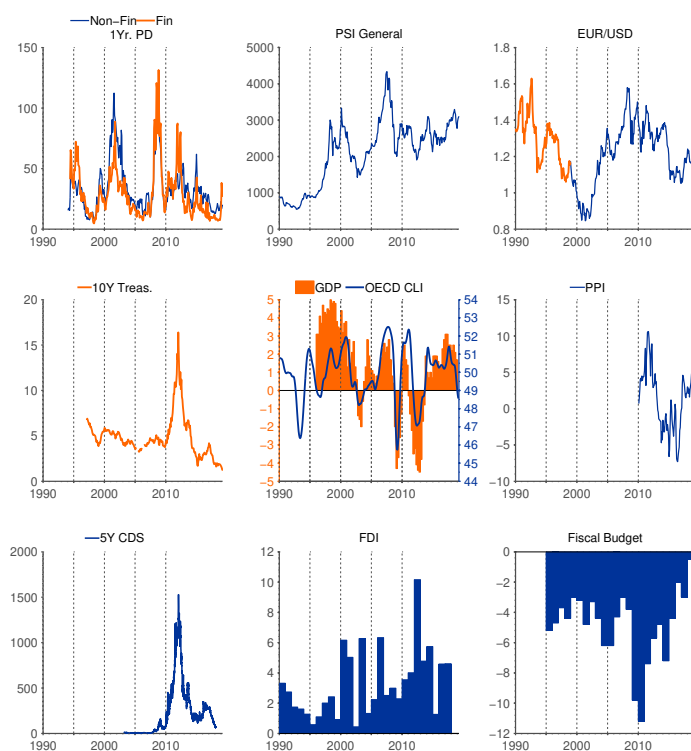
Peru	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.76	5.15	7.51	6.28	5.43
1Yr. PD, Fin.	1.86	2.45	2.95	2.37	1.60
PEN/USD	3.23	3.28	3.30	3.37	3.32
10Y Treas. Yield (%)	4.83	5.58	5.61	5.64	5.24
3m Interbank (%)	3.55	3.97	4.44	4.90	4.54
GDP (YoY%)	—	—	—	4.0	—
PPI (YoY%)	0.3	1.7	2.3	3.2	1.7
Money Supply (YoY%)	14.90	12.40	11.70	12.10	9.90*
5Y CDS (bps)	81.63	89.15	73.53	94.28	67.26



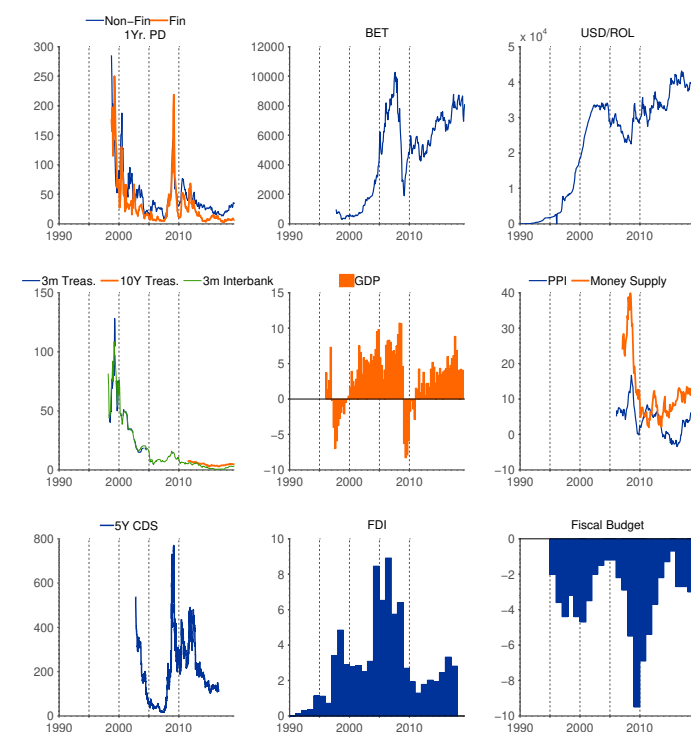
Philippines	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	7.30	10.54	10.72	13.37	13.37
1Yr. PD, Fin.	4.21	5.70	6.13	7.00	5.55
PSEi	7980	7194	7277	7466	7921
USD/PHP	52.20	53.37	54.03	52.56	52.55
3m Treas. Yield (%)	3.09	3.91	4.37	4.64*	—
10Y Treas. Yield (%)	6.00	6.41	7.39	7.66*	—
GDP (YoY%)	6.5	6.2	6.0	6.3	—
PPI (YoY%)	-0.6	1.0	1.9	0.3	3.2*
5Y CDS (bps)	74.09	91.31	76.69	88.23	58.38
Fiscal Budget (%GDP)	—	—	—	-3.20	—



Poland	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	27.46	36.78	38.21	43.58	34.31
1Yr. PD, Fin.	17.65	25.16	27.31	32.04	23.62
WIG	58377	55954	58975	57691	59668
USD/PLN	3.42	3.74	3.69	3.74	3.84
10Y Treas. Yield (%)	3.17	3.22	3.24	2.83	2.84
3m Interbank (%)	1.60	1.60	1.62	1.62	1.62
GDP (YoY%)	5.3	5.1	5.1	4.9	—
OECD CLI	100.16	99.87	99.38	99.13	99.06*
PMI	53.7	54.2	50.5	47.6	48.7
PPI (YoY%)	0.5	3.7	3.0	2.1	2.5
Money Supply (YoY%)	5.80	7.20	7.90	9.20	9.90
Fiscal Budget (%GDP)	—	—	—	-0.40	—

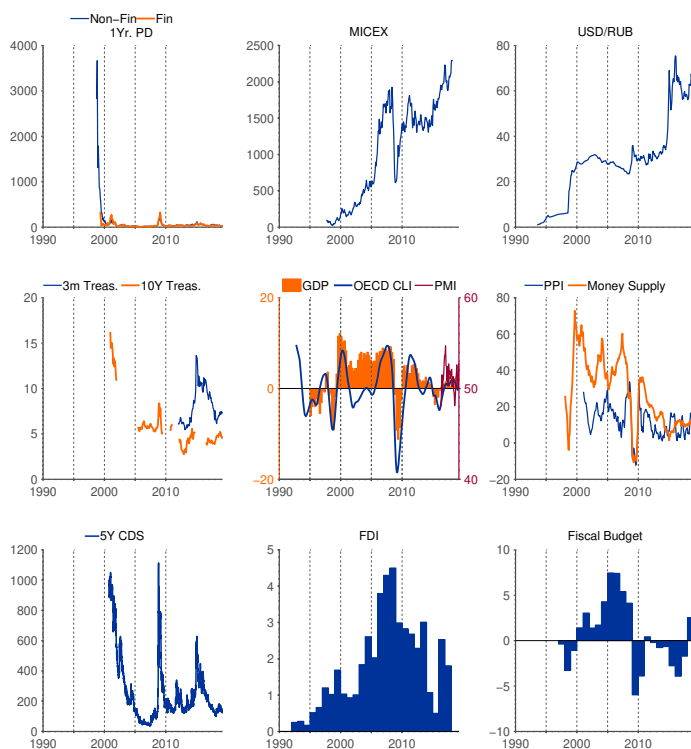


Portugal	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	16.50	19.18	16.91	22.79	19.73
1Yr. PD, Fin.	8.96	6.80	8.02	16.40	27.38
PSI General	3008	3229	3161	2776	3085
EUR/USD	1.23	1.17	1.16	1.15	1.12
10Y Treas. Yield (%)	1.61	1.79	1.88	1.72	1.25
GDP (YoY%)	2.2	2.5	2.1	1.7	—
OECD CLI	100.47	100.41	99.96	98.99	98.56*
PPI (YoY%)	2.7	3.1	4.9	2.3	1.0*
5Y CDS (bps)	63.21	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-0.50	—

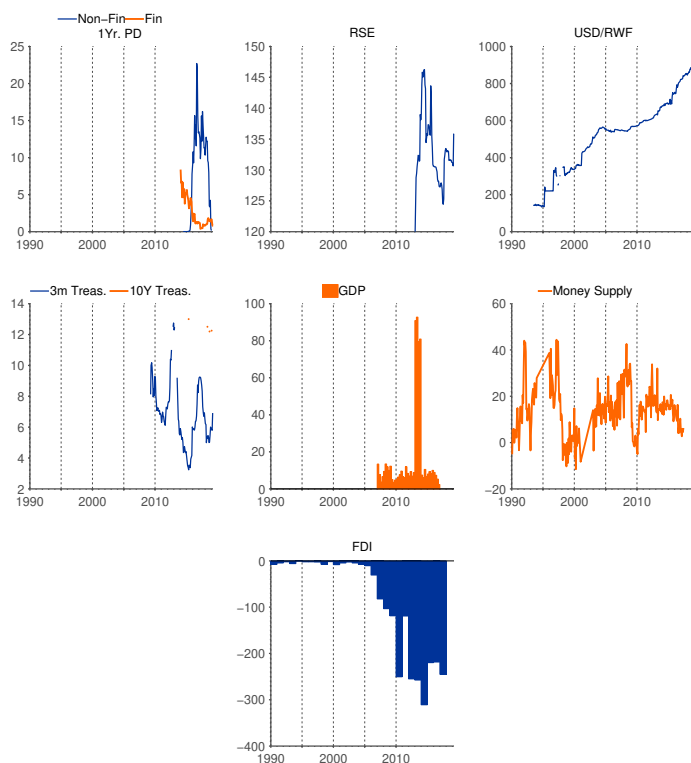


Romania	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	22.76	28.31	32.28	28.91	35.04
1Yr. PD, Fin.	7.82	7.49	7.30	9.20	6.38
BET	8714	8087	8413	7384	8045
USD/ROL	37768.50	39913.00	40057.00	40589.50	42499.51
10Y Treas. Yield (%)	4.46	5.21	4.98	4.81	4.79
3m Interbank (%)	1.90	2.99	3.00	2.86	3.06
GDP (YoY%)	4.0	4.1	4.2	4.0	—
PPI (YoY%)	3.8	6.1	5.6	4.5	4.8*
Money Supply (YoY%)	11.68	12.87	10.25	8.90	9.25*
Fiscal Budget (%GDP)	—	—	—	-3.00	—

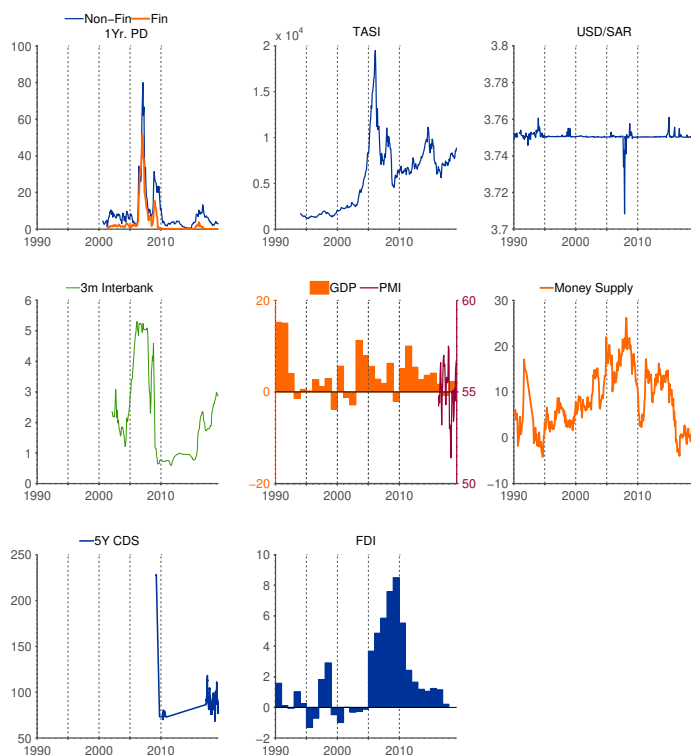




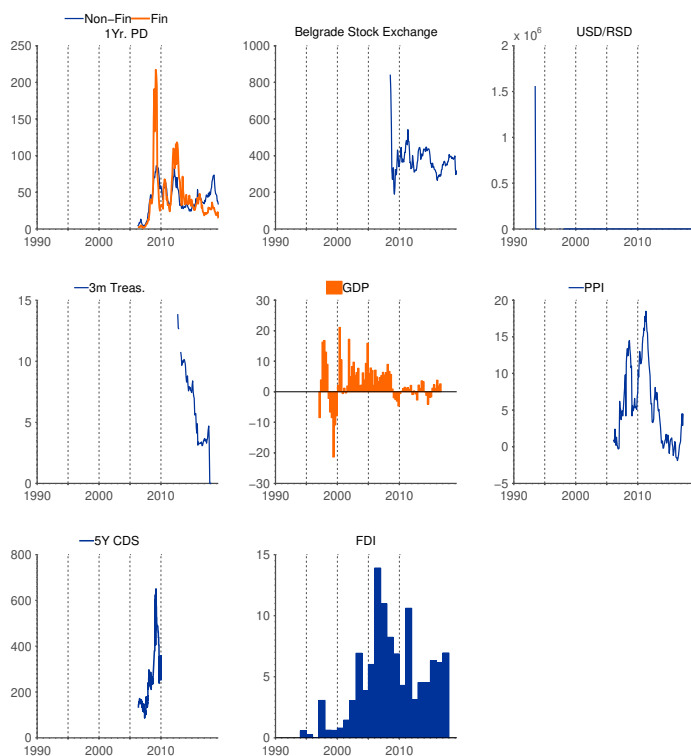
Russia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	45.13	33.43	41.24	34.70	27.64
1Yr. PD, Fin.	31.78	28.94	31.39	30.25	21.95
MICEX	2286	—	—	—	—
USD/RUB	57.13	62.74	65.55	69.72	65.63
3m Treas. Yield (%)	6.39	6.64	6.97	7.12	7.30
10Y Treas. Yield (%)	4.53	4.79	4.88	5.05	4.52
GDP (YoY%)	1.9	2.2	2.2	2.7	—
OECD CLI	101.03	100.89	100.50	99.93	99.79*
PMI	50.6	49.5	50.0	51.7	52.8
PPI (YoY%)	4.8	16.1	14.4	11.7	10.9
Money Supply (YoY%)	9.90	11.40	11.80	11.00	9.90*
5Y CDS (bps)	123.53	141.22	143.29	153.13	134.42
Fiscal Budget (%GDP)	—	—	—	2.55	—



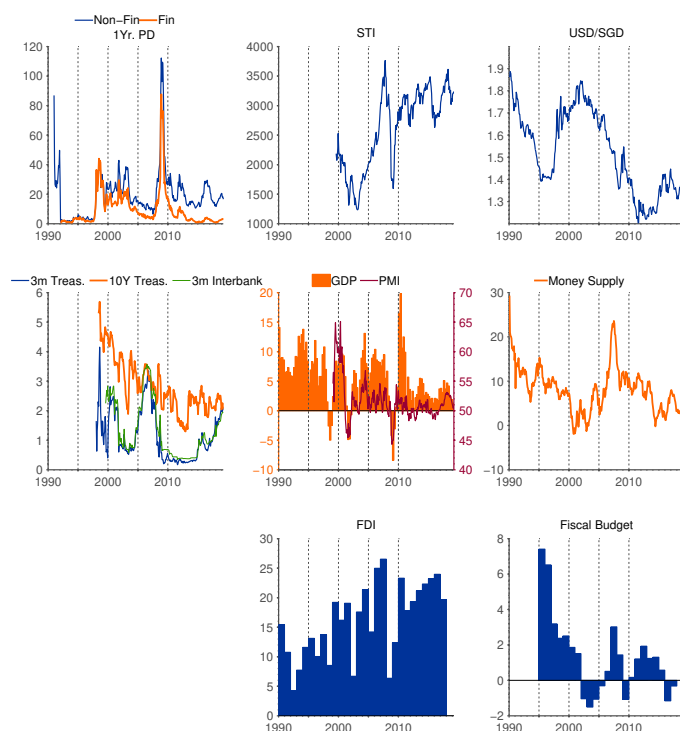
Rwanda	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	12.18	9.31	3.34	0.15	—
1Yr. PD, Fin.	0.96	1.83	1.40	1.70	0.78
RSE	133	132	132	131	136
USD/RWF	855.00	876.45	872.70	894.10	903.35
3m Treas. Yield (%)	4.99	5.45	5.02	5.85	6.92
10Y Treas. Yield (%)	—	12.50*	12.20	—	12.25*



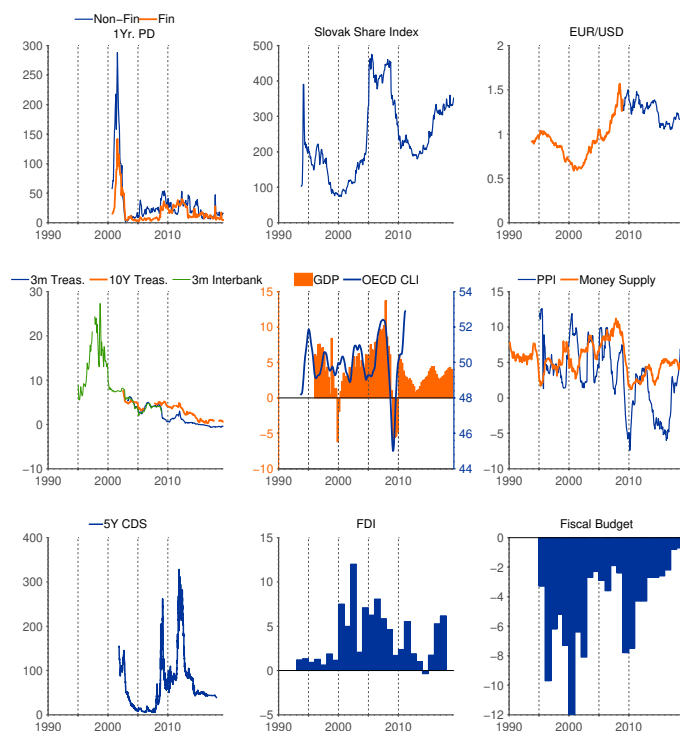
Saudi Arabia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	2.57	2.51	3.13	3.15	2.96
1Yr. PD, Fin.	0.01	0.00	0.01	0.01	0.01
TASI	7871	8314	8000	7827	8819
USD/SAR	3.75	3.75	3.75	3.75	3.75
3m Interbank (%)	2.27	2.59	2.72	2.98	2.87
GDP (YoY%)	—	—	—	2.2	—
PMI	52.8	55.0	53.4	54.5	56.8
Money Supply (YoY%)	0.20	-0.80	2.40	2.80	1.50*
5Y CDS (bps)	84.56	91.02	68.22	105.09	86.20



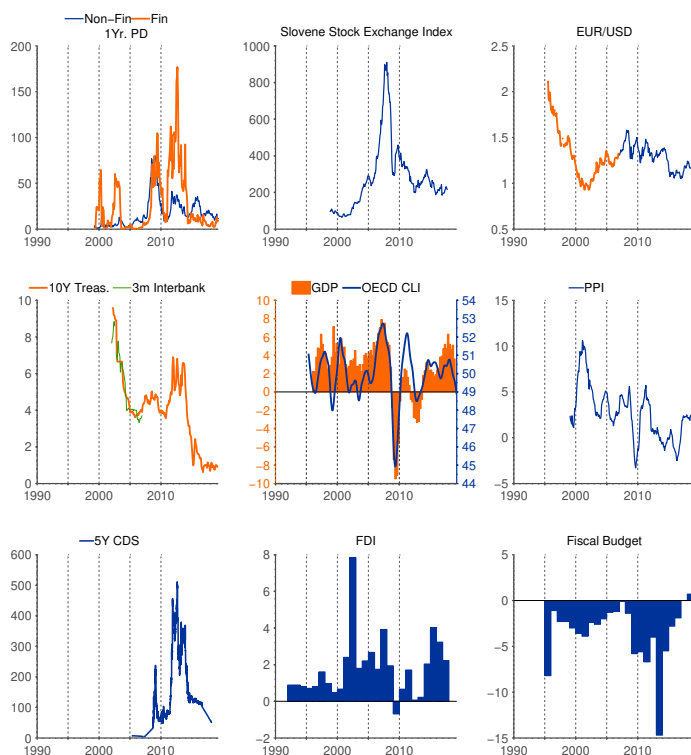
Serbia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	64.98	73.11	52.13	45.61	33.71
1Yr. PD, Fin.	36.12	28.26	23.17	19.92	14.73
Belgrade Stock Exchange	395	384	380	399	317
USD/RSD	95.91	100.99	101.87	103.18	105.11
3m Treas. Yield (%)	0.00*	—	—	—	—



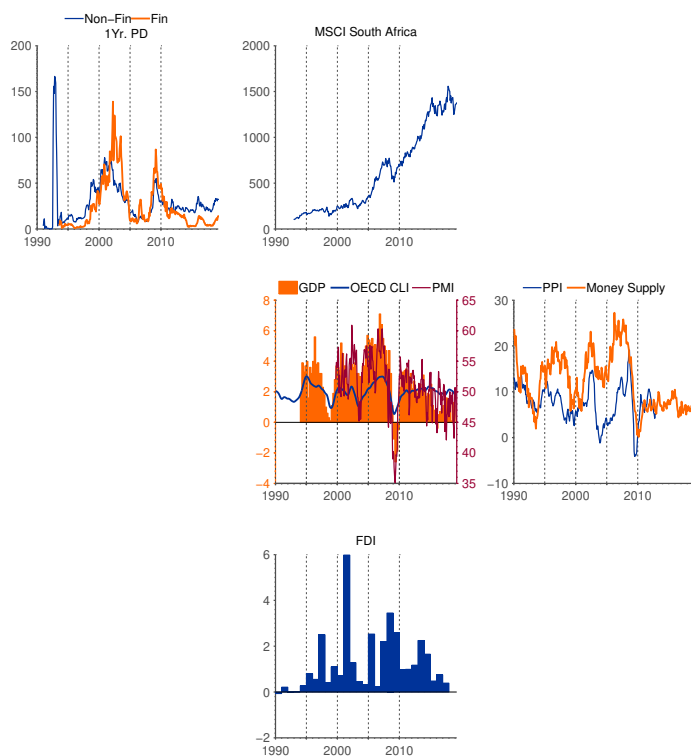
Singapore	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	14.04	16.91	18.20	20.54	16.93
1Yr. PD, Fin.	1.36	1.85	2.37	2.70	3.03
STI	3428	3269	3257	3069	3213
USD/SGD	1.31	1.36	1.37	1.36	1.36
3m Treas. Yield (%)	1.63	1.74	1.81	2.08	2.07
10Y Treas. Yield (%)	2.29	2.53	2.50	2.04	2.07
3m Interbank (%)	1.45	1.52	1.64	1.89	1.94
GDP (YoY%)	4.7	4.2	2.4	1.9	1.3
PMI	53.0	52.5	52.4	51.1	50.8
Money Supply (YoY%)	2.80	2.70	3.50	3.90	4.10*



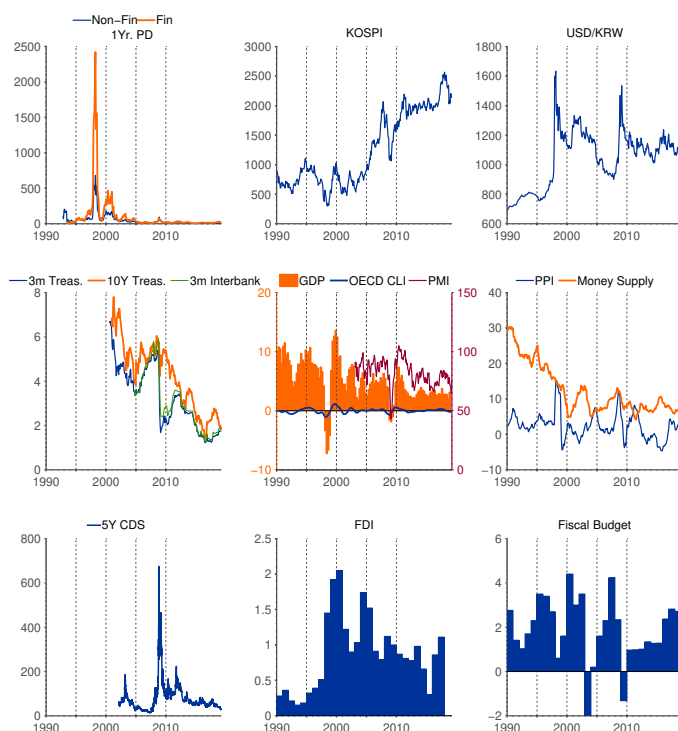
Slovakia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	13.67	12.75	14.22	12.13	15.28
1Yr. PD, Fin.	8.84	7.74	7.54	5.18	4.29
Slovak Share Index	330	326	331	332	350
EUR/USD	1.23	1.17	1.16	1.15	1.12
3m Treas. Yield (%)	-0.57	-0.46	-0.49	-0.56	-0.40
10Y Treas. Yield (%)	-	0.87	0.94	0.79	0.56
GDP (YoY%)	3.9	4.2	4.3	4.0	-
PPI (YoY%)	3.3	5.5	6.1	4.3	4.0*
Money Supply (YoY%)	4.40	4.90	4.20	4.20	4.50*
5Y CDS (bps)	37.90	-	-	-	-
Fiscal Budget (%GDP)	-	-	-	-0.70	-



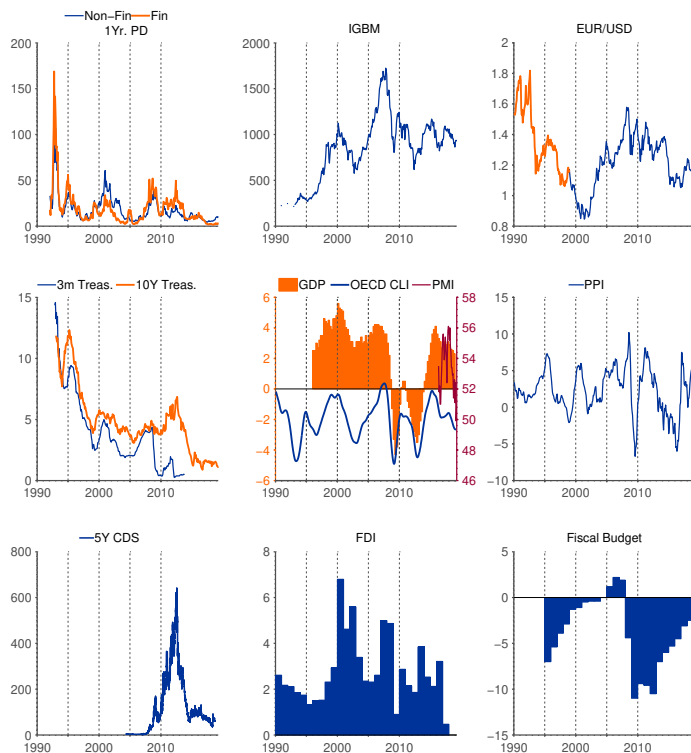
Slovenia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	16.83	13.44	11.53	16.46	11.51
1Yr. PD, Fin.	6.85	2.27	3.37	13.06	9.46
EUR/USD	1.23	1.17	1.16	1.15	1.12
10Y Treas. Yield (%)	1.11	0.99	0.75	0.96	0.87*
GDP (YoY%)	5.2	4.6	5.1	3.6	—
OECD CLI	100.61	100.20	99.81	99.50	98.87
PPI (YoY%)	2.2	2.4	2.2	1.4	1.1
5Y CDS (bps)	49.88	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	0.70	—



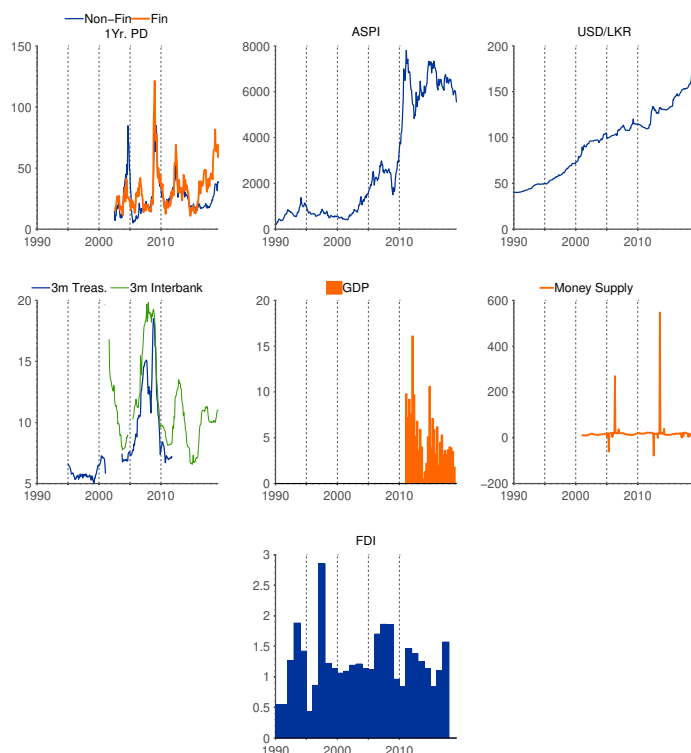
South Africa	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	20.83	27.57	29.95	32.55	32.17
1Yr. PD, Fin.	3.73	5.95	8.78	11.68	14.04
MSCI South Africa	1402	1421	1347	1313	1368
GDP (YoY%)	0.7	0.1	1.3	1.1	—
OECD CLI	100.32	100.17	99.90	99.51	99.37*
PMI	46.7	48.0	44.5	50.7	45.0
Money Supply (YoY%)	6.43	5.77	7.00	5.56	5.30*



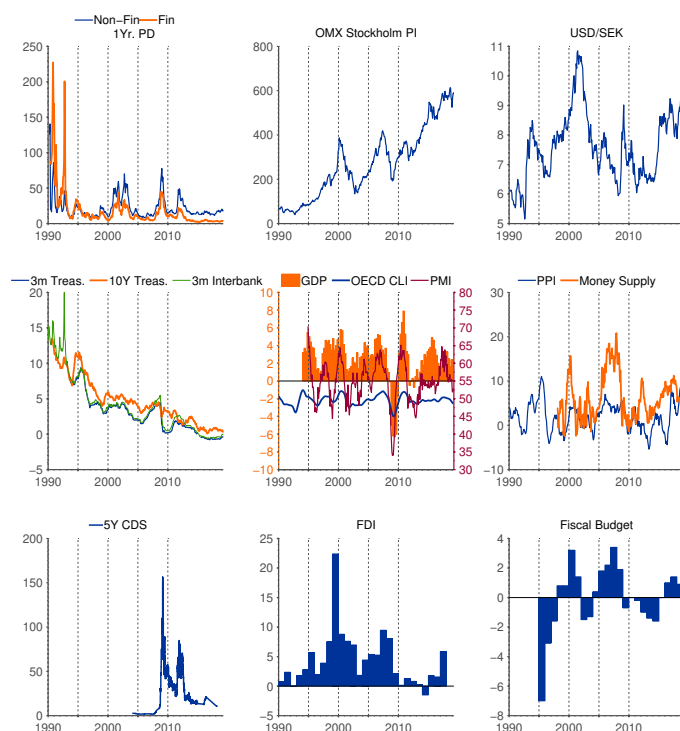
South Korea	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	3.89	6.53	6.97	11.30	8.24
1Yr. PD, Fin.	15.35	23.49	20.93	25.45	15.78
KOSPI	2446	2326	2343	2041	2141
USD/KRW	1063.63	1114.67	1109.30	1110.95	1135.18
3m Treas. Yield (%)	1.52	1.58	1.57	1.75	1.75
10Y Treas. Yield (%)	2.62	2.56	2.36	1.96	1.83
3m Interbank (%)	1.65	1.68	1.71	1.90	1.87
GDP (YoY%)	2.8	2.8	2.0	3.1	—
OECD CLI	100.17	99.65	99.20	98.92	98.91*
PMI	82.0	79.0	77.0	71.0	76.0
PPI (YoY%)	1.3	2.6	2.7	0.9	0.1
Money Supply (YoY%)	6.70	6.70	7.20	7.60	7.10*
5Y CDS (bps)	54.92	49.68	38.36	39.03	32.10
Fiscal Budget (%GDP)	—	—	—	2.72	—



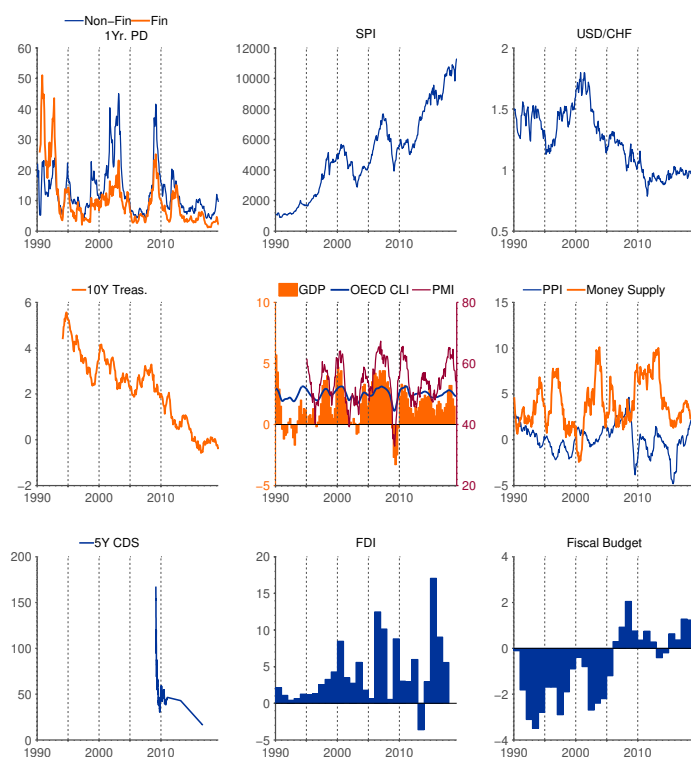
Spain	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.56	5.95	7.06	10.26	10.04
1Yr. PD, Fin.	1.84	1.46	2.60	2.67	2.83
IGBM	976	975	951	863	932
EUR/USD	1.23	1.17	1.16	1.15	1.12
10Y Treas. Yield (%)	1.16	1.32	1.50	1.42	1.10
GDP (YoY%)	2.9	2.6	2.5	2.3	—
OECD CLI	100.22	99.91	99.55	99.36	99.35*
PMI	54.8	53.4	51.4	51.1	50.9
PPI (YoY%)	1.2	4.0	5.3	1.7	1.9*
5Y CDS (bps)	40.90	69.26	64.87	—	—
Fiscal Budget (%GDP)	—	—	—	-2.50	—



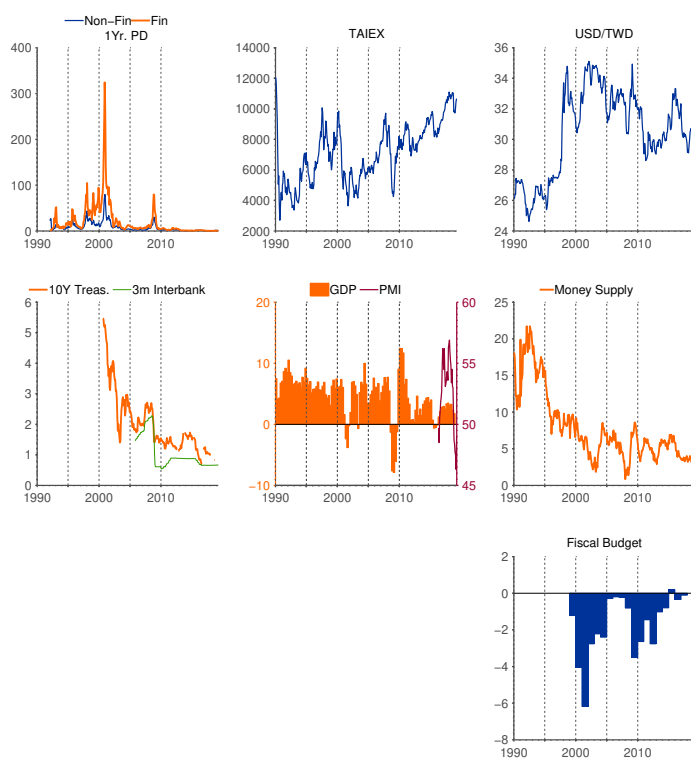
Sri Lanka	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	24.12	27.15	37.02	36.73	38.10
1Yr. PD, Fin.	45.41	64.66	81.62	63.43	58.77
ASPI	6477	6195	5862	6052	5557
USD/LKR	155.70	158.30	169.15	182.90	175.47
3m Interbank (%)	10.08	10.02	10.01	10.50	11.00
GDP (YoY%)	4.0	3.9	3.5	1.8	—
Money Supply (YoY%)	17.60	15.90	14.20	13.50	11.90*



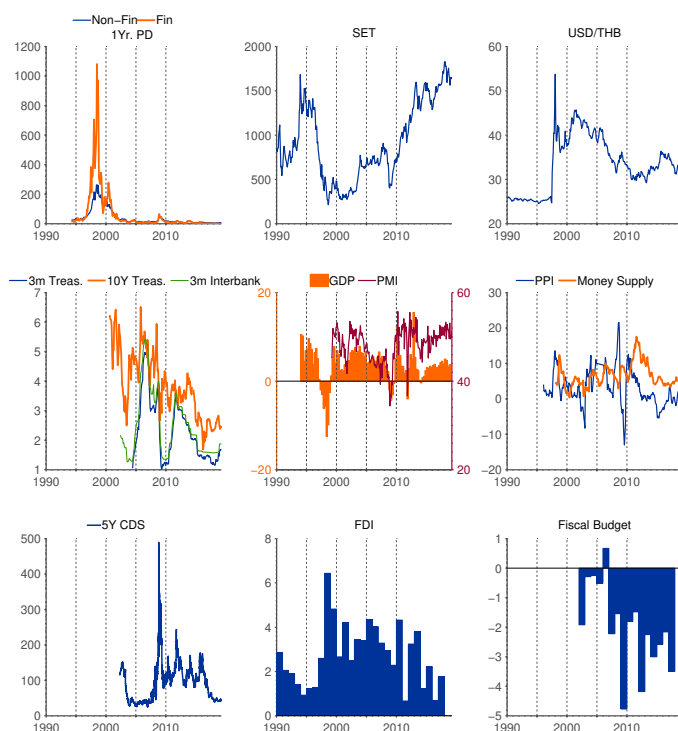
Sweden	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	17.76	18.72	15.89	20.47	17.81
1Yr. PD, Fin.	3.90	3.17	2.58	3.98	3.56
OMX Stockholm PI	560	574	613	525	587
USD/SEK	8.34	8.94	8.89	8.85	9.29
3m Treas. Yield (%)	-0.70	-0.65	-0.70	-0.45	-0.40
10Y Treas. Yield (%)	0.69	0.50	0.64	0.47	0.32
3m Interbank (%)	-0.36	-0.35	-0.46	-0.13	0.01
GDP (YoY%)	3.3	2.5	1.6	2.4	—
OECD CLI	100.06	99.92	99.52	98.91	98.60*
PMI	55.4	55.1	55.1	52.1	52.8
PPI (YoY%)	4.0	8.0	10.1	5.6	6.3*
Money Supply (YoY%)	6.34	5.44	4.48	5.87	6.73*
5Y CDS (bps)	10.55	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	0.90	—



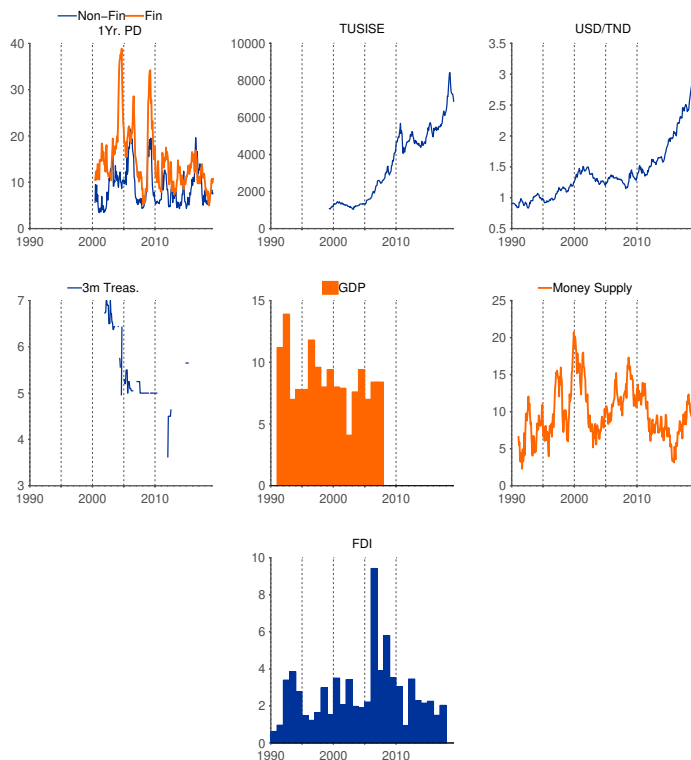
Switzerland	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.41	5.98	6.61	12.05	9.72
1Yr. PD, Fin.	2.68	3.08	2.98	4.67	2.19
SPI	10190	10327	10808	9830	11241
USD/CHF	0.95	0.99	0.98	0.98	1.00
10Y Treas. Yield (%)	0.03	-0.06	0.04	-0.25	-0.38
GDP (YoY%)	3.2	3.2	2.1	1.5	-
OECD CLI	101.06	100.65	100.00	99.42	99.26*
PMI	61.4	61.8	59.9	57.5	50.3
PPI (YoY%)	1.1	1.9	1.6	0.4	-0.5
Money Supply (YoY%)	3.24	2.29	2.29	3.14	3.54
Fiscal Budget (%GDP)	-	-	-	1.24	-



Taiwan	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	0.54	0.61	0.96	1.26	0.79
1Yr. PD, Fin.	0.25	0.26	0.32	0.59	0.31
TAIEX	10919	10837	11006	9727	10641
USD/TWD	29.11	30.48	30.53	30.55	30.83
10Y Treas. Yield (%)	-	-	0.83	-	-
3m Interbank (%)	0.66	0.66	0.66	0.67	0.66
GDP (YoY%)	3.1	3.3	2.4	1.8	-
PMI	55.3	54.5	50.8	47.7	49.0
Money Supply (YoY%)	3.45	3.76	3.33	2.65	3.34

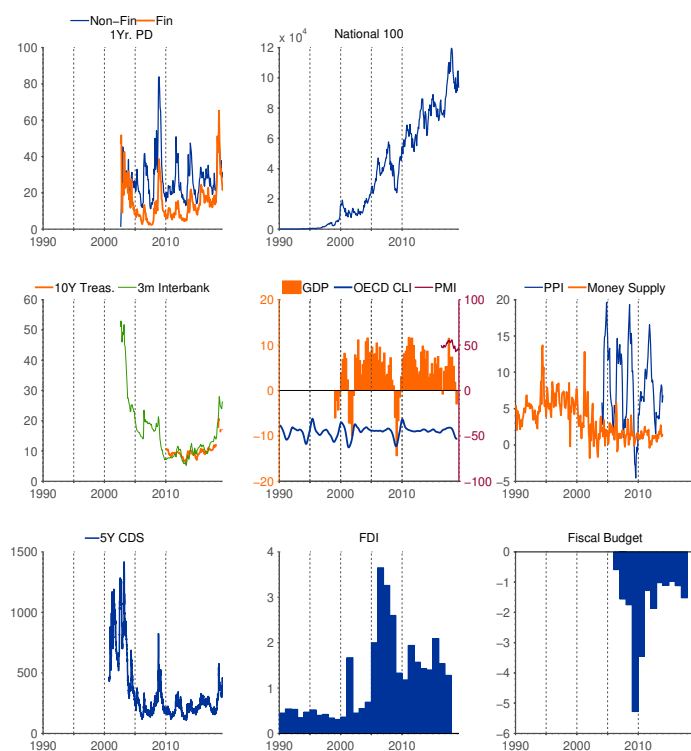


Thailand	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.14	6.09	5.13	7.77	6.30
1Yr. PD, Fin.	0.69	0.72	0.35	0.47	0.19
SET	1776	1596	1756	1564	1639
USD/THB	31.18	33.04	32.32	32.33	31.74
3m Treas. Yield (%)	1.15	1.29	1.31	1.61	1.69
10Y Treas. Yield (%)	2.40	2.58	2.80	2.48	2.43
3m Interbank (%)	1.57	1.58	1.59	1.86	1.88
GDP (YoY%)	5.0	4.7	3.2	3.7	—
PMI	53.3	52.8	51.5	49.5	51.4
PPI (YoY%)	-1.4	1.8	1.3	-0.5	0.4
Money Supply (YoY%)	6.16	5.15	4.85	4.70	4.66*
5Y CDS (bps)	47.06	49.38	41.28	44.00	42.59

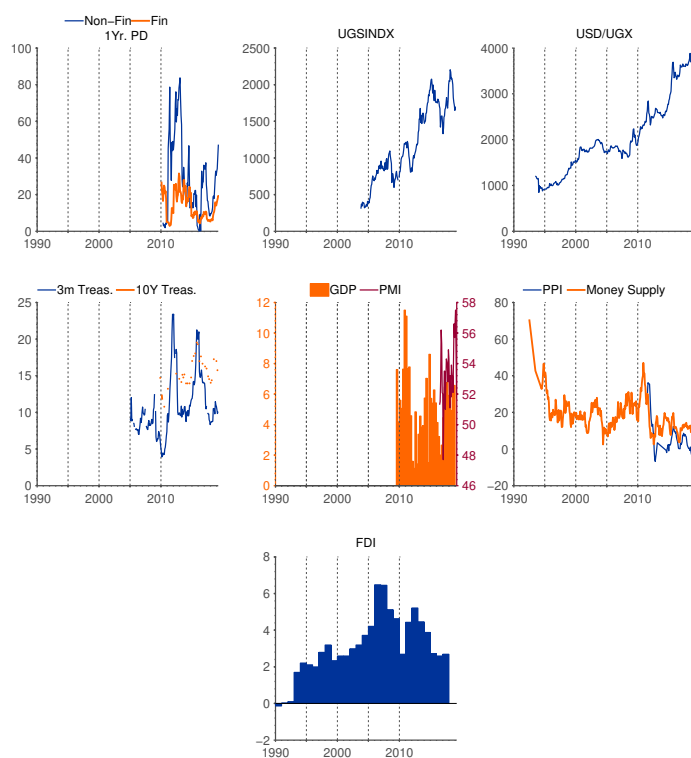


Tunisia	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	5.96	6.08	6.69	7.99	7.64
1Yr. PD, Fin.	7.11	5.87	6.54	10.41	10.75
TUNISE	7143	8059	7802	7272	6861
USD/TND	2.41	2.61	2.80	3.00	3.01
Money Supply (YoY%)	12.33	9.94	9.24	6.43	6.20*

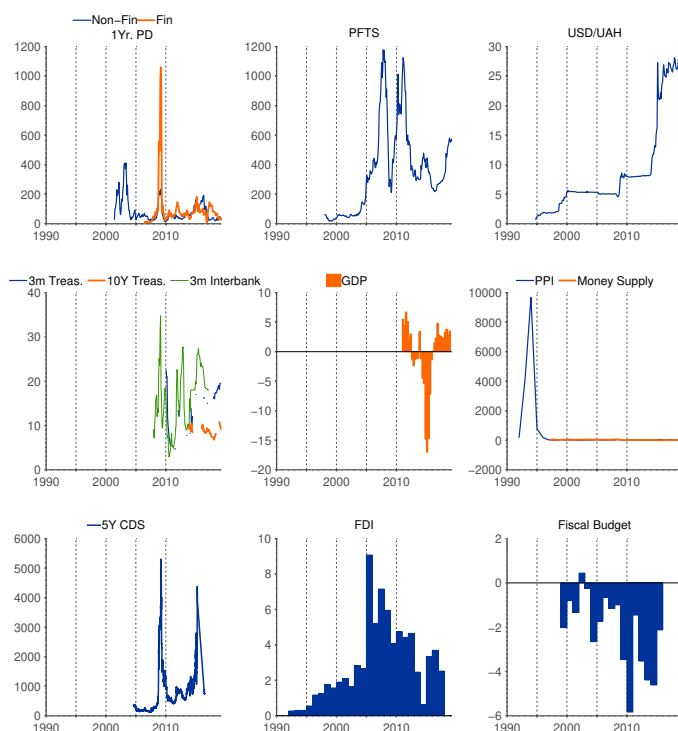




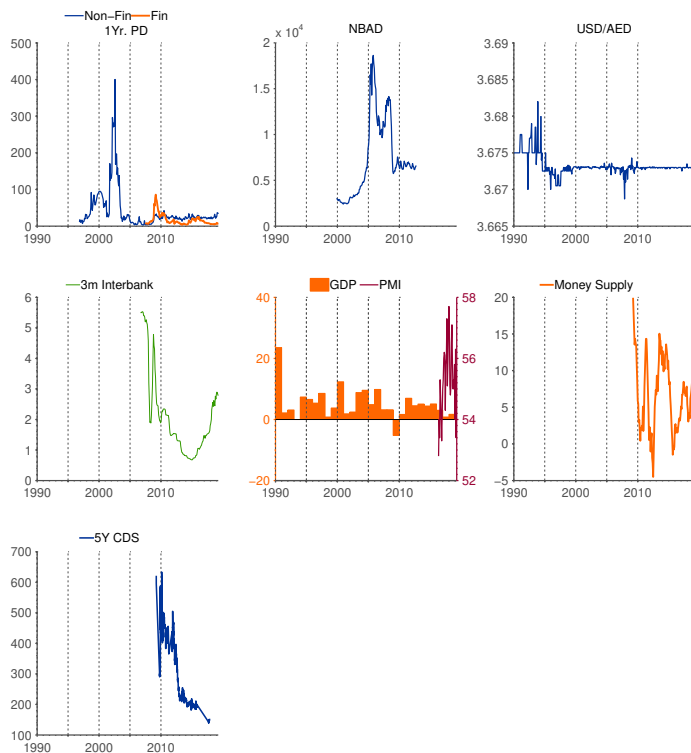
Turkey	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	23.89	43.03	45.54	37.78	31.12
1Yr. PD, Fin.	20.52	42.43	48.24	33.22	21.52
National 100	114930	96520	99957	91270	93784
10Y Treas. Yield (%)	12.27	—	20.03	17.25	17.18
3m Interbank (%)	13.98	19.29	27.96	24.65	26.25
GDP (YoY%)	7.4	5.3	1.8	-3.0	—
OECD CLI	6.39	1.83	-2.63	-2.87	—
PMI	51.8	46.8	42.7	44.2	47.2
5Y CDS (bps)	195.74	299.91	377.04	361.57	434.68



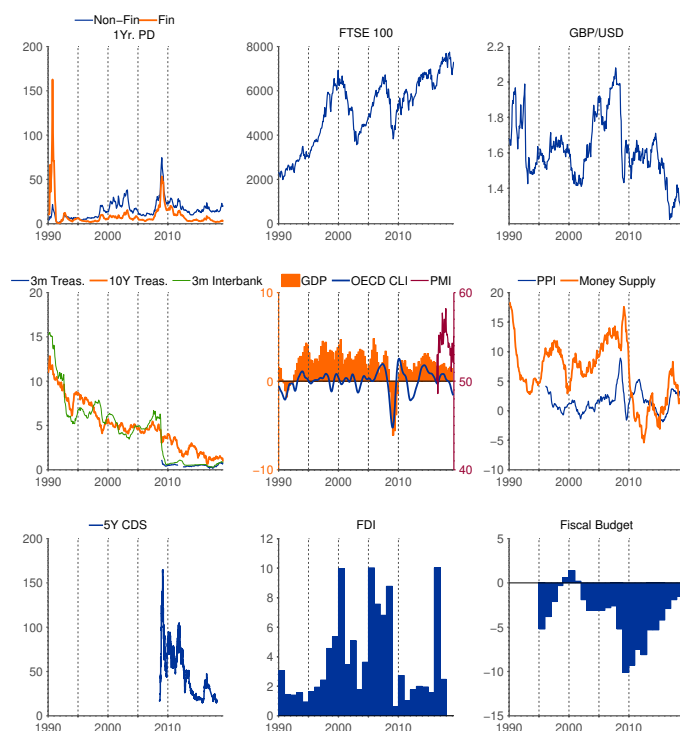
Uganda	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	10.79	19.21	28.76	32.63	46.28
1Yr. PD, Fin.	6.65	9.96	15.79	15.38	19.33
UGSINDEX	2203	2089	1825	1649	1701*
USD/UGX	3688.05	3884.15	3816.02	3705.94	3714.38
3m Treas. Yield (%)	8.77	10.52	9.79	10.80	10.11
10Y Treas. Yield (%)	14.38	—	17.25*	17.00	15.75*
GDP (YoY%)	6.8	4.9	6.2	6.6	—
PMI	53.2	53.2	54.2	56.6	51.7
PPI (YoY%)	0.2	1.1	-2.7	-3.3	-2.8*
Money Supply (YoY%)	11.24	12.78	10.77	8.17	8.56*



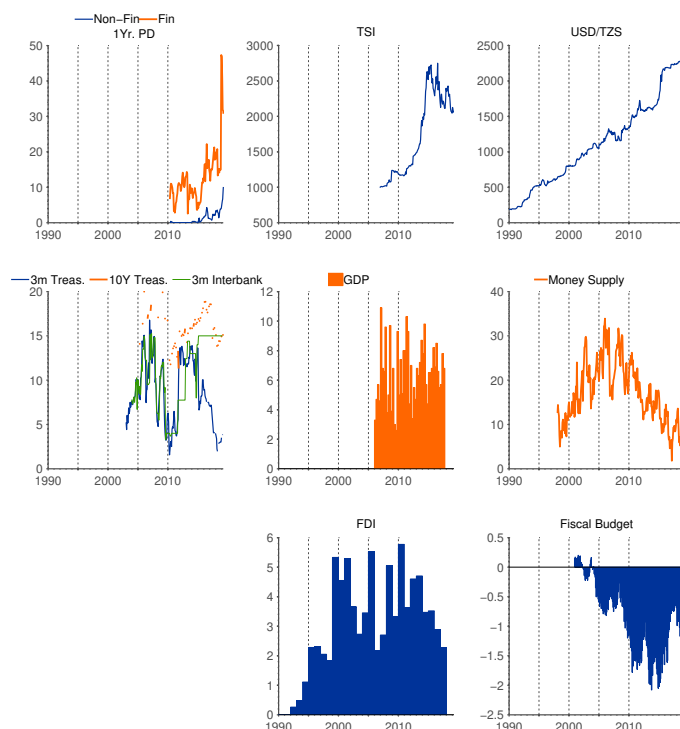
Ukraine	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	20.40	37.74	24.20	42.09	26.88
1Yr. PD, Fin.	74.26	66.19	33.32	39.62	30.23
PFTS	354	463	538	559	574
USD/UAH	26.27	26.34	28.24	27.72	27.31
3m Treas. Yield (%)	17.33	17.35	18.50	18.19	19.50
10Y Treas. Yield (%)	7.42	8.20	—	10.79	9.26
GDP (YoY%)	3.3	3.8	2.8	3.5	—
PPI (YoY%)	15.9	18.4	18.9	14.2	8.9
Money Supply (YoY%)	8.70	9.90	11.10	5.80	7.30*



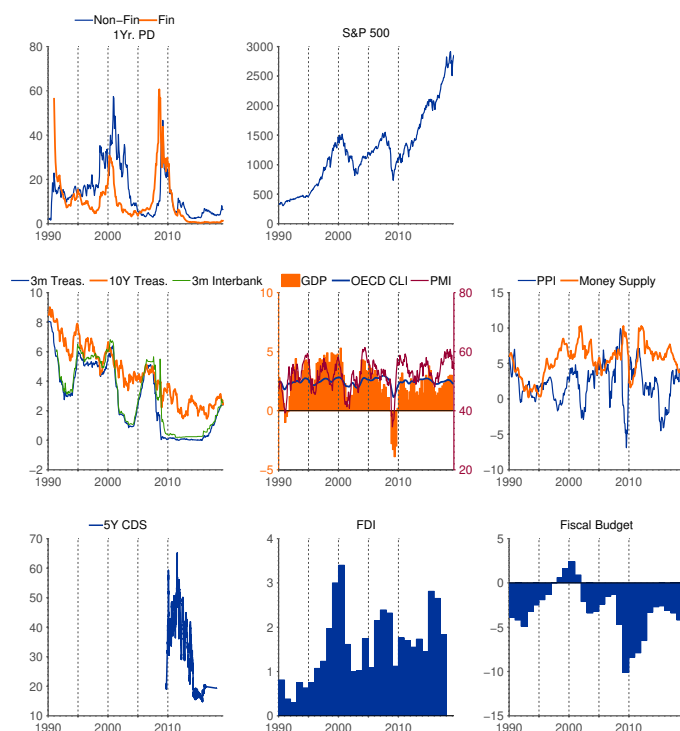
United Arab Emirates	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	19.76	23.48	26.78	25.67	34.20
1Yr. PD, Fin.	5.40	5.36	5.17	8.86	6.90
USD/AED	3.67	3.67	3.67	3.67	3.67
3m Interbank (%)	2.33	2.43	2.45	2.84	2.79
GDP (YoY%)	—	—	—	1.7	—
PMI	54.8	57.1	55.3	54.0	55.7
Money Supply (YoY%)	4.15	6.19	8.35	7.75	6.88



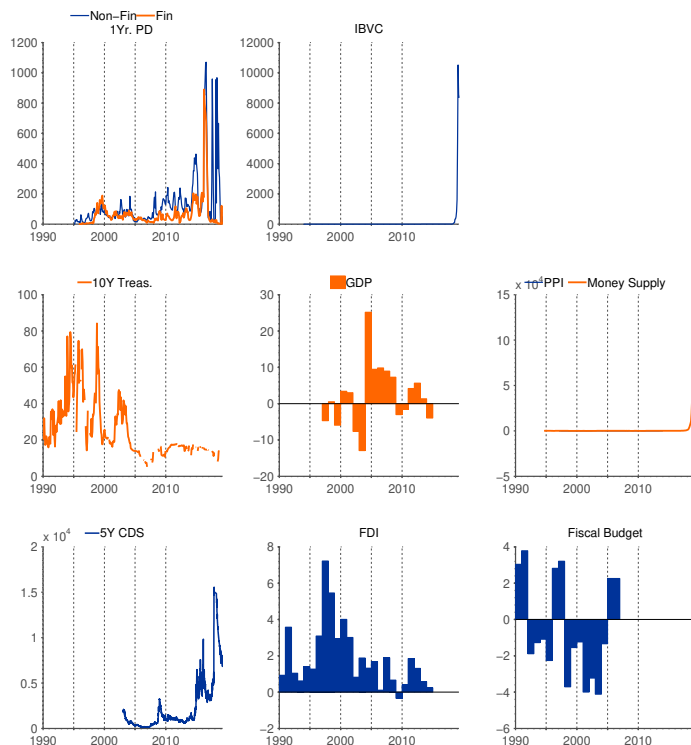
United Kingdom	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	15.94	13.65	14.97	22.98	19.86
1Yr. PD, Fin.	2.45	2.15	2.53	3.73	2.66
FTSE 100	7057	7637	7510	6728	7279
GBP/USD	1.40	1.32	1.30	1.28	1.30
3m Treas. Yield (%)	0.49	0.61	0.77	0.72	0.80
10Y Treas. Yield (%)	1.35	1.28	1.57	1.28	1.00
3m Interbank (%)	0.71	0.67	0.80	0.91	0.85
GDP (YoY%)	1.2	1.4	1.6	1.4	—
OECD CLI	100.02	99.85	99.32	98.67	98.40*
PMI	54.8	54.0	53.7	54.3	55.1
PPI (YoY%)	2.5	3.3	3.1	2.4	2.4
Money Supply (YoY%)	2.30	1.70	0.80	2.00	1.20*
5Y CDS (bps)	16.31	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-1.50	—



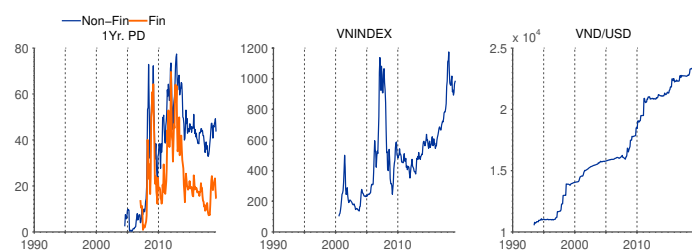
United Republic of Tanzania	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	3.58	1.38	3.86	5.06	9.81
1Yr. PD, Fin.	20.78	14.78	14.85	46.84	31.45
TSI	2409	2281	2105	2046	2060
USD/TZS	2255.94	2270.03	2284.92	2298.73	2310.71
3m Treas. Yield (%)	2.25	2.85	2.99	3.50	3.86
10Y Treas. Yield (%)	13.86	13.94*	14.39	14.94	15.11
3m Interbank (%)	15.00	15.00	15.00	15.00	15.00*
Money Supply (YoY%)	10.80	7.10	7.20	3.80	6.00*
Fiscal Budget (%GDP)	-0.92	-1.02	-1.09	-1.41	—



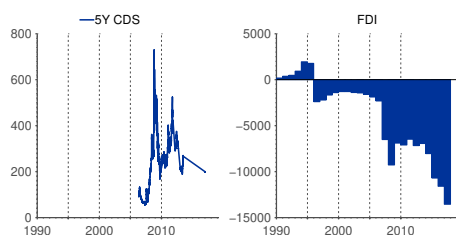
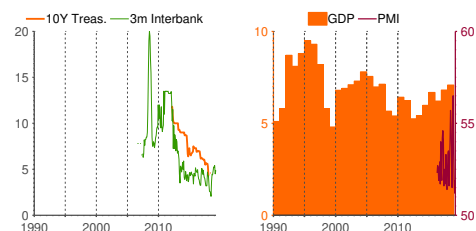
United States	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	4.14	3.91	4.26	8.13	6.51
1Yr. PD, Fin.	0.71	0.57	0.65	1.48	1.32
S&P 500	2641	2718	2914	2507	2834
3m Treas. Yield (%)	1.70	1.91	2.20	2.35	2.38
10Y Treas. Yield (%)	2.74	2.86	3.06	2.68	2.40
3m Interbank (%)	1.67	2.25	2.25	2.80	2.55
GDP (YoY%)	2.6	2.9	3.0	3.0	—
OECD CLI	100.43	100.34	100.01	99.38	99.06*
PMI	59.3	60.0	59.5	54.3	55.3
PPI (YoY%)	3.0	4.1	3.2	1.4	1.4
Money Supply (YoY%)	4.00	4.10	3.70	3.70	3.80
5Y CDS (bps)	19.42	—	—	—	—
Fiscal Budget (%GDP)	—	—	—	-4.20	—



Venezuela	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	139.41	365.82	308.91	2.56	41.94
1Yr. PD, Fin.	27.03	3.24	3.70	2.51	2.55
IBVC	5	93	343	1605	8568
10Y Treas. Yield (%)	—	8.11	13.66	—	—
Money Supply (YoY%)	3011.60	8209.20	34490.20	68146.60	100816.90
5Y CDS (bps)	—	11154.47	9283.97	8281.03	7720.86



Vietnam	2018				2019
	Q1	Q2	Q3	Q4	Q1
1Yr. PD, Non-Fin. (bps)	38.33	47.21	40.84	47.19	43.75
1Yr. PD, Fin.	7.35	22.28	18.17	22.34	14.63
VNINDEX	1174	961	1017	893	981
VND/USD	22794.00	22938.00	23315.00	23175.00	23189.00
10Y Treas. Yield (%)	4.30*	4.60*	—	—	—
3m Interbank (%)	2.60	2.05	4.40	5.25	4.85
GDP (YoY%)	—	—	—	7.1	—
PMI	51.6	55.7	51.5	53.8	51.9



## 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 April 2019 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	Conversion 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](#).<sup>†</sup>

**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](#).

<sup>†</sup>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](http://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 68,000 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 34,000 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 credit-related 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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