# Quarterly Credit Report

Q2/2011

Volume 1, No 1





# Introduction

The Quarterly Credit Report (QCR) provides analysis of credit conditions across regions, economies and sectors based on the probabilities of default (PD) generated by the Risk Management Institute's (RMI) default forecast model. The objective of the QCR is to provide insights on trends in credit conditions to credit professionals, investors and researchers.

The QCR provides commentary summarizing the most important trends in credit conditions, and this first issue covers the second quarter of 2011. The commentary is divided into four regions: the developed economies of Asia-Pacific; the emerging economies of Asia-Pacific; North America and Western Europe. For each region we discuss the general credit conditions in the region based on relevant indicators and relate them to RMI's default forecasts. Important and noteworthy economies and sectors within each region are discussed in greater detail.

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

The commentary in the QCR is based on equally weighted averages of the 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. An exception is for the banking sector, where firms are included based on the Level II Bloomberg Industry Classification. 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 the current coverage of RMI's default forecast model. The developed economies of Asia-Pacific include: Australia, Hong Kong, Japan, Singapore, South Korea and Taiwan. The emerging economies of Asia-Pacific include: China, India, Indonesia, Malaysia, Philippines and Thailand. North America includes: Canada and the US. Western Europe includes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK.

## **Credit Rating Initiative**

The QCR is a companion publication to the Global Credit Review, and both are produced as part of the Credit Rating Initiative (CRI) undertaken by RMI.

These publications supplement the CRI's operational PD system, which is accessible at:

www.rmi.nus.edu.sg/cri

As of this issue of the QCR, the PD system covers 30 economies in Asia-Pacific, North America and Western Europe. The probabilities of default for 2,200 listed firms are publicly available, along with PDs aggregated at the region, economy and sector level for nearly 30,000 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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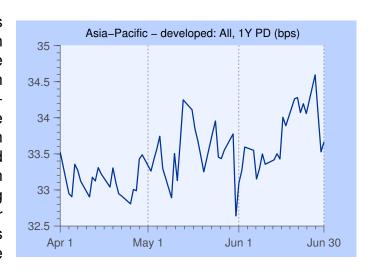
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# Asia-Pacific – developed economies

#### A Overview

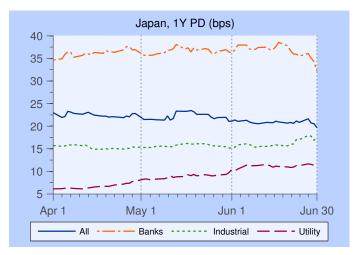
During the second quarter, credit conditions improved across most developed economies in the Asia-Pacific region. Japan had a notable improvement in overall credit conditions, which can be largely attributed to its continuing recovery from the impacts of the Tohoku earthquake and tsunami. Other developed countries such as Singapore and South Korea maintained stable credit conditions despite rising inflation and their central banks' monetary tightening to tame it. The 1-year aggregate PD for the overall Asia Pacific developed region was within a stable range, reflecting the positive developments during this quarter.



In this issue, we focus on a sampling of economies in this region: Japan, Australia and Singapore.

## **B** Japan

With the rising Yen as well as the after effects of the Tohoku earthquake and tsunami, Japan's export-reliant economy contracted severely. However, the extraordinary liquidity support provided by the Bank of Japan (BOJ) has appeared to be able to counter the negative effects on the economy. BOJ's extremely loose monetary policy was a timely and effective response in meeting the funding needs for the disaster relief, with the cost of funding being effectively brought down to low levels for both banks and non-financial firms. For example, the prime rate was in a range between 1.5%



and 1.7%.<sup>1</sup> This was a positive factor for overall credit conditions in the Japanese economy. The aggregate 1-year PD of Japanese firms was stable over the second quarter. However, the hard-hit utility sector suffered a significant increase in its 1-year PD.

## **B.1** Banking sector

Despite having exposure to Tokyo Electric Power Company's (TEPCO) debts, credit conditions in the Japanese banking sector was little affected in the second quarter. Firstly, liquidity in the Japanese financial system has been ample after the March earthquake, with BOJ's emergency liquidity support in the money market operations and asset purchase program. Funds were injected into the real economy at extremely low rates, with the overnight call rate between 0 and 10bps.<sup>2</sup> Secondly, while there has been increasing risk of TEPCO restructuring its debts that would likely erode Japanese banks' profitability and capitalization,<sup>3</sup> the sound funding and liquidity profiles of Japanese banks could mean that the credit costs are still manageable depending on the actual materialization of losses.<sup>4,5</sup> As a result of the above-mentioned factors, the Japanese

banking sector maintained a stable credit profile during the second quarter with its 1-year PD showing little fluctuation during most of the quarter and then a small decline towards the end of the quarter.

#### **B.2** Industrial sector

With the gradual easing of supply chain disruptions caused by the March earthquake, the Japanese Purchasing Managers' Index (PMI) gradually returned to above 50<sup>6</sup>, above the threshold signalling the return of the industrial sector to expansion. However, negative impacts from rising inflation seemed to outweigh this improvement, which was further compounded by the appreciating Yen. While increasing commodity prices impaired the profitability of producers in the form of increased input costs, the strengthening Yen also hurt overseas demand. Against this backdrop, the credit profile for the Japanese industrial sector declined slightly over the second quarter, with its 1-year PD increasingly marginally towards the end of the quarter.

#### **B.3** Utility sector

The overall credit conditions in the Japanese utility sector have been understandably undermined by its biggest player, TEPCO, whose credit profile suffered a drastic decline in the aftermath of the earthquake. In the face of the potentially enormous amount of insurance claims, TEPCO's 1-year PD jumped to 126.7bps on June 30 from 0.6bps on Feb 28. Other Japanese utility companies with nuclear power plants also face the possibility of increased costs as they may be required to pay premiums under a new government-proposed insurance fund. Under the increased cost and liability pressure, the 1-year PD of the Japanese utility sector nearly doubled over the second quarter.

#### C Australia

The Australian economy's steady recovery from the financial crisis has been tempered by a number of issues that arose at the end of 2010. Severe floods and cyclones battering some regions of Australia, the appreciation of the Aussie dollar and soaring inflation have all negatively affected the economy. As a result, in the first quarter of 2011, the Australian economy slowed down at a magnitude not seen since 1991. Nevertheless, in the second quarter of 2011 the economy offered resistance and the overall credit conditions in Australia stabilized.



On the positive side, increasing iron ore and coal prices benefited the companies in the basic materials sector.

## C.1 Banking sector

The Australian banking sector performed well during the second quarter of 2011. Commercial credit grew steadily and the level of non-performing loans remained low at 1.2%,<sup>8</sup> one of the world's lowest non-performing loan ratios. Also, the non-performing residential mortgage loan ratio remains consistently lower than in other developed countries.<sup>9,10</sup>

According to Australia's National Quarterly Business Survey, the second quarter saw the number of financial firms reporting an increase in profits exceeding those reporting a decrease in profits by 10.3%. The comparable figure in the previous quarter was 2.90%.<sup>11</sup> The improving credit

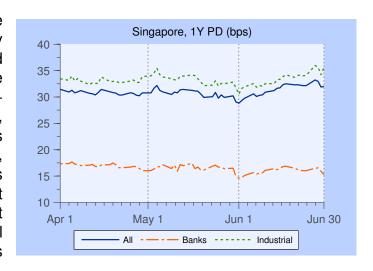
conditions were reflected in a moderate decrease in the Australian bank sector's aggregate 1-year PD towards the end of the quarter.

#### C.2 Basic Materials sector

The recent surge in demand for iron ore and coal from Asia contributed positively to the basic materials sector.<sup>12</sup> As a result, the sector's 1-year PD remained stable during the second quarter between 21 and 26bps, which was consistently lower than Australia's aggregate 1-year PD for the same period.

## **D** Singapore

The second quarter saw a slowdown in the growth of Singapore's export-reliant economy when its exports were affected by subdued overseas demand. Compounding the negative impacts on Singapore's exports was the continuing appreciation of the Singapore dollar, amid the Monetary Authority of Singapore's (MAS) efforts to tame inflation. Nevertheless, in the face of these challenges, Singapore's economy continued to have strong credit growth and demonstrate resilience in its credit conditions on both the overall and sectoral level. Singapore's 1-year aggregate PD was stable throughout the second quarter.



#### D.1 Banking sector

In a statement released on June 28, MAS set new capital requirements for Singaporean banks and acknowledged that the banks were well capitalized and capable of meeting the new requirements which are more stringent than the Basel III requirements.<sup>13</sup>

During the second quarter, credit conditions remained healthy for Singapore's banking sector, indicated by the stability of its aggregate 1-year PD during the period. A few factors supported this strength.

First, the credit growth in the banking sector continued its strong momentum during the quarter. The year-on-year growth rate of the total bank loans and advances issued by Singaporean banks was among the country's highest since 2000.<sup>14</sup> This has provided solid support for the sector's loan revenue.

Also, the funding position continued to be supportive for Singaporean banks. On one hand, the cost of funding was consistently low for Singapore's banks. The costs of retail funding such as the interest rates on savings deposit and fixed deposit as well as the cost of wholesale funding such as interbank overnight and 3 month rates remained stable and cheap for the second quarter even by historical standards. As well, MAS enhanced the deposit insurance scheme from May 2011, increasing bank depositor's coverage to \$\$50,000. This should help to further safeguard the stability of Singaporean banks' retail funding base.

Finally, Singaporean banks' non-performing loan ratio decreased to historical lows in the second quarter, supporting the banks' asset quality.<sup>17</sup>

#### D.2 Industrial sector

During the second quarter, Singapore's industrial sector suffered setbacks from subdued overseas demand and supply chain disruptions caused by Japan's earthquake in March. Singapore's PMI continuously declined throughout the second quarter. However, with the PMI above 50 for each month in the quarter, Singapore's industrial sector still remained in an expansionary mode.

There was a continuation of ample credit available to Singapore's manufacturers, with the total bank loans to manufacturers 20% higher than in the previous year. Furthermore, the prime rate was stable at 5.38% since 2008.

In this environment, credit conditions for Singapore's industrial sector remained positive. Its 1-year PD stayed in the range of 30 to 35bps, about the same as the previous guarter.

<sup>&</sup>lt;sup>1</sup> Japanese Long-Term Prime Rate, Source: Bloomberg, Mizuho Corporate Bank.

<sup>&</sup>lt;sup>2</sup>May 24, 2011, Fitch: TEPCO Exposure Has No Immediate Ratings Impact on Japanese Mega Banks, The FINANCIAL.

<sup>&</sup>lt;sup>3</sup>June 21, 2011, Japanese banks profits to remain flat through 2012, Singapore Business Review.

<sup>&</sup>lt;sup>4</sup>June 02, 2011, Japan's banks face heightened risks from restructuring of TEPCO loans, The Asian Banker, www.theasianbanker.com

<sup>&</sup>lt;sup>5</sup>June 15, 2011, Monthly Report of Recent Economic and Financial Developments, Bank of Japan, www.boj.or.jp

<sup>&</sup>lt;sup>6</sup>Nomura/JMMA Purchasing Managers' Index (seasonally adjusted), Source: Bloomberg, Markit/Nomura Securities Co.,Ltd.

<sup>&</sup>lt;sup>7</sup>April 15, 2011, Japan eyes state-backed insurer to save TEPCO -Nikkei, Reuters.

<sup>&</sup>lt;sup>8</sup>Source: Reserve Bank of Australia, www.rba.gov.au

<sup>&</sup>lt;sup>9</sup>Source: Mortgage & Finance Association of Australia, www.mfaa.com.au

<sup>&</sup>lt;sup>10</sup>April 2011, Global Financial Stability Report, International Monetary Fund, www.imf.org

<sup>&</sup>lt;sup>11</sup>Quarterly Business Survey – Actual Profitability of Finance Sector, Source: Bloomberg, National Australia Bank.

<sup>&</sup>lt;sup>12</sup>May 31, 2011, Coal industry looks past Japan dip as Asia demand booms, Reuters.

<sup>&</sup>lt;sup>13</sup>June 28, 2011, MAS Strengthens Capital Requirements for Singapore-incorporated Banks, Monetary Authority of Singapore, www.mas.gov.sg

<sup>&</sup>lt;sup>14</sup>Singapore Total Bank Loans & Advances to Non-Bank Customers, YoY change, Source: Bloomberg, Monetary Authority of Singapore.

<sup>&</sup>lt;sup>15</sup>Source: Monetary Authority of Singapore, www.mas.gov.sg

<sup>&</sup>lt;sup>16</sup>May 14, 2011, Deposit Insurance Scheme increases coverage to S\$50,000, Channel NewsAsia.

<sup>&</sup>lt;sup>17</sup>August 08, 2011, Singapore Industry Focus - Singapore Banks, DBS Vickers Research, www.dbsvresearch.com

<sup>&</sup>lt;sup>18</sup>Singapore Bank Loans & Advances to Manufacturing Sector, YoY change, Source: Bloomberg, Monetary Authority of Singapore.

<sup>&</sup>lt;sup>19</sup>Singapore Prime Lending Rate, Source: Bloomberg, Monetary Authority of Singapore.

# Asia-Pacific – emerging economies

#### A Overview

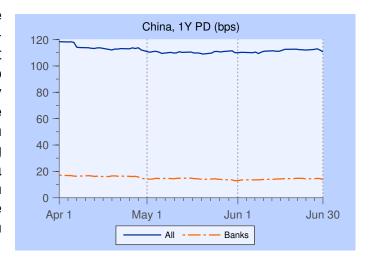
The emerging economies in the Asia-Pacific region have weathered the recent global recession relatively well. In the aftermath of the crisis, most economies have been growing at promising rates. More recently, however, soaring inflation and the tight monetary policy response from some central banks seem to have negatively affected economic growth in the region. Due to differing economic and financial fundamentals, the aggregate countries' credit conditions, represented by the 1-year PD movement over the second quarter, have experienced different evolutions in reaction to these looming threats.



Here, we focus on the two largest economies of this region: China and India.

#### **B** China

During the second quarter of 2011, the Chinese economy was confronted with major challenges ranging from sovereign debt issues affecting its major trading partners, to surging inflation, tightening monetary policy and overheated property markets. Despite widespread concern about a likely slowdown in China's economy, China's manufacturing activity continued to expand, although at a more modest rate, as indicated by its PMI in the range between 50.9 and 52.9 during the quarter. China's PMI was above 52 for each month in the previous quarter.<sup>20</sup>



In addition to external factors, China's aggregate credit conditions were also affected by various domestic policy measures. On one hand, the People's Bank of China (PBOC) continued to reinforce its tough stance on liquidity control by raising the benchmark lending and deposit rate to 6.56% and 3.5% respectively, and increasing Chinese commercial banks' reserve requirements to 21.50% on June 14. This has increased the funding pressure for small and medium enterprises in China. On the other hand, China pursued its goal of further developing the domestic financial market and financial innovation, to benefit companies by diversifying their sources of funding. <sup>21,22,23</sup>

Under the net effect of these different factors, there was an overall improvement in credit conditions during the second quarter, reflected by a falling 1-year PD.

## **Banking sector**

A primary concern with China's banking sector is excessive lending. Despite PBOC's move to restrain banks' excessive lending, the lending limit continues to be breached, though at a lesser

rate.24

Another important concern is the banks' potentially high exposure to the bad debt of Chinese local governments. According to Moody's, roughly 12% of the loans extended to local governments may become non-performing loans.<sup>25</sup>

However, China's financial sector is highly-regulated. In addition to the already high regulatory capital requirements, China's banking regulator, China Banking Regulatory Commission (CBRC), raised the required capital requirements for China's five biggest banks to 11.5% in April this year, in a move to safeguard the stability of China's banking system.<sup>26</sup>

Furthermore, Chinese banks were able to maintain strong profit growth<sup>27</sup> in a protective environment where regulations set a ceiling on deposit rates and a floor on lending rates.<sup>28</sup> Net interest margin, the main driver of Chinese banks' income, remained consistently above 300bps.<sup>29</sup>

Based on RMI's default forecast model, the banking sector's 1-year PD showed a marginally downward trend during the second quarter.

#### C India

In the past few years, the Indian economy has experienced significant growth. However, since March 2010, India's GDP growth has slowed down as the country was suffering from soaring inflation, the government's fiscal consolidation and monetary tightening by the Reserve Bank of India (RBI).

In the second quarter of 2011, India's domestic inflation continued to rise. The cost of production remained high, with the Producer Price Index (PPI) staying above 9% for the period. In an attempt to control inflation, the RBI started with a series of interest rate hikes



in March 2010. The subsequent acceleration in the cost of funding for corporate and individual borrowers put a strain on the expansion of production and consumption.

In addition, the government's continued attempts to tighten its fiscal deficits also marginally affected the Indian economy's growth.<sup>30</sup>

In general, Indian public listed firms suffered from these worsening market conditions, which is reflected in an increase in the 1-year aggregate PD.

## C.1 Banking sector

Credit conditions in the Indian banking sector deteriorated during the second quarter, largely due to the increased pressure on the sector's profitability as a result of increased costs of funding. A number of factors contributed to this pressure.

First, the increase in the repo rate and highly regulated savings account rate led to higher costs of borrowing for Indian banks.<sup>31</sup> The repo rate was increased to 7.5% on June 16 from 6.75% on March 17 as a consequence of the RBI's monetary tightening. Also, the savings deposit interest rate was increased to 4% in May.<sup>32</sup> The resulting erosion of the net interest margin damaged Indian banks' profitability.<sup>33</sup>

Furthermore, as Indian banks passed the higher cost of borrowing to their customers through raising base rates,<sup>34</sup> domestic credit demand contracted, further affecting banks' profitability.<sup>35,36</sup>

During the period from July 2010 to May 2011, 47 Indian banks raised their base rates by 150 to 300bps. India's domestic credit demand saw a noticeable decrease, with the year-on-year non-food credit growth decreasing to 20.6% in early June from 21.3% in March 2011.<sup>37</sup>

Finally, the high-interest rate environment induced an increase in non-performing loans, jeopardizing the banks' asset quality and profitability. By March 31, 2012, the amount of Indian banks' total non-performing assets was forecasted to increase 25% to 2.92%.<sup>38</sup>

Against this backdrop, the banking sector experienced some credit deterioration, accompanied by a modest increase of its aggregate PD increase during the quarter.

#### C.2 Industrial sector

Indian firms have suffered from tightened liquidity controls which brought about an increased cost of borrowing. For example, Indian's prime rate rose rapidly to 14% as of May 12 from 13% on April 22.<sup>39</sup> The industrial sector seemed to be the most affected Indian sector with a marked increase in its 1-year PD.

<sup>&</sup>lt;sup>20</sup>China Manufacturing PMI (seasonally adjusted), Source: Bloomberg, China Federation of Logistics & Purchasing.

<sup>&</sup>lt;sup>21</sup>June 15, 2011, China Moves Closer to Letting Foreign Banks Underwrite Yuan Bonds, The Wall Street Journal.

<sup>&</sup>lt;sup>22</sup>May 3, 2011, China Allows Firms to Sell Bonds via Private Placement, The Wall Street Journal.

<sup>&</sup>lt;sup>23</sup>June 22, 2011, China to Speed Approval of Public-Housing Bonds, The Wall Street Journal.

<sup>&</sup>lt;sup>24</sup>April 2011, Asian Development Outlook, Asia Development Bank, www.adb.org

<sup>&</sup>lt;sup>25</sup>July 5, 2011, China's Local Government Debt Understated by Billions: Moody's, CNBC.

<sup>&</sup>lt;sup>26</sup>April 25, 2011, China raises capital requirement for top five banks, Reuters.

<sup>&</sup>lt;sup>27</sup>July 29, 2011, China banks to post 20 pct profit growth in 2011 -Xinhua, Reuters.

<sup>&</sup>lt;sup>28</sup>September 2009, IMF Working Paper: What Drives China's Interbank Market?, International Monetary Fund, www.imf.org

<sup>&</sup>lt;sup>29</sup>May 20, 2011, Bank of China Says Interest Rate Reform to Erode Margins, CNBC.

<sup>&</sup>lt;sup>30</sup>April 2011, Asian Development Outlook, Asia Development Bank, www.adb.org

<sup>&</sup>lt;sup>31</sup>July 13, 2011, Banks won't deregulate savings acct rate, The Indian Express.

<sup>&</sup>lt;sup>32</sup>Source: Reserve Bank of India, www.rbi.org.in

<sup>&</sup>lt;sup>33</sup>May 3, 2011, Banks see margin woes ahead on RBI double whammy, Reuters.

<sup>&</sup>lt;sup>34</sup>July 31, 2011, Banks to pass on rate hikes; see pressure on assets, Reuters.

<sup>&</sup>lt;sup>35</sup>June 14, 2011, Financial Stability Report, June 2011, Reserve Bank of India, www.rbi.org.in

<sup>&</sup>lt;sup>36</sup>June 14, 2011, Rising interest rates to hurt banks' profit: RBI, Business Standard.

<sup>&</sup>lt;sup>37</sup>June 16, 2011, Mid-Quarter Monetary Policy Review: June 2011, Reserve Bank of India, www.rbi.org.in

<sup>&</sup>lt;sup>38</sup>August 2, 2011, Banks in BRICs Signaling Credit Crisis With Loans Showing Increasing Risks, Bloomberg.

<sup>&</sup>lt;sup>39</sup>Benchmark Prime Lending Rate – State Bank of India Advance Rate, Source: Bloomberg, Indian Banks Association.

# Western Europe

#### **A** Overview

During the second quarter of 2011, the European economy's performance remained sluggish and uneven across the region amid a multitude of challenges including the deepening sovereign debt crisis, vulnerable financial stability, persistent inflation and a subdued labor market. However, many of the major market indices were range-bound during this period, reflecting the stable outlook of market participants. As a result, the aggregate 1-year PD of European firms stayed in a narrow range as it had in the previous quarter.



For Western Europe, we first look at the critical

banking sector before turning to economy specific analyses. Germany is taken as an example of a 'core' Eurozone country, and Spain, Greece and Portugal are taken as examples of 'peripheral' Eurozone countries currently being questioned on sovereign debt issues.

## **B** Banking sector

Under the combination of reduced funding sources and liquidity, and weakened profitability, European banks experienced a worsening in credit conditions during the second quarter of 2011, with the aggregate 1-year PD of the banking sector increased slightly during the period.

## B.1 Reduced funding sources and liquidity

During the second quarter of this year, the European banking sector continued to experience funding and liquidity challenges to different degrees between the debt-laden and fiscally-sound economies. More specifically, the banks headquartered in the debt-stricken peripheral countries were further confronted with funding difficulties.<sup>40</sup> For one, these banks were affected by a shrinking deposit funding base amid the deepening debt crisis in their countries.<sup>41</sup> Furthermore, their access to the financial markets remained virtually blocked due to heightened counterparty risk concerns. As a result, these banks were forced to rely on the European Central Bank (ECB) for liquidity.<sup>42</sup> However, due to the ECB's toughened stance in monetary policy, the cost of funding for these banks rose and their profitability was further eroded.

Consequently, some European banks were forced to look for funding alternatives, resulting in a revival of covered bond issues. Covered bonds are essentially a form of collateralization backed by banks' assets and therefore are often perceived as a secured funding source for these European banks. However, if a bank does default, this increases the vulnerability of unsecured creditors as a higher percentage of the bank's assets are held to back the covered bonds.<sup>43</sup>

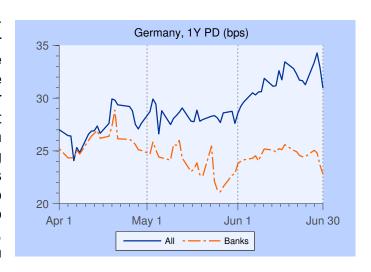
## **B.2** Weakened profitability

With the ECB raising the marginal lending rate 25bps to 2% on April 13, the profit margins of banks in the weaker debt-ridden European countries were placed under pressure.<sup>44</sup> Banks from other European countries that were able to obtain liquidity from the wholesale market also experienced increases in their funding costs. The jump in the funding cost was evident in the rise in 3 month Euribor rate and the volatile Eonia rate during the quarter.

As for retail funding, European banks' deposit rates paid to non-financial corporates and house-holds increased for the most part, adding further pressures to the cost of funding for banks. 45,46,47

## **C** Germany

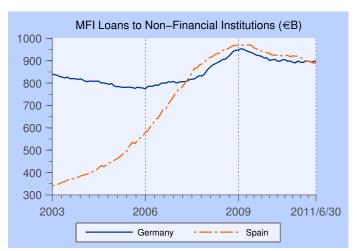
Following Germany's robust economic performance in the first quarter, the second quarter saw momentum easing slightly with some moderation in its GDP growth rate. The second quarter registered a 2.7% year-on-year GDP growth, compared to 4.7% in the first quarter. Germany's PMI declined to 54.6 in June from a high of 62.7 in February, signalling a slowdown in the expansion of Germany's manufacturing activities.<sup>48</sup> There was no growth in loan supply from German MFIs to non-financial corporations during the quarter, further putting pressure on credit conditions in Germany.



Against this backdrop, Germany's overall credit conditions worsened slightly, with its aggregate 1-year PD on a slight upward trend.

#### Banking sector

With German banks facing higher funding cost pressures as a result of higher Euribor rate and increased deposit rates,<sup>49</sup> German banks demonstrated volatility in its 1-year PD. However, the banks remained resilient in the second quarter, with its 1-year PD consistently lower than that of the, for example, French banking sector.



Source: European Central Bank

## D Spain

The second quarter saw a decline in the loan supply for Spanish non-financial institutions from Spanish MFIs. Meanwhile, negative investor sentiment in Spanish treasury markets pushed Spain's costs of borrowing to record highs. Facing shrinking credit supply and increased costs of borrowing, credit conditions in Spain's overall economy deteriorated, with its 1-year PD showing volatile movement during the quarter.

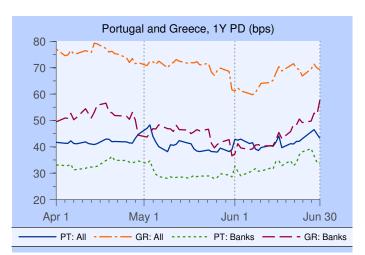


#### **Banking sector**

In Spain, local banks were vigorously competing for retail funding to reduce reliance on the wholesale market. To attain this goal, they have significantly increased the deposit rates for their retail customers to a level that may outweigh the return from their lending business. <sup>50</sup> Meanwhile, an increase in non-performing loans and lack of loan growth on Spanish banks' profitability continued to weigh on credit conditions. <sup>51</sup> The 1-year aggregate PD of Spanish banking sector exhibited high volatility in a range around 30bps.

## **E** Greece and Portugal

In Greece and Portugal, consumer demand was subdued by high unemployment rates and rising inflation, exerting pressure on these countries' already weakened economies. 52,53 This was further aggravated by the deleveraging policy of the local banks in Greece and Portugal in their attempt to reduce their loan to deposit ratio and reliance on ECB funding. 54 Loans extended by Greek MFIs continued to decrease while loan growth for Portuguese MFIs was stagnant. On the back of these factors, credit quality of the public firms in Greece and Portugal deteriorated in



the second quarter, with the 1-year aggregate PD of Greece and Portugal showing relatively high volatility in the second quarter.

### **Banking sector**

As their countries' debt crises intensified, the Greek and Portuguese banking sector was further affected by the lack of market funding and the high cost of borrowing. Adding further pressures on the Greek banks is the increasing likelihood of a Greek sovereign debt restructuring and its potential adverse impacts on the banks' government debt portfolios. The deterioration in credit conditions for the Greek banking sector was pronounced as indicated by the high volatility of its 1-year PD during the quarter and the fact that its PD was higher than other countries' banking sectors. Note that the Agricultural Bank of Greece was excluded from the Greek banking sector's PD graph. This is



Source: European Central Bank

because volatility in its market cap due to a rights issue announcement in early June caused a spike in PD that was affecting the aggregate for the whole sector.

The 1-year PD of the Portuguese banking sector, although more stable, stayed largely above 30bps, higher than that of the Spanish banking sector.

<sup>&</sup>lt;sup>40</sup>April 7, 2011, Spanish, Irish banks most vulnerable to ECB hikes, Reuters.

<sup>&</sup>lt;sup>41</sup>August 9, 2011, Greek bank deposits drop 1.9 pct m/m in June- cenbank, Reuters.

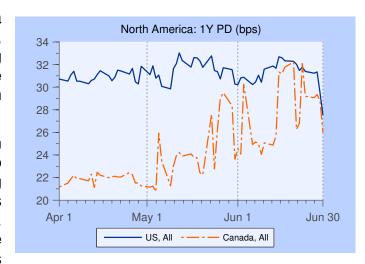
- <sup>42</sup>July 26, 2011, How does sovereign risk affect bank funding conditions? What can policymakers do?, VoxEU.org,.
- <sup>43</sup>June 15, 2011, Rising use of covered bonds by banks triggers warning, Financial Times.
- <sup>44</sup>April 7, 2011, Spanish, Irish banks most vulnerable to ECB hikes, Reuters.
- <sup>45</sup>June 3, 2011, Euro Area MFI interest rate statistics, April 2011, European Central Bank, www.ecb.int
- <sup>46</sup>July 6, 2011, Euro Area MFI interest rate statistics, May 2011, European Central Bank, www.ecb.int
- <sup>47</sup>August 2, 2011, Euro Area MFI interest rate statistics, June 2011, European Central Bank, www.ecb.int
- <sup>48</sup>Germany Manufacturing PMI, Source: Bloomberg, Markit.
- <sup>49</sup>Source: Statistical Data Warehouse, European Central Bank, http://sdw.ecb.europa.eu/
- <sup>50</sup>May 12, 2011, The IMF considers unsustainable war for deposits in Spain, EconomicsNewspaper.com.
- <sup>51</sup>July 22, 2011, Spanish banks H1 hit by provisions, funding rates, Reuters.
- <sup>52</sup>May 18, 2011, Portugal's Unemployment Rate Increases as Economy Shrinks, Bloomberg Businessweek.
- <sup>53</sup>Aug 12, 2011, Greek recession slows in Q2 but austerity hurting, Reuters.
- <sup>54</sup>June 7, 2011, Bank Of Portugal Asks Banks Not to Slash Lending, The Wall Street Journal.

## **North America**

#### A Overview

Overall credit conditions in North America showed a mixed picture in the second quarter, with the US's 1-year aggregate PD decreasing moderately and Canada's 1-year aggregate PD gradually rising and showing fairly high volatility.

Common positive factors were in play in both countries, such as steady credit growth to support the economy. However, factors hurting both economies included high energy prices that weighed on the consumer spending. The WTI crude oil stayed consistently above \$90/bbl in the quarter having eased after its



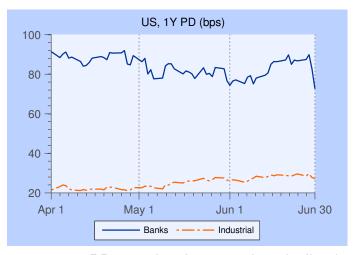
peak in April. Consumer spending in both countries was subdued in the quarter, showing a slow down in the U.S. while experiencing weak growth in Canada.<sup>55</sup>

Nevertheless, differences remained. Although inflation curbed consumer spending, on an overall basis the US economy proved resilient and maintained a promising credit trend, likely attributable to its stimulative monetary policy still in place. Canada, on the other hand suffered deterioration in its credit conditions, largely due to the sensitivity of its commodity-reliant economy to a global economic slowdown in the quarter.<sup>56</sup>

In spite of all these, on an overall basis credit conditions in Canada were better than those of the US, with Canada's aggregate 1-year PD lower than that of the US in the quarter.

## B US

There was a range of challenges facing US economy during the seocnd quarter of this year, such as a persistently high unemployment rate, fiscal tightening,<sup>57</sup> rising PPI and continued weakening in the housing market. In addition, a possible US sovereign default was unresolved during the period and the quantitative easing program ended as scheduled in June. Nevertheless, the treasury rate and interbank rate remained at low levels for the quarter, and US corporate profits continued to rise, partly helped by the declining US dollar.<sup>58</sup> Under these factors, overall credit



conditions improved slightly, with the US's aggregate 1-year PD experiencing a modest decline in the second quarter.

## **B.1** Banking sector

While the US housing market continued to show signs of weakness in the second quarter, reinforcing concerns about negative home equity, several positive factors contributed to the improvement in credit conditions of the US banking sector.

Firstly, credit growth was steady, accompanied by increased loan demand and improvement in credit quality.<sup>59</sup> The delinquency rate of the total loans and leases at US commercial banks were on a gradual decline since its peak of 7.37% reached in the first quarter of 2010, dropping to 6.16% as of the first quarter of 2011. Correspondingly, US banks' charge-off rate lowered to 1.98% in the first quarter, compared to its peak of 3.05% reached in the fourth quarter of 2009.<sup>60</sup>

Secondly, the Fed's quantitative easing program continued to support a low-cost environment for American banks. The effective Fed Fund rate remained at historically low levels, staying below 0.12% for the second quarter.

Overall, the US banking sector saw a noticeable improvement in credit conditions with its 1-year PD decreasing noticeably.

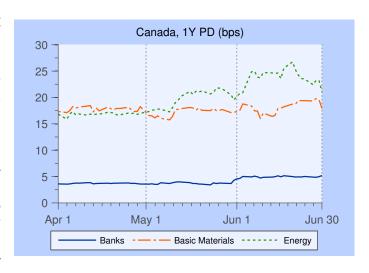
#### **B.2** Industrial sector

The continuation of weak consumer spending growth<sup>61</sup> combined with rising PPI has led to a noticeable slowdown in the US industrial sector in the second quarter. Although the US PMI stayed above 50<sup>62</sup> throughout the second quarter, signaling expansion of the manufacturing sector, it has been in a significant decline since the first quarter. Against this backdrop, credit conditions for the US industrial sector suffered a notable decline, with its 1-year PD steadily increasing throughout the quarter.

#### C Canada

There were positive factors supporting credit conditions in Canada. During the second quarter, lending conditions and credit availability both saw noticeable improvements while the cost of funding for Canadian business continued to be low. <sup>63</sup>

However, under the influence of a global economic slowdown the second quarter saw a softened economic performance for Canada.<sup>64</sup> Its month-on-month GDP sustained a 0% and a -0.3% growth rate in April and May respectively.<sup>†</sup> Besides the factors mentioned above, the appreciation of the Canadian dollar



and the supply chain disruptions caused by Japan's March earthquake also contributed to a worsening in Canadian firms' overall credit conditions in the second-quarter.

## C.1 Banking sector

Canada has a mature, sophisticated and well-managed financial system.<sup>65</sup> It emerged little affected from the subprime mortgage crisis that occurred in the US, due to its relatively healthy housing market and prudent financial regulations.<sup>66</sup> The second quarter continued to see robustness in the Canadian banking sector with stable credit conditions. The sector's 1-year PD was within a stable low range.

A few factors underpinning the strength of the Canadian banking sector include: house prices remaining stable in the quarter,<sup>67</sup> laying a solid foundation for banks' mortgage loan asset quality; strong credit growth, contributing to banks' loan revenue;<sup>68</sup> and stable and low costs of wholesale funding for Canadian banks, supporting banks' profitability.<sup>69</sup>

<sup>&</sup>lt;sup>†</sup>June GDP data was not available at the time of this report.

#### C.2 Basic materials and energy sector

The stabilization of commodity prices in the second quarter<sup>70</sup> was associated with some deterioration in the credit conditions for Canada's basic materials and energy sector, although the worsening in the energy sector was more pronounced than the basic materials sector. The 1-year PD of Canada's energy sector experienced a noticeable increase, which roughly coincided with the decline in the oil prices that started around the end of April. Meanwhile, the 1-year PD of Canada's basic materials sector exhibited some volatility although at a lesser degree. Its PD also showed a marginal upward trend from around the end of April.

<sup>&</sup>lt;sup>55</sup>July 20, 2011, Monetary Policy Report - July 2011, Bank of Canada, www.bankofcanada.ca

<sup>&</sup>lt;sup>56</sup>June 17, 2011, Mild Slowdown of the Global Expansion, and Increasing Risks, International Monetary Fund, www.imf.org

<sup>&</sup>lt;sup>57</sup>April 14, 2011, U.S. House passes fiscal 2011 spending-cut bill, Reuters.

<sup>&</sup>lt;sup>58</sup>April 21, 2011, WRAPUP 1-Weak dollar helps earnings, but little hiring yet, Reuters.

<sup>&</sup>lt;sup>59</sup>July 27, 2011, The Beige Book, The Federal Reserve of the United States, www.federalreserve.gov

<sup>&</sup>lt;sup>60</sup>Source: The Federal Reserve of the United States, www.federalreserve.gov

<sup>&</sup>lt;sup>61</sup>US Personal Consumption Expenditures, Nominal Dollars, MoM change (seasonally adjusted), Source: Bloomberg, Bureau of Economic Analysis (US).

<sup>&</sup>lt;sup>62</sup>US Chicago Purchasing Managers Index (seasonally adjusted), Source: Bloomberg, Kingsbury International, Ltd..

<sup>63</sup> Source: Bank of Canada, www.bankofcanada.ca

<sup>&</sup>lt;sup>64</sup>Aug, 19, 2011, Loonie stays flat as markets continue fall, The Globe and Mail.

<sup>&</sup>lt;sup>65</sup>June 20, 2011, Minister of Finance Highlights Resilience and Stability of Canada's Financial System in Address to Global Insurance Leaders, Department of Finance, Canada.

<sup>&</sup>lt;sup>66</sup>January 24, 2011, Tougher mortgage rules 'credit positive' for Canadian banks: Moody's, Financial Post.

<sup>&</sup>lt;sup>67</sup>STCA Canada New Housing Price MoM, Source: Bloomberg, Statistics Canada.

<sup>&</sup>lt;sup>68</sup>July 20, 2011, Monetary Policy Report - July 2011, Bank of Canada, www.bankofcanada.ca

<sup>&</sup>lt;sup>69</sup>Source: Bank of Canada, www.bankofcanada.ca

<sup>&</sup>lt;sup>70</sup>June 17, 2011, Mild Slowdown of the Global Expansion, and Increasing Risks, International Monetary Fund, www.imf.org

# **Appendices**

The appendices provide readers with a comprehensive overview of various outputs that are produced by RMI's operational probability of default (PD) system. While the PD system provides default forecasts at horizons ranging from one month to two years, here only one year PDs are reported. In addition to the PD produced by the RMI 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 1-year aggregate PD where the aggregations are by region, economy and sector. These are given as month-end data, and are based on RMI's default forecast model calibrated on July 6, 2011, using data up to June 30. For a detailed description of RMI'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 mean and standard deviation of PDs for firms within ten industry sectors at the end of Q1 and Q2 in 2011. Note that the statistics are for firms that have a PD at both dates so that consistent comparisons can be made. The mean and standard deviation of the difference of individual PD is also given. The industry sectors are based on the Level I Bloomberg Industry Classification.

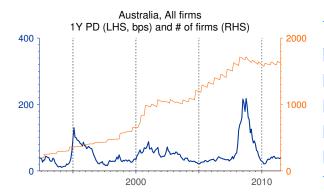
Appendix B gives 1-year aggregate PD by the four regions of Asia-Pacific developed, Asia-Pacific emerging, Western Europe and North America. The top two graphs of each regions show the time series of the distribition of Probability of Default implied Ratings (PDiR). The PDiR are described in the last section of Appendix D. The different color areas in the graph indicate different PDiR classes. From the bottom, the blue area indicates the percentage of CCC/C firms, the bottommost white area indicates B firms, the orange area indicates BB firms, the middle white area indicates BBB firms, the green area indicates A firms, the top-most white area indicates AA firms, and the maroon area indicates AAA firms.

The bottom 12 graphs in each region show the time series of 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 count of firms with PD in thin orange on the right axis.

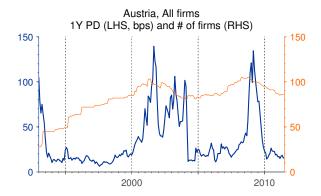
Appendix C provides common macroeconomic, corporate credit and sovereign risk indicators for each economy along with the 1-year aggregate PD for financial and non-financial firms. The graphs on the left give historical context to the values, and the table on the right give the data from the previous 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 June 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, along with a description of the PDiR.

# A PD by economies



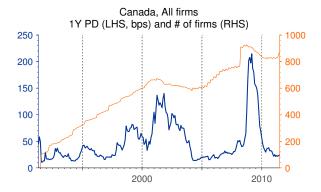
Australia		201	1Q1	201	1Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	166	46.3	64.2	41.7	66.0	-4.6	23.9
Basic Materials	653	23.2	49.1	25.1	47.8	1.9	36.8
Communications	91	38.7	48.4	39.3	65.6	0.6	40.7
Consumer Cyclical	91	61.0	205.9	68.4	260.4	7.5	79.9
Consumer Non-cyclical	209	51.3	150.5	48.2	133.0	-3.1	81.0
Diversified	9	22.5	22.0	15.3	14.6	-7.3	12.4
Energy	206	29.0	43.9	35.5	90.7	6.5	75.9
Industrial	138	50.9	68.1	49.0	73.5	-1.9	52.2
Technology	50	85.6	145.6	63.9	94.2	-21.7	87.1
Utilities	10	276.9	635.3	318.0	839.9	41.2	232.9



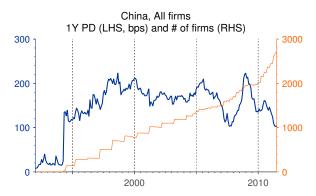
Austria		201	l 1Q1	201	2011Q2		2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	25	13.3	11.3	13.8	21.2	0.6	22.2
Basic Materials	4	4.2	1.6	3.0	1.2	-1.2	0.9
Communications	4	4.8	2.7	5.0	2.6	0.2	1.7
Consumer Cyclical	12	10.7	11.4	8.6	7.4	-2.1	4.6
Consumer Non-cyclical	7	17.1	10.1	26.3	28.4	9.2	26.4
Energy	4	3.5	1.6	3.3	1.1	-0.3	1.0
Industrial	19	10.6	13.8	10.9	16.3	0.3	5.1
Technology	7	93.4	151.7	66.6	106.5	-26.9	45.6
Utilities	3	3.2	0.9	2.7	0.8	-0.5	0.4



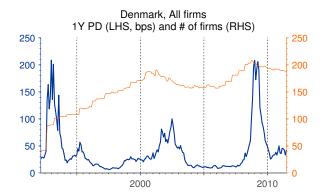
Dalairus		001	1101	001	1100	Q2-Q1		
Belgium		20	2011Q1		1Q2	QZ-Q1		
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	29	9.1	16.6	13.4	27.2	4.3	11.0	
Basic Materials	8	4.5	2.7	5.9	6.4	1.3	4.8	
Communications	9	24.5	32.3	44.9	75.0	20.4	44.4	
Consumer Cyclical	6	6.6	7.2	12.5	16.8	6.0	9.8	
Consumer Non-cyclical	28	12.9	24.4	18.5	43.1	5.6	22.5	
Diversified	8	32.3	79.4	31.4	74.4	-0.9	6.2	
Energy	2	72.6	0.3	104.1	1.8	31.5	1.4	
Industrial	26	12.5	18.0	14.7	15.7	2.2	11.2	
Technology	8	9.1	5.9	13.6	11.5	4.6	6.6	
Utilities	2	2.3	1.9	2.8	2.5	0.5	0.6	



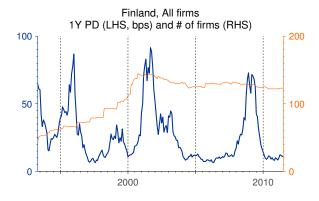
Canada		201	11Q1	201	2011Q2		2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	103	14.4	53.7	15.0	53.0	0.6	7.5
Basic Materials	250	16.5	83.8	17.7	81.6	1.2	26.4
Communications	52	19.1	47.6	29.6	84.4	10.4	53.6
Consumer Cyclical	58	17.3	26.9	58.9	318.2	41.6	300.6
Consumer Non-cyclical	96	34.5	74.8	45.2	146.2	10.6	106.0
Diversified	6	26.9	49.6	20.8	38.1	-6.1	11.7
Energy	145	14.5	31.3	19.9	61.5	5.4	38.8
Industrial	66	25.7	59.8	26.5	53.4	0.8	23.7
Technology	30	44.6	107.3	37.6	94.4	-7.0	35.0
Utilities	9	9.7	15.5	5.5	8.4	-4.2	8.7



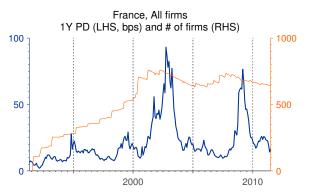
China		2011Q1		201	11Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	188	131.0	226.6	117.4	229.4	-13.6	85.2
Basic Materials	319	133.3	137.2	122.6	117.8	-10.7	52.6
Communications	141	67.0	98.3	69.0	84.7	2.0	54.7
Consumer Cyclical	454	116.8	125.9	109.7	109.4	-7.1	49.0
Consumer Non-cyclical	433	107.6	188.1	103.1	167.2	-4.5	61.2
Diversified	51	168.1	100.1	147.9	80.5	-20.1	40.4
Energy	75	62.0	77.2	77.4	123.0	15.4	101.5
Industrial	711	102.4	133.8	104.6	124.8	2.3	61.7
Technology	139	73.6	118.5	82.2	142.3	8.6	45.0
Utilities	74	172.7	119.2	152.2	102.9	-20.5	36.0



Denmark		201	I1Q1	201	1Q2	Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	72	48.3	125.2	62.4	125.3	14.1	90.4
Basic Materials	2	5.3	4.8	7.0	2.5	1.7	2.3
Communications	12	12.8	16.4	13.9	19.0	1.2	3.5
Consumer Cyclical	19	21.9	21.0	23.8	23.8	1.9	13.2
Consumer Non-cyclical	25	10.8	28.8	9.6	17.6	-1.2	26.5
Diversified	2	6.5	3.2	6.7	4.7	0.2	1.4
Energy	2	101.3	104.9	76.6	82.5	-24.7	22.4
Industrial	40	37.1	100.7	43.5	99.8	6.4	11.3
Technology	13	30.9	31.2	47.9	79.6	17.0	52.2



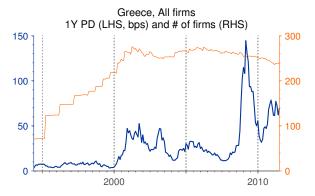
Finland		201	11Q1	201	1Q2	Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	15	13.8	13.1	11.9	11.3	-1.9	2.8
Basic Materials	10	7.0	5.7	4.5	3.9	-2.5	4.8
Communications	15	10.7	13.8	8.9	10.6	-1.8	4.6
Consumer Cyclical	10	23.2	38.1	24.1	43.3	0.9	12.7
Consumer Non-cyclical	16	12.6	18.1	11.7	12.4	-1.0	6.9
Diversified	1	10.1	-	5.0	_	-5.0	-
Energy	1	4.0	-	7.9	-	3.9	-
Industrial	38	7.3	7.7	7.0	7.2	-0.3	2.5
Technology	16	21.0	20.0	17.5	21.4	-3.6	10.4
Utilities	1	0.7	_	1.1	_	0.4	_



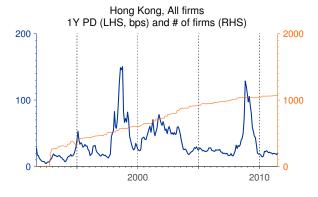
France		201	2011Q1		11Q2	Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	110	33.7	178.1	21.6	79.2	-12.1	109.4	
Basic Materials	18	9.6	10.2	7.9	11.2	-1.6	3.4	
Communications	78	35.9	189.7	13.4	26.1	-22.5	167.1	
Consumer Cyclical	86	18.6	34.6	30.0	153.1	11.5	133.8	
Consumer Non-cyclical	118	9.2	14.0	7.6	13.1	-1.5	8.5	
Diversified	10	13.5	17.3	10.5	13.3	-3.0	4.5	
Energy	17	14.4	14.2	23.8	42.8	9.4	38.7	
Industrial	106	12.9	26.0	11.5	25.2	-1.4	7.6	
Technology	85	22.4	53.8	21.7	85.2	-0.7	41.2	
Utilities	10	15.9	34.7	11.4	25.2	-4.4	9.5	



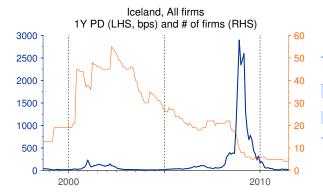
Germany		201	2011Q1		11Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	187	28.5	61.8	30.2	72.9	1.7	32.9
Basic Materials	25	8.3	13.0	7.8	12.6	-0.5	2.1
Communications	76	17.7	32.6	19.3	36.8	1.6	22.5
Consumer Cyclical	96	18.7	28.1	19.0	34.2	0.3	17.6
Consumer Non-cyclical	108	32.5	158.0	53.6	269.0	21.1	122.1
Diversified	5	18.2	12.8	33.3	33.6	15.1	27.2
Energy	23	57.3	113.8	143.3	520.7	86.0	417.7
Industrial	154	27.7	86.3	34.5	123.3	6.8	86.1
Technology	85	16.3	32.3	17.6	28.6	1.3	16.0
Utilities	10	8.7	14.2	11.4	24.3	2.7	10.9



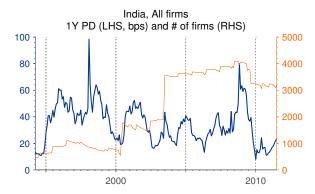
Greece		2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	26	125.2	432.2	88.7	253.2	-36.5	188.6
Basic Materials	10	37.5	34.1	26.2	34.5	-11.3	18.6
Communications	17	67.9	54.2	71.6	113.7	3.7	98.0
Consumer Cyclical	48	59.2	79.5	41.8	47.9	-17.4	40.8
Consumer Non-cyclical	38	63.1	115.6	64.2	121.2	1.1	125.9
Diversified	2	64.9	80.1	28.2	33.2	-36.7	46.9
Energy	5	16.1	14.7	9.2	7.0	-6.9	8.0
Industrial	75	93.7	170.9	102.8	274.0	9.1	172.6
Technology	14	77.4	73.8	45.2	45.3	-32.3	37.8
Utilities	3	5.1	2.3	4.8	2.9	-0.3	0.8



Hong Kong		201	2011Q1		1Q2	Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	210	15.0	15.7	15.5	19.7	0.5	11.6	
Basic Materials	57	21.1	16.4	26.5	34.1	5.5	33.2	
Communications	81	20.1	26.5	19.3	36.6	-0.7	19.3	
Consumer Cyclical	234	19.2	24.9	20.0	35.4	8.0	27.9	
Consumer Non-cyclical	125	20.4	22.2	21.6	29.6	1.2	16.1	
Diversified	71	18.0	16.3	16.3	15.1	-1.8	8.6	
Energy	35	23.9	18.9	27.7	27.8	3.8	20.9	
Industrial	180	20.6	18.1	22.5	41.6	1.9	35.3	
Technology	63	26.8	34.1	30.5	50.0	3.6	29.2	
Utilities	11	11.7	10.1	9.9	9.2	-1.8	3.8	



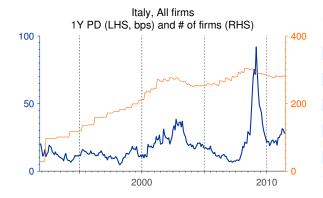
Iceland		2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Consumer Cyclical	1	14.5	_	14.4	_	-0.2	_
Consumer Non-cyclical	1	3.8	_	3.9	_	0.1	_
Industrial	1	3.8	_	4.0	_	0.3	-
Technology	1	77.9	_	68.8	_	-9.2	_



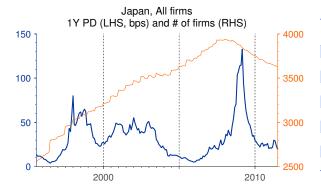
India		201	11Q1	201	11Q2	Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	436	16.6	21.3	23.0	28.7	6.3	13.7
Basic Materials	438	17.9	16.9	24.5	24.1	6.6	12.2
Communications	117	18.5	39.9	24.0	49.0	5.6	15.1
Consumer Cyclical	612	18.2	17.9	24.7	22.9	6.5	10.1
Consumer Non-cyclical	522	19.3	27.3	24.9	30.5	5.5	14.0
Diversified	25	16.3	14.1	19.4	16.5	3.1	7.4
Energy	50	11.6	10.8	14.0	14.4	2.4	10.9
Industrial	639	16.8	15.3	22.6	19.4	5.8	9.5
Technology	190	17.1	30.6	21.0	25.5	4.0	28.1
Utilities	32	6.3	5.1	8.8	7.4	2.5	3.2



Indonesia		2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	98	43.4	38.6	44.6	46.3	1.2	19.5
Basic Materials	41	41.0	41.7	30.6	33.0	-10.5	23.9
Communications	21	30.0	20.8	27.1	19.9	-2.9	20.0
Consumer Cyclical	58	25.2	19.5	24.3	26.4	-0.9	15.2
Consumer Non-cyclical	56	25.5	34.9	19.5	21.6	-5.9	19.0
Diversified	1	32.2	-	29.3	-	-2.9	_
Energy	24	55.8	46.2	38.3	35.4	-17.5	27.6
Industrial	50	35.5	42.7	31.2	32.0	-4.4	21.5
Technology	5	19.1	10.8	14.1	8.4	-5.0	4.0
Utilities	2	10.6	14.5	9.2	5.6	-1.4	8.9



Italy		2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	59	36.7	73.1	32.8	51.8	-3.9	32.1
Basic Materials	9	20.5	17.4	20.3	21.3	-0.2	9.6
Communications	32	17.5	22.6	13.1	15.9	-4.4	9.5
Consumer Cyclical	45	19.0	24.1	14.6	17.7	-4.5	12.4
Consumer Non-cyclical	33	17.8	27.3	16.3	29.5	-1.5	14.8
Diversified	3	10.2	4.1	5.8	5.7	-4.4	2.3
Energy	15	19.0	28.9	17.9	24.1	-1.0	13.2
Industrial	57	64.1	363.0	60.2	334.3	-3.9	37.6
Technology	13	28.1	30.4	19.4	23.4	-8.7	14.7
Utilities	14	7.3	6.3	7.1	8.6	-0.2	3.6



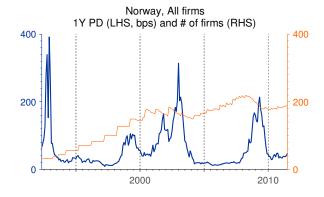
Japan		2011Q1		201	11Q2	Q2	!-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	329	51.5	103.9	48.4	119.4	-3.0	71.1
Basic Materials	244	15.4	60.2	12.9	47.7	-2.5	14.9
Communications	252	10.4	27.5	9.0	24.0	-1.3	15.2
Consumer Cyclical	908	24.9	106.2	18.9	77.6	-6.1	73.8
Consumer Non-cyclical	583	20.1	199.6	13.5	62.1	-6.6	186.3
Diversified	2	10.5	3.7	13.2	9.1	2.7	5.4
Energy	15	140.4	382.9	32.7	71.7	-107.6	313.0
Industrial	1008	15.5	55.2	17.3	112.3	1.8	102.2
Technology	253	30.0	218.0	24.4	227.2	-5.6	71.3
Utilities	24	5.8	6.9	10.7	25.1	4.9	19.9



Malaysia		201	11Q1	201	11Q2	Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	130	41.4	52.6	40.1	57.4	-1.3	22.4
Basic Materials	69	65.2	83.7	65.0	78.8	-0.2	19.5
Communications	34	42.7	54.6	34.4	45.7	-8.3	21.5
Consumer Cyclical	118	57.1	70.4	62.1	90.7	4.9	39.7
Consumer Non-cyclical	151	39.5	53.0	41.8	65.4	2.3	26.3
Diversified	25	30.8	28.7	29.6	27.6	-1.1	6.5
Energy	22	51.5	104.4	58.6	128.1	7.1	29.0
Industrial	280	65.1	83.8	66.7	95.6	1.6	54.2
Technology	62	68.7	94.9	66.6	92.6	-2.0	18.8
Utilities	6	3.8	3.9	3.6	3.9	-0.2	0.8



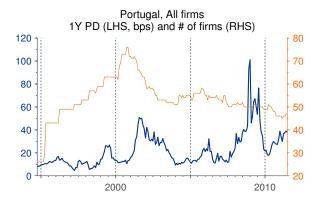
Netherlands		201	2011Q1		11Q2	Q2	-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	17	17.2	14.6	17.4	20.3	0.2	10.6
Basic Materials	6	35.4	73.8	65.3	136.0	29.9	62.3
Communications	9	14.0	24.0	14.8	23.7	0.8	14.9
Consumer Cyclical	12	31.4	73.6	44.2	130.4	12.8	57.6
Consumer Non-cyclical	27	21.7	40.6	25.9	48.4	4.2	33.6
Diversified	4	944.0	1836.1	662.7	1226.9	-281.3	611.9
Energy	4	3.0	2.3	3.3	3.3	0.3	1.1
Industrial	32	8.9	8.9	10.6	15.7	1.6	15.3
Technology	14	13.8	16.0	16.0	19.5	2.2	8.3



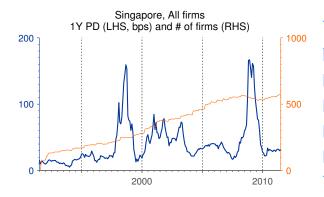
Norway		201	2011Q1		2011Q2		2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	36	46.2	38.1	45.3	47.2	-0.9	15.9
Basic Materials	6	18.6	13.7	30.6	32.9	12.0	25.2
Communications	9	9.8	7.1	10.3	8.2	0.5	4.3
Consumer Cyclical	7	13.8	9.7	11.3	6.5	-2.5	4.6
Consumer Non-cyclical	35	41.6	98.4	38.9	99.2	-2.8	105.9
Diversified	1	5.1	_	1.4	_	-3.7	_
Energy	25	48.6	71.2	100.0	299.6	51.4	292.8
Industrial	49	41.5	74.0	48.0	113.6	6.5	53.5
Technology	15	30.3	51.8	45.1	84.0	14.7	34.2
Utilities	2	3.8	2.5	3.2	1.4	-0.6	1.1



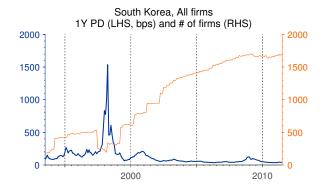
Philippines		201	I1Q1	2011Q2		Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	69	58.6	65.8	48.0	54.7	-10.5	28.4
Basic Materials	21	35.5	43.8	25.4	31.6	-10.1	14.3
Communications	13	43.3	52.4	33.8	38.7	-9.5	16.3
Consumer Cyclical	15	92.8	172.9	88.6	137.3	-4.2	64.9
Consumer Non-cyclical	27	57.6	82.4	57.5	77.3	-0.1	28.9
Diversified	16	35.1	41.5	28.4	41.1	-6.7	13.3
Energy	12	15.1	17.0	12.0	12.8	-3.1	7.5
Industrial	13	33.6	30.1	32.4	31.3	-1.1	9.7
Technology	1	41.0	-	11.3	-	-29.7	-
Utilities	10	32.9	21.7	18.4	11.1	-14.6	13.1



Portugal		2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	4	29.7	10.4	30.7	20.5	1.0	10.7
Basic Materials	7	24.9	27.0	22.1	25.1	-2.8	3.3
Communications	7	26.8	28.6	46.0	48.9	19.2	33.5
Consumer Cyclical	8	59.3	50.0	48.4	35.8	-10.9	23.4
Consumer Non-cyclical	5	64.7	86.1	66.2	91.7	1.5	6.7
Diversified	2	30.7	7.8	21.8	7.4	-8.9	15.2
Energy	1	1.1	-	0.6	-	-0.5	-
Industrial	8	31.2	21.0	33.9	19.2	2.7	22.3
Technology	2	41.4	44.8	53.6	65.1	12.2	20.2
Utilities	2	4.0	0.2	2.6	1.5	-1.4	1.7



Singapore		201	11Q1	201	2011Q2		2-Q1
3-4	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	89	21.8	25.3	21.6	26.0	-0.2	11.2
Basic Materials	30	44.7	36.5	46.3	38.3	1.6	20.5
Communications	29	45.9	48.0	45.7	51.5	-0.3	22.2
Consumer Cyclical	81	30.3	32.3	28.2	30.7	-2.1	23.2
Consumer Non-cyclical	72	23.1	21.4	24.7	32.5	1.6	19.7
Diversified	11	38.4	65.2	42.1	69.8	3.7	12.2
Energy	29	34.1	24.8	38.2	36.5	4.1	26.1
Industrial	187	32.1	26.9	35.1	45.7	3.1	32.8
Technology	31	43.8	52.4	34.9	36.4	-8.9	20.8
Utilities	1	1.3	_	0.9	_	-0.3	_



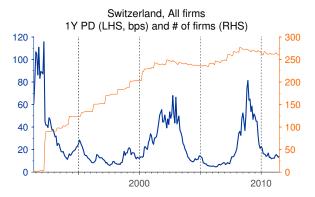
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South Korea		20	11Q1	201	1Q2	Q2	2-Q1
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	113	37.6	29.9	42.2	39.9	4.6	23.3
Basic Materials	184	39.6	57.5	39.0	46.0	-0.5	23.0
Communications	169	34.5	63.6	39.0	73.7	4.5	22.3
Consumer Cyclical	259	34.8	42.9	37.5	43.7	2.7	21.3
Consumer Non-cyclical	218	29.9	54.2	31.0	52.6	1.1	14.2
Diversified	25	14.7	18.2	14.5	19.3	-0.1	5.9
Energy	9	28.2	22.9	30.6	21.0	2.5	7.1
Industrial	498	44.6	70.3	47.1	88.1	2.5	33.4
Technology	172	41.0	70.7	48.9	82.7	7.9	29.5
Utilities	17	23.7	15.6	27.4	17.6	3.7	9.3



Spain		201	I1Q1	201	1Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	33	48.4	88.4	44.5	79.4	-3.9	20.0
Basic Materials	10	12.8	13.7	8.8	10.7	-3.9	5.2
Communications	10	37.2	89.0	34.7	89.1	-2.5	6.6
Consumer Cyclical	12	11.4	11.1	6.8	6.5	-4.7	4.7
Consumer Non-cyclical	25	16.1	26.5	12.2	18.7	-3.9	13.0
Energy	5	7.0	9.5	4.2	5.9	-2.8	3.6
Industrial	26	11.0	6.5	10.5	11.1	-0.5	7.6
Technology	4	15.4	21.2	7.7	12.5	-7.7	9.1
Utilities	6	3.7	2.2	1.4	1.1	-2.4	1.1



Sweden		2011Q1		201	11Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	58	95.4	352.1	81.3	343.5	-14.1	157.2
Basic Materials	29	33.4	56.9	42.2	68.5	8.8	42.9
Communications	47	68.6	126.5	60.6	108.1	-7.9	38.9
Consumer Cyclical	53	29.5	44.9	28.2	35.4	-1.2	27.1
Consumer Non-cyclical	100	53.7	141.7	37.3	109.5	-16.4	81.5
Diversified	7	7.7	8.6	8.7	10.9	1.0	2.6
Energy	15	47.8	46.5	60.2	77.1	12.3	58.6
Industrial	100	79.0	314.0	48.6	109.3	-30.4	296.4
Technology	41	30.0	58.4	38.1	85.9	8.1	42.1
Utilities	1	7.4	_	12.2	_	4.8	_



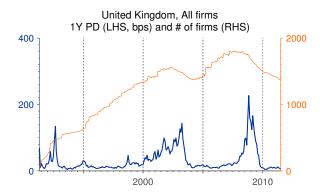
Switzerland		201	2011Q1		1Q2	Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	65	13.5	28.3	11.1	18.9	-2.4	19.8	
Basic Materials	16	12.3	21.6	9.2	16.3	-3.1	6.5	
Communications	14	49.1	158.3	23.2	61.4	-25.9	97.6	
Consumer Cyclical	24	13.9	47.4	24.2	72.5	10.3	56.0	
Consumer Non-cyclical	40	11.4	32.2	10.3	34.7	-1.2	5.7	
Diversified	3	19.6	16.8	20.6	14.2	1.0	8.0	
Energy	8	68.2	134.3	64.9	120.3	-3.3	21.3	
Industrial	68	6.7	13.3	7.0	13.8	0.3	5.4	
Technology	12	19.6	35.6	16.8	25.3	-2.9	11.4	
Utilities	10	21.0	55.7	22.8	61.9	1.8	6.2	



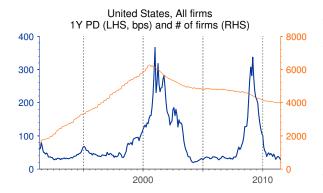
Taiwan		2011Q1		2011Q2		Q2-Q1	
Idiwaii							
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Financials	96	54.2	49.5	47.8	43.5	-6.4	40.1
Basic Materials	98	39.5	55.5	52.4	131.2	13.0	114.2
Communications	84	27.9	48.0	32.9	81.7	5.0	45.8
Consumer Cyclical	176	61.5	174.7	60.8	176.0	-0.7	35.7
Consumer Non-cyclical	125	40.1	111.2	42.5	140.9	2.4	59.7
Diversified	2	53.1	65.8	44.4	52.0	-8.7	13.9
Energy	8	37.8	84.9	75.2	135.6	37.4	53.1
Industrial	592	61.9	209.1	79.7	345.4	17.8	175.4
Technology	328	63.3	191.9	75.6	258.9	12.3	136.7
Utilities	7	11.8	20.1	9.4	13.0	-2.4	8.8



Thailand		201	2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	98	38.0	38.4	46.2	50.0	8.2	24.8	
Basic Materials	47	29.8	33.4	33.6	33.9	3.8	19.3	
Communications	33	23.5	38.1	27.3	38.4	3.9	12.9	
Consumer Cyclical	105	27.1	37.2	31.8	40.7	4.7	20.4	
Consumer Non-cyclical	67	21.6	32.7	23.5	35.1	1.9	8.4	
Diversified	2	3.0	2.8	7.1	3.1	4.1	5.9	
Energy	14	14.7	13.7	14.4	11.9	-0.3	8.7	
Industrial	92	38.3	59.4	42.5	47.9	4.2	37.7	
Technology	11	46.1	42.2	76.5	100.7	30.5	65.7	
Utilities	6	11.1	9.1	10.4	9.9	-0.7	4.4	



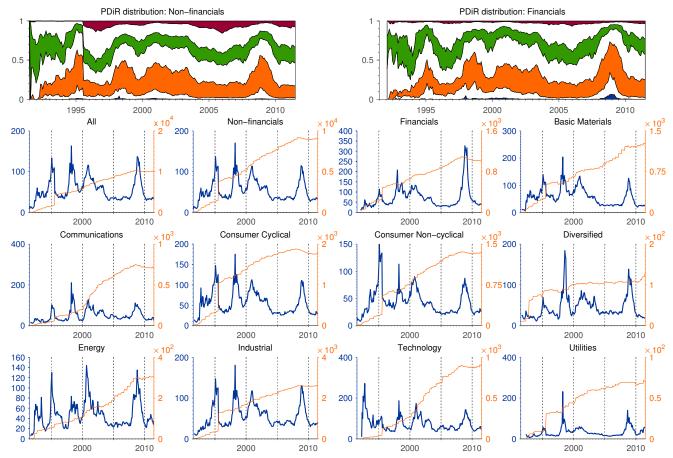
United Kingdom		201	2011Q1		2011Q2		Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	246	11.7	25.2	5.4	11.6	-6.3	18.7	
Basic Materials	114	10.7	33.3	5.6	11.8	-5.1	23.3	
Communications	129	18.0	41.8	7.9	13.0	-10.1	31.8	
Consumer Cyclical	167	14.6	33.0	7.3	19.8	-7.3	15.0	
Consumer Non-cyclical	263	10.2	14.3	4.8	10.9	-5.4	11.1	
Diversified	19	12.9	24.2	5.2	7.7	-7.7	17.3	
Energy	109	8.8	10.7	4.9	6.6	-3.9	7.1	
Industrial	192	11.4	18.9	8.2	36.0	-3.1	26.3	
Technology	106	8.8	13.3	4.6	7.5	-4.2	8.1	
Utilities	13	7.7	11.0	3.7	5.8	-4.0	6.1	



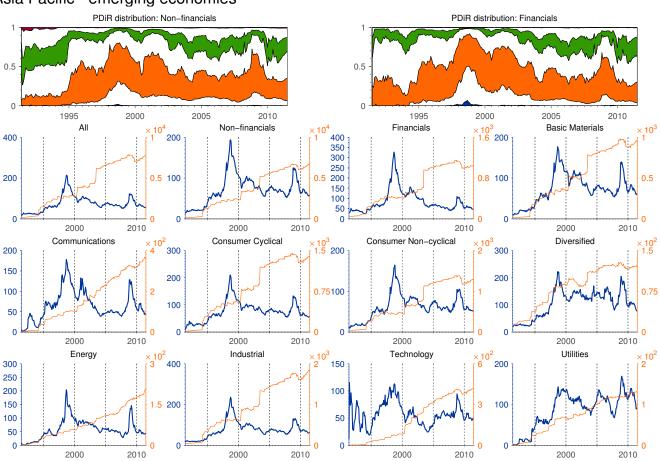
United States		201	11Q1	201	11Q2	Q2	Q2-Q1	
	#	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.	
Financials	904	62.8	195.7	49.8	157.5	-13.0	132.3	
Basic Materials	146	8.7	14.9	8.0	18.0	-0.7	10.4	
Communications	324	27.6	99.5	31.6	118.5	4.0	43.3	
Consumer Cyclical	462	22.3	67.9	18.1	58.8	-4.2	24.7	
Consumer Non-cyclical	815	21.9	110.4	20.1	128.6	-1.8	37.4	
Diversified	10	93.9	176.0	82.8	151.6	-11.2	32.3	
Energy	271	21.5	67.7	26.6	100.2	5.2	69.6	
Industrial	547	22.1	79.1	27.0	112.8	5.0	79.4	
Technology	350	10.6	23.5	10.3	26.8	-0.3	14.7	
Utilities	97	5.9	13.9	3.5	7.6	-2.4	7.8	

## B PD by regions

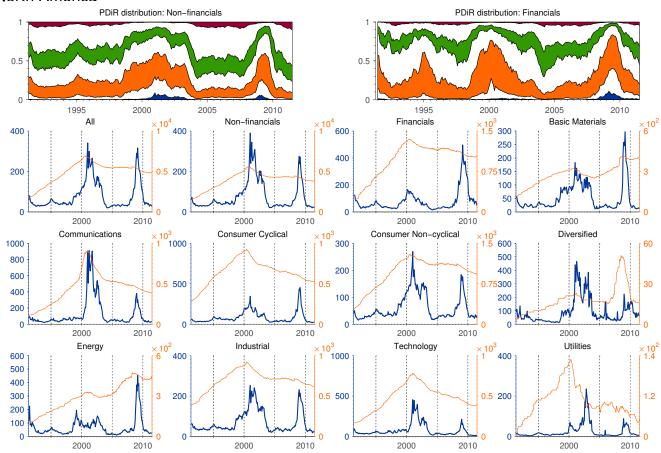
#### Asia Pacific - developed economies



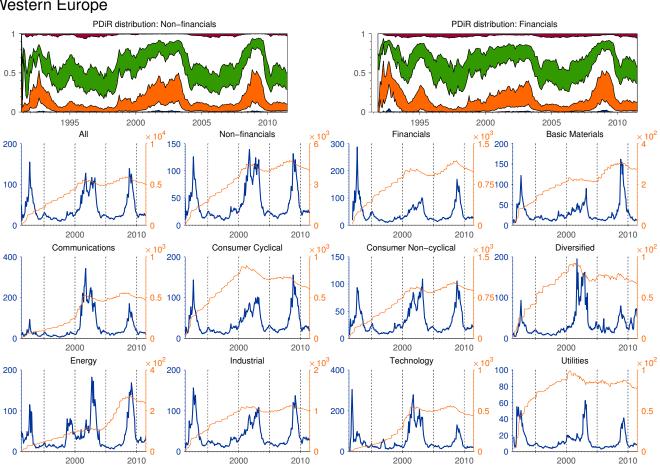
#### Asia Pacific - emerging economies



#### North America

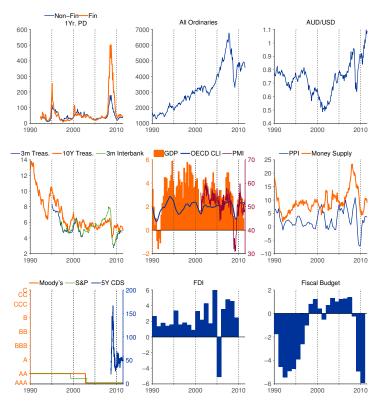


#### Western Europe

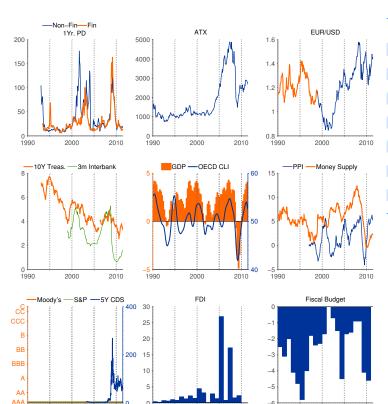


## **C** Macroeconomic Indicators

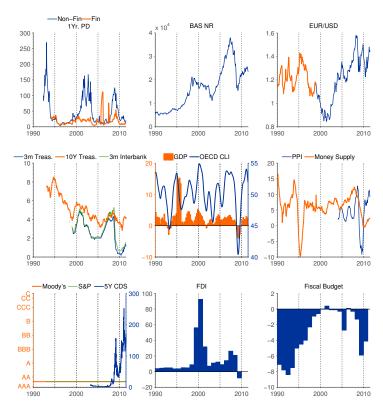
Descriptions of the data contained in this section are provided in Appendix D.



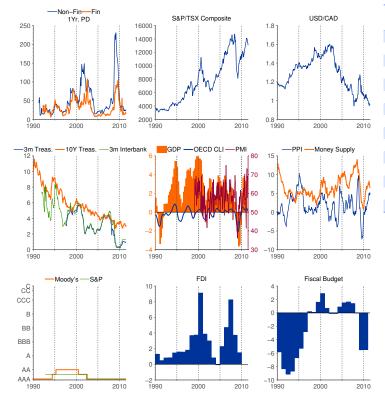
Australia		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	33.84	39.48	41.76	37.86	39.02
1Yr. PD, Fin. (bps)	51.55	56.84	56.89	48.22	41.33
All Ordinaries	4325	4637	4847	4929	4660
AUD/USD	0.84	0.97	1.02	1.03	1.07
3m Treas. Yield (%)	4.56	4.78	4.84	-	-
10Y Treas. Yield (%)	5.09	4.96	5.54	5.49	5.21
3m Interbank (%)	4.91	4.89	4.97	4.92	4.97
GDP (YoY%)	3.2	2.5	2.7	1.0	-
OECD CLI (YoY%)	101.72	101.58	101.63	101.70	100.45
PMI (YoY%)	52.9	47.3	46.3	47.9	52.9
PPI (YoY%)	2.5	1.5	3.8	3.9	3.6
Money Supply (YoY%)	4.52	6.34	10.33	9.95	8.97
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	60.36	45.36	50.41	52.31	57.12
Fiscal Budget (%GDP)	-	-	-5.89	-	-



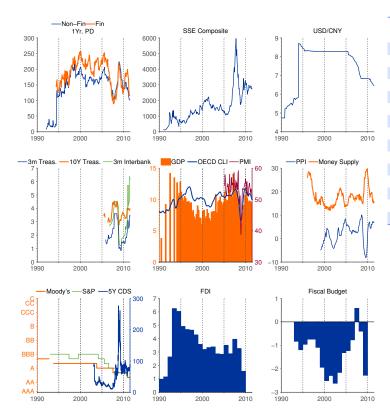
Austria		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	24.03	23.30	15.59	19.19	16.85
1Yr. PD, Fin. (bps)	32.27	20.81	19.42	13.27	13.85
ATX	2279	2542	2904	2882	2767
EUR/USD	1.22	1.36	1.34	1.42	1.45
10Y Treas. Yield (%)	3.16	2.80	3.51	3.80	3.50
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	2.1	2.8	3.3	3.9	4.1
OECD CLI (YoY%)	101.77	102.79	103.81	103.80	102.35
PPI (YoY%)	5.0	4.5	5.4	6.3	5.2*
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	88.97	84.06	100.31	59.50	61.45
Fiscal Budget (%GDP)	-	-	-4.60	-	-



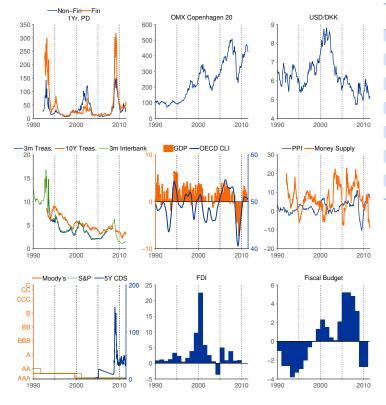
Belgium		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	31.34	32.36	28.93	14.94	20.62
1Yr. PD, Fin. (bps)	10.97	8.41	9.33	9.56	13.42
BAS NR	22053	24012	24376	24803	24165
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	0.41	0.42	0.54	1.05	1.35
10Y Treas. Yield (%)	3.44	3.14	3.97	4.30	4.09
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	2.7	2.0	2.1	3.0	2.5
OECD CLI (YoY%)	102.02	102.66	103.85	103.74	101.95
PPI (YoY%)	6.5	7.8	8.9	11.1	9.2
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aa1	Aa1	Aa1	Aa1	Aa1
Sov. Rating, S&P	AA+	AA+	AA+	AA+	AA+
5Y CDS (bps)	144.5	125.8	217.9	139.4	143.1
Fiscal Budget (%GDP)	_	_	-4.10	_	-
GDP (YoY%) OECD CLI (YoY%) PPI (YoY%) Money Supply (YoY%) Sov. Rating, Moody's Sov. Rating, S&P 5Y CDS (bps)	2.7 102.02 6.5 0.2 Aa1 AA+	2.0 102.66 7.8 1.2 Aa1 AA+	2.1 103.85 8.9 1.7 Aa1 AA+ 217.9	3.0 103.74 11.1 2.2 Aa1 AA+	2. 101.9 9. 2. Aa AA



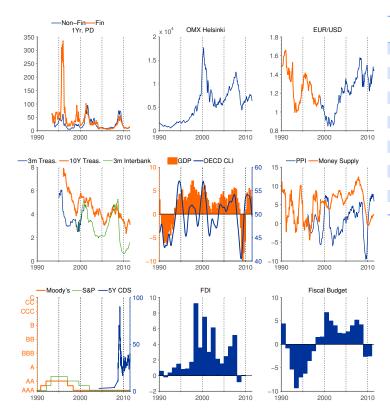
Canada		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	38.02	34.82	22.80	24.38	26.08
1Yr. PD, Fin. (bps)	24.03	14.21	14.66	14.35	14.76
S&P/TSX Composite	11294	12369	13443	14116	13301
USD/CAD	1.06	1.03	1.00	0.97	0.96
3m Treas. Yield (%)	0.61	1.01	1.05	0.96	0.90
10Y Treas. Yield (%)	3.08	2.76	3.12	3.35	3.11
3m Interbank (%)	0.88	1.29	1.30	1.30	1.29
GDP (YoY%)	3.62	3.82	3.35	2.94	-
OECD CLI (YoY%)	102.07	101.25	101.70	101.82	100.52
PMI (YoY%)	58.9	70.3	50.0	73.2	68.2
PPI (YoY%)	0.18	1.58	3.05	5.06	5.20
Money Supply (YoY%)	5.74	6.12	7.03	8.28	6.44
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
Fiscal Budget (%GDP)	-	-	-5.50	-	-



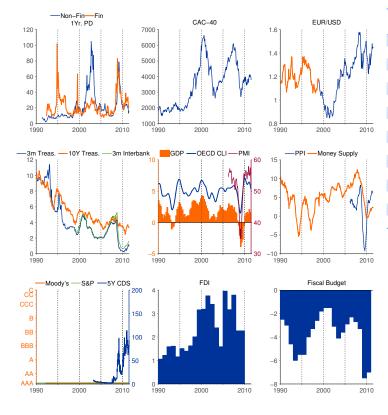
China		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	158.99	140.56	134.25	108.82	103.12
1Yr. PD, Fin. (bps)	187.71	187.49	187.38	130.38	116.78
SSE Composite	2398	2656	2808	2928	2762
USD/CNY	6.78	6.69	6.61	6.55	6.46
3m Treas. Yield (%)	1.75	1.80	2.80	2.50	3.50
10Y Treas. Yield (%)	3.31	3.33	3.91	3.91	3.89
3m Interbank (%)	2.63	2.61	4.62	4.17	6.39
GDP (YoY%)	10.3	9.6	9.8	9.7	9.5
OECD CLI (YoY%)	101.25	101.33	101.92	101.18	99.87
PMI (YoY%)	52.1	53.8	53.9	53.4	50.9
PPI (YoY%)	6.4	4.3	5.9	7.3	7.1
Money Supply (YoY%)	18.5	19.0	19.7	16.6	15.9
Sov. Rating, Moody's	A1	A1	Aa3	Aa3	Aa3
Sov. Rating, S&P	A+	A+	AA-	AA-	AA-
5Y CDS (bps)	88.96	71.32	69.35	73.77	85.45



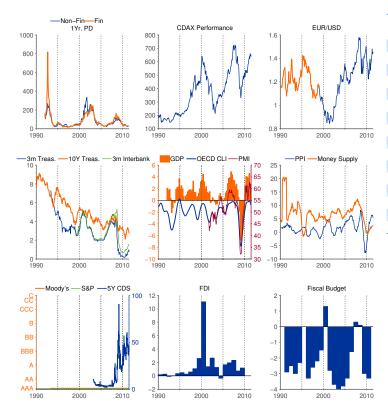
Denmark	2010			2011		
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	28.59	27.33	36.07	42.49	29.60	
1Yr. PD, Fin. (bps)	40.79	42.22	37.56	48.27	62.39	
OMX Copenhagen 20	393.0	417.0	457.6	467.1	431.1	
USD/DKK	6.09	5.47	5.57	5.27	5.14	
10Y Treas. Yield (%)	2.68	2.39	3.02	3.59	3.24	
3m Interbank (%)	1.12	1.15	1.21	1.34	1.61	
GDP (YoY%)	2.3	3.3	2.6	1.9	-	
OECD CLI (YoY%)	100.78	101.05	100.91	100.79	100.28	
PPI (YoY%)	4.8	5.5	7.7	9.0	6.8	
Money Supply (YoY%)	3.52	4.11	9.27	-4.28	-8.53	
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa	
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA	
5Y CDS (bps)	41.20	35.79	45.86	38.09	44.51	
Fiscal Budget (%GDP)	_	_	-2.70	_	-	



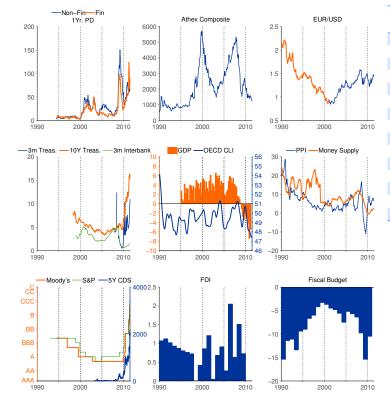
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Finland		2010		2011	
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	10.90	8.47	9.44	11.98	10.77
1Yr. PD, Fin. (bps)	11.77	9.04	8.16	13.80	11.90
OMX Helsinki	6251	7096	7662	7520	6717
EUR/USD	1.22	1.36	1.34	1.42	1.45
10Y Treas. Yield (%)	2.83	2.54	3.16	3.57	3.34
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	4.6	3.5	5.5	5.1	3.7
OECD CLI (YoY%)	104.06	104.00	103.48	102.02	99.44
PPI (YoY%)	5.2	7.2	7.8	7.8	5.9
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	35.40	29.94	33.45	29.35	35.12
Fiscal Budget (%GDP)	-	_	-2.50	-	_



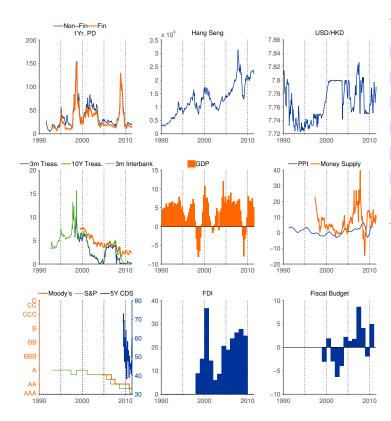
France		2010	2011		
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	21.86	23.37	24.71	20.33	15.82
1Yr. PD, Fin. (bps)	25.85	38.79	29.57	33.71	21.59
CAC-40	3443	3715	3805	3989	3982
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	0.30	0.51	0.40	0.80	1.18
10Y Treas. Yield (%)	3.05	2.66	3.36	3.71	3.41
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	1.5	1.6	1.4	2.1	1.6
OECD CLI (YoY%)	102.38	102.27	102.87	102.30	100.59
PMI (YoY%)	54.8	56.0	57.2	55.4	52.5
PPI (YoY%)	3.6	4.2	5.4	6.7	6.1
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	92.90	78.96	101.02	74.45	80.17
Fiscal Budget (%GDP)	-	-	-7.00	-	-



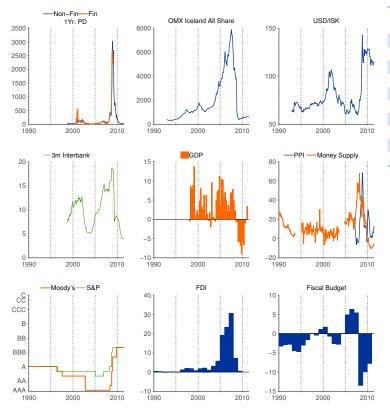
Germany		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	46.13	35.58	27.60	24.00	33.77
1Yr. PD, Fin. (bps)	40.52	34.83	29.54	28.42	30.18
CDAX Performance	518.9	545.5	611.3	623.0	651.4
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	0.16	0.36	0.31	0.75	0.98
10Y Treas. Yield (%)	2.58	2.28	2.96	3.35	3.02
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	4.1	4.0	3.8	4.6	2.8
OECD CLI (YoY%)	104.17	104.31	104.56	104.44	102.85
PMI (YoY%)	58.4	55.1	60.7	60.9	54.6
PPI (YoY%)	1.6	3.9	5.2	6.2	5.5
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	44.66	39.00	58.44	45.00	42.84
Fiscal Budget (%GDP)	-	-	-3.30	_	-



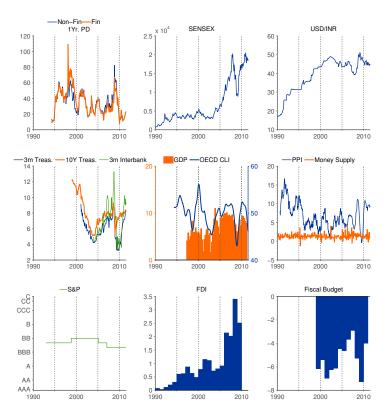
Greece		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	49.55	69.99	73.16	71.25	67.57
1Yr. PD, Fin. (bps)	45.07	52.75	53.29	123.92	88.70
Athex Composite	1434	1471	1414	1535	1279
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	3.36	4.20	6.46	5.26	9.62
10Y Treas. Yield (%)	10.43	10.45	12.47	12.84	16.34
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	-3.1	-4.1	-7.4	-5.5	_
OECD CLI (YoY%)	98.46	98.11	97.98	97.53	97.50
PPI (YoY%)	6.1	5.2	6.9	8.1	6.3
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Ba1	Ba1	Ba1	B1	Ca
Sov. Rating, S&P	BB+	BB+	BB+	BB-	CC
5Y CDS (bps)	910.3	792.5	1074.1	1003.1	1952.4
Fiscal Budget (%GDP)	-	-	-10.50	-	-



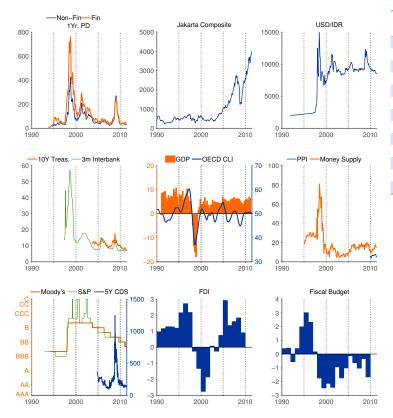
Hong Kong		2010		20	2011	
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	22.74	21.64	21.12	20.59	21.74	
1Yr. PD, Fin. (bps)	19.06	16.32	16.26	14.91	15.51	
Hang Seng	20129	22358	23035	23528	22398	
USD/HKD	7.79	7.76	7.77	7.78	7.78	
3m Treas. Yield (%)	0.63	0.26	0.29	0.22	0.10	
10Y Treas. Yield (%)	2.31	2.00	2.87	2.69	2.33	
3m Interbank (%)	0.57	0.33	0.28	0.26	0.26	
GDP (YoY%)	6.7	6.9	6.4	7.5	5.1	
PPI (YoY%)	6.0	6.4	7.6	8.2	_	
Money Supply (YoY%)	3.1	8.7	7.6	7.2	8.3	
Sov. Rating, Moody's	Aa2	Aa2	Aa1	Aa1	Aa1	
Sov. Rating, S&P	AA+	AA+	AAA	AAA	AAA	
5Y CDS (bps)	55.56	47.70	45.52	43.51	57.84	
Fiscal Budget (%GDP)	_	-	4.94	-	-	



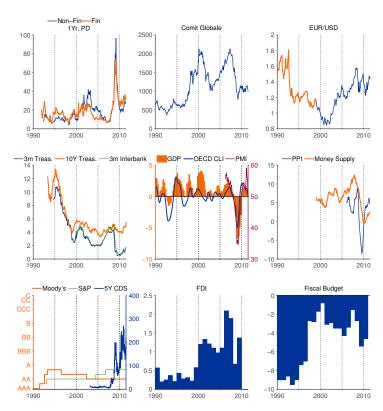
Iceland		2010			2011	
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	47.90	16.75	14.18	25.01	22.77	
OMX Iceland All Share	560.6	572.1	569.2	626.8	605.0	
USD/ISK	128.1	113.2	114.9	114.1	114.3	
3m Interbank (%)	7.05	5.35	4.15	4.00	4.00	
GDP (YoY%)	-6.7	-1.0	0.0	3.4	_	
PPI (YoY%)	13.54	1.39	2.64	6.97	13.01	
Money Supply (YoY%)	-8.49	-10.22	-9.87	-8.17	-4.98	
Sov. Rating, Moody's	Baa3	Baa3	Baa3	Baa3	Baa3	
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-	
Fiscal Budget (%GDP)	_	_	-7.79	_	_	



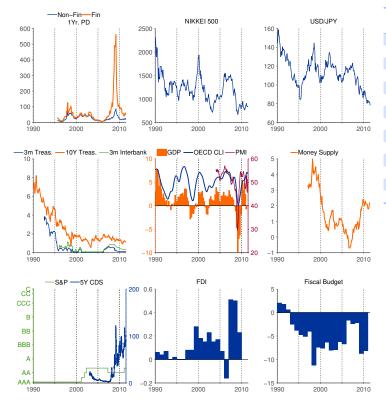
India		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	15.49	10.93	13.64	17.75	23.30
1Yr. PD, Fin. (bps)	16.57	11.41	12.89	17.11	22.77
SENSEX	17701	20069	20509	19445	18846
USD/INR	46.45	44.95	44.70	44.59	44.70
3m Treas. Yield (%)	5.36	6.19	7.18	7.22	8.15
10Y Treas. Yield (%)	7.55	7.84	7.92	7.99	8.33
3m Interbank (%)	3.60	7.50	8.80	10.25	9.00
GDP (YoY%)	9.3	8.9	8.3	7.8	_
OECD CLI (YoY%)	101.86	101.62	101.01	98.92	96.12
PPI (YoY%)	10.25	8.98	9.45	9.68	9.44
Money Supply (YoY%)	1.23	0.48	2.26	0.38	0.80*
Sov. Rating, S&P	BBB-	BBB-	BBB-	BBB-	BBB-
Fiscal Budget (%GDP)	-	-	-3.99	-	_



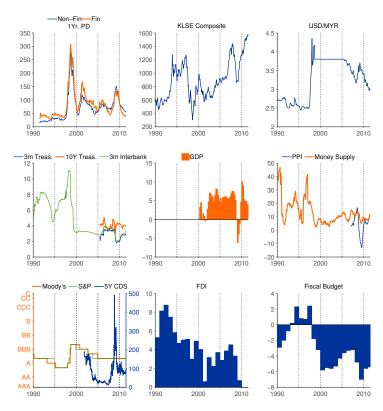
2010			2011	
Q2	Q3	Q4	Q1	Q2
39.87	37.65	31.15	32.52	26.39
41.80	39.21	41.21	43.85	43.95
2914	3501	3704	3679	3889
9074	8908	8996	8708	8579
8.38	7.63	7.61	8.04	7.55
6.93	6.95	6.63	7.05	7.14
6.1	5.8	6.9	6.5	-
100.41	100.48	100.69	100.42	100.12
6.31	6.92	7.25	7.43	4.66
12.82	12.70	15.32	16.06	15.49*
Ba2	Ba2	Ba2	Ba1	Ba1
BB	BB	BB	BB	BB+
189.7	142.3	128.2	144.0	141.7
	39.87 41.80 2914 9074 8.38 6.93 6.1 100.41 6.31 12.82 Ba2 BB	Q2     Q3       39.87     37.65       41.80     39.21       2914     3501       9074     8908       8.38     7.63       6.93     6.95       6.1     5.8       100.41     100.48       6.31     6.92       12.82     12.70       Ba2     Ba2       BB     BB	Q2         Q3         Q4           39.87         37.65         31.15           41.80         39.21         41.21           2914         3501         3704           9074         8908         8996           8.38         7.63         7.61           6.93         6.95         6.63           6.1         5.8         6.9           100.41         100.48         100.69           6.31         6.92         7.25           12.82         12.70         15.32           Ba2         Ba2         Ba2           BB         BB         BB	Q2         Q3         Q4         Q1           39.87         37.65         31.15         32.52           41.80         39.21         41.21         43.85           2914         3501         3704         3679           9074         8908         8996         8708           8.38         7.63         7.61         8.04           6.93         6.95         6.63         7.05           6.1         5.8         6.9         6.5           100.41         100.48         100.69         100.42           6.31         6.92         7.25         7.43           12.82         12.70         15.32         16.06           Ba2         Ba2         Ba1           BB         BB         BB         BB



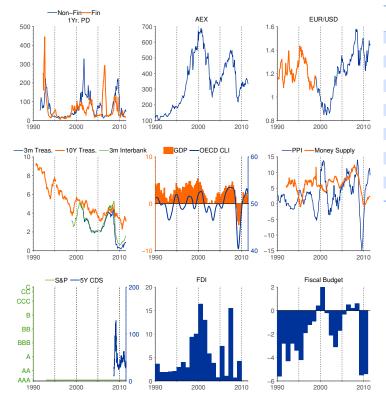
Italy		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	21.08	21.17	22.45	29.99	26.43
1Yr. PD, Fin. (bps)	30.92	28.56	33.60	36.72	32.83
Comit Globale	972	1033	1048	1120	1039
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	0.87	0.94	1.33	1.08	1.58
10Y Treas. Yield (%)	4.09	3.88	4.82	4.82	4.88
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	1.4	1.4	1.5	1.0	0.8
OECD CLI (YoY%)	103.36	103.02	102.87	102.08	100.19
PMI (YoY%)	54.3	52.6	54.7	56.2	49.8
PPI (YoY%)	3.5	4.2	4.7	6.2	4.7
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aa2	Aa2	Aa2	Aa2	Aa2
Sov. Rating, S&P	A+	A+	A+	A+	A+
5Y CDS (bps)	190.3	194.9	238.5	150.9	171.0
Fiscal Budget (%GDP)	-	-	-4.60	-	-



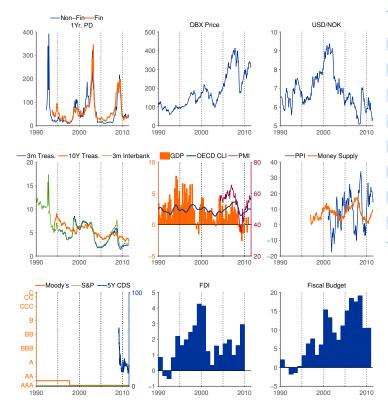
Japan		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	20.80	21.18	19.32	27.00	16.64
1Yr. PD, Fin. (bps)	85.84	55.22	41.75	58.86	48.25
NIKKEI 500	816.5	792.2	865.5	846.2	845.7
USD/JPY	88.43	83.53	81.12	83.13	80.56
3m Treas. Yield (%)	0.12	0.11	0.12	0.11	0.10
10Y Treas. Yield (%)	1.09	0.94	1.13	1.26	1.14
3m Interbank (%)	0.39	0.36	0.34	0.34	0.34
GDP (YoY%)	3.33	4.78	2.44	-0.72	-
OECD CLI (YoY%)	100.71	101.21	102.96	104.25	103.63
PMI (YoY%)	53.9	49.5	48.3	46.4	50.7
Money Supply (YoY%)	2.2	2.1	1.8	1.9	2.2
Sov. Rating, S&P	AA	AA	AA	AA-	AA-
5Y CDS (bps)	92.53	61.66	72.42	99.75	90.77
Fiscal Budget (%GDP)	-	-	-8.14	-	-



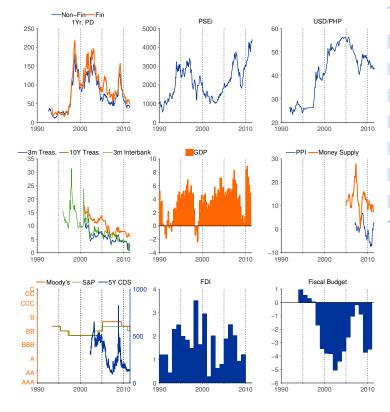
Malaysia		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	72.73	68.96	63.06	57.32	57.08
1Yr. PD, Fin. (bps)	54.81	49.97	43.53	41.41	39.65
KLSE Composite	1314	1464	1519	1545	1579
USD/MYR	3.24	3.09	3.06	3.03	3.02
3m Treas. Yield (%)	2.66	2.80	2.81	2.80	2.89
10Y Treas. Yield (%)	3.96	3.63	4.04	4.10	3.93
3m Interbank (%)	2.72	2.93	2.98	3.04	3.29
GDP (YoY%)	9.0	5.3	4.8	4.9	4.0
PPI (YoY%)	5.2	4.9	5.5	7.9	10.6*
Money Supply (YoY%)	8.48	8.18	6.76	7.97	12.37
Sov. Rating, Moody's	A3	A3	A3	A3	A3
Sov. Rating, S&P	A-	A-	A-	A-	A-
5Y CDS (bps)	103.75	80.14	74.51	75.00	90.68
Fiscal Budget (%GDP)	_	_	-5.60	_	-



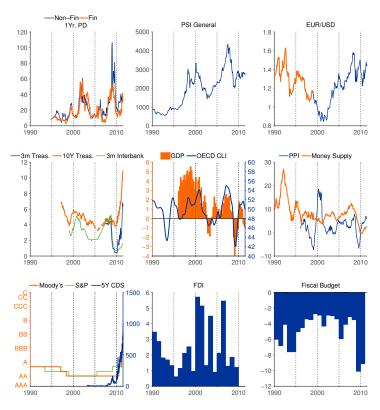
Netherlands		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	65.01	24.69	35.70	50.94	45.36
1Yr. PD, Fin. (bps)	34.68	44.78	23.27	16.36	17.41
AEX	316.8	334.4	354.6	365.6	339.6
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	0.28	0.52	0.36	0.81	0.90
10Y Treas. Yield (%)	2.81	2.51	3.15	3.64	3.34
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	2.4	1.7	1.9	2.3	1.7
OECD CLI (YoY%)	101.41	101.79	102.74	103.22	101.98
PPI (YoY%)	4.7	6.3	7.8	10.7	9.1
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	50.42	45.52	63.04	37.75	38.03
Fiscal Budget (%GDP)	-	-	-5.40	-	-



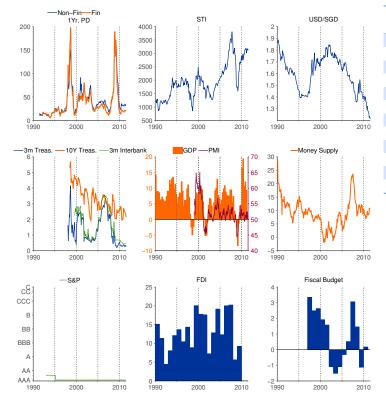
	2010			2011	
Q2	Q3	Q4	Q1	Q2	
44.97	50.31	33.71	36.55	47.69	
39.80	34.66	37.63	46.24	45.09	
252.1	293.6	335.3	339.8	310.5	
6.50	5.88	5.82	5.54	5.39	
2.23	2.28	2.20	2.25	2.33	
3.50	3.30	3.72	3.83	3.41	
2.79	2.60	2.60	2.67	2.92	
1.1	-1.2	1.2	0.1	_	
98.70	99.67	100.12	99.99	100.29	
51.4	52.9	54.3	57.7	56.4	
11.4	19.7	23.9	21.4	14.4	
2.3	3.8	5.5	7.5	9.6*	
Aaa	Aaa	Aaa	Aaa	Aaa	
AAA	AAA	AAA	AAA	AAA	
26.58	23.66	23.49	17.14	21.37	
_	_	10.52	_	_	
	44.97 39.80 252.1 6.50 2.23 3.50 2.79 1.1 98.70 51.4 11.4 2.3 Aaa	44.97 50.31 39.80 34.66 252.1 293.6 6.50 5.88 2.23 2.28 3.50 3.30 2.79 2.60 1.1 -1.2 98.70 99.67 51.4 52.9 11.4 19.7 2.3 3.8 Aaa Aaa	Q2         Q3         Q4           44.97         50.31         33.71           39.80         34.66         37.63           252.1         293.6         335.3           6.50         5.88         5.82           2.23         2.28         2.20           3.50         3.30         3.72           2.79         2.60         2.60           1.1         -1.2         1.2           98.70         99.67         100.12           51.4         52.9         54.3           11.4         19.7         23.9           2.3         3.8         5.5           Aaa         Aaa         Aaa           AAA         AAA         AAA           26.58         23.66         23.49	Q2         Q3         Q4         Q1           44.97         50.31         33.71         36.55           39.80         34.66         37.63         46.24           252.1         293.6         335.3         339.8           6.50         5.88         5.82         5.54           2.23         2.28         2.20         2.25           3.50         3.30         3.72         3.83           2.79         2.60         2.60         2.67           1.1         -1.2         0.1         98.70         99.67         100.12         99.99           51.4         52.9         54.3         57.7         7.5           40         40         40         40         40         40           2.3         3.8         5.5         7.5         40	



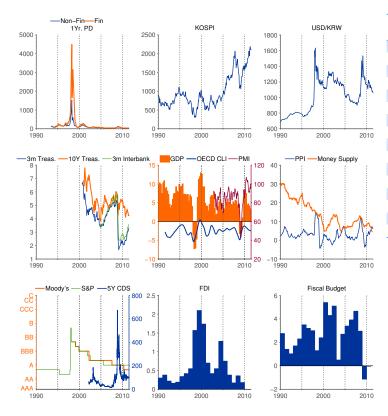
Philippines		2010	2011		
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	52.42	38.29	46.06	45.17	39.11
1Yr. PD, Fin. (bps)	63.24	49.70	55.95	58.55	48.04
PSEi	3373	4100	4201	4055	4291
USD/PHP	46.35	43.85	43.80	43.36	43.38
3m Treas. Yield (%)	3.96	4.10	1.20	1.04	2.90
10Y Treas. Yield (%)	7.63	6.07	5.80	6.98	6.41
3m Interbank (%)	4.25	4.13	1.06	2.00	3.75
GDP (YoY%)	8.9	7.3	6.1	4.9	-
PPI (YoY%)	-5.8	-7.0	-6.2	-0.3	3.0
Money Supply (YoY%)	10.30	10.50	10.64	10.26	8.00*
Sov. Rating, Moody's	Ba3	Ba3	Ba3	Ba3	Ba2
Sov. Rating, S&P	BB-	BB-	BB	BB	BB
5Y CDS (bps)	174.1	139.3	127.6	133.1	138.7
Fiscal Budget (%GDP)	_	_	-3.49	_	_



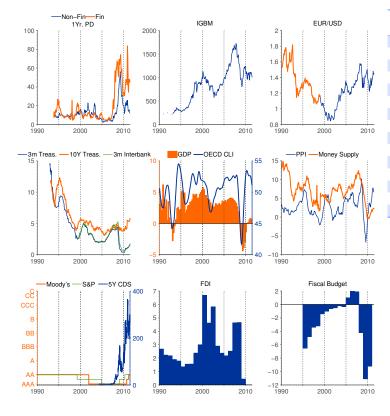
Portugal		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	29.20	29.34	40.59	37.20	38.64
1Yr. PD, Fin. (bps)	19.41	13.11	20.86	29.74	30.86
PSI General	2524	2656	2722	2789	2774
EUR/USD	1.22	1.36	1.34	1.42	1.45
3m Treas. Yield (%)	1.38	2.68	3.57	3.01	6.82
10Y Treas. Yield (%)	5.70	6.30	6.60	8.41	10.90
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55
GDP (YoY%)	1.4	1.2	1.0	-0.6	-0.9
OECD CLI (YoY%)	100.88	101.12	101.66	101.04	99.95
PPI (YoY%)	3.7	4.4	4.9	7.0	5.8
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2
Sov. Rating, Moody's	Aa2	A1	A1	A3	Ba2
Sov. Rating, S&P	A-	A-	A-	BBB-	BBB-
5Y CDS (bps)	311.3	409.4	499.6	579.6	744.8
Fiscal Budget (%GDP)	-	-	-9.10	-	-



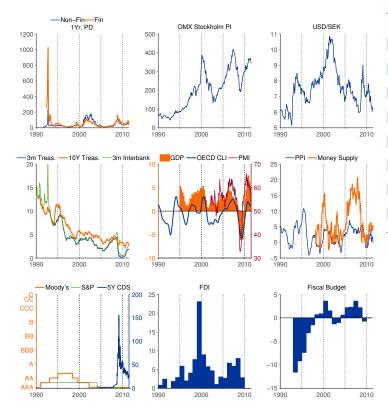
Singapore		2010		2011		
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	31.50	31.83	32.85	34.19	33.94	
1Yr. PD, Fin. (bps)	20.72	19.56	18.99	21.82	21.61	
STI	2836	3098	3190	3106	3120	
USD/SGD	1.40	1.32	1.28	1.26	1.23	
3m Treas. Yield (%)	0.33	0.30	0.39	0.25	0.32	
10Y Treas. Yield (%)	2.37	2.02	2.71	2.48	2.31	
3m Interbank (%)	0.56	0.51	0.44	0.44	0.44	
GDP (YoY%)	19.4	10.5	12.0	9.3	0.9	
PMI (YoY%)	51.3	49.5	50.7	50.1	50.4	
Money Supply (YoY%)	6.9	7.8	8.4	8.6	10.6	
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA	
Fiscal Budget (%GDP)	_	_	0.17	_	_	



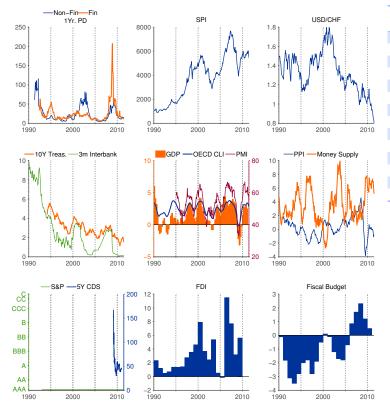
South Korea		2010		2011	
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	37.22	36.63	35.40	43.56	40.34
1Yr. PD, Fin. (bps)	35.61	33.19	33.23	38.94	42.03
KOSPI	1698	1873	2051	2107	2101
USD/KRW	1222	1140	1126	1097	1068
3m Treas. Yield (%)	2.10	2.38	2.51	3.04	3.32
10Y Treas. Yield (%)	4.95	4.11	4.52	4.48	4.29
3m Interbank (%)	2.48	2.67	2.80	3.37	3.56
GDP (YoY%)	7.5	4.4	4.7	4.2	3.4
OECD CLI (YoY%)	103.09	101.91	100.81	100.43	99.81
PMI (YoY%)	104.0	104.0	91.0	96.0	97.0
PPI (YoY%)	4.6	4.0	5.3	7.3	6.2
Money Supply (YoY%)	9.3	7.7	6.9	4.7	4.4*
Sov. Rating, Moody's	A1	A1	A1	A1	A1
Sov. Rating, S&P	Α	Α	Α	Α	Α
5Y CDS (bps)	131.7	100.8	95.6	101.1	102.9
Fiscal Budget (%GDP)	-	-	-0.04	-	_



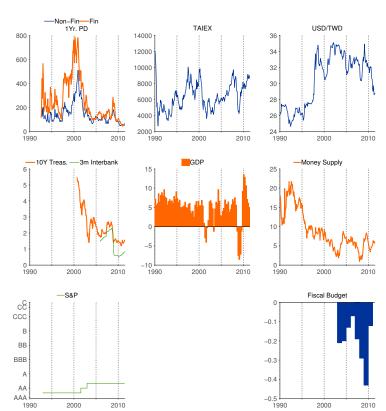
Spain		2010		20	2011		
	Q2	Q3	Q4	Q1	Q2		
1Yr. PD, Non-Fin. (bps)	23.21	25.28	20.85	14.67	11.73		
1Yr. PD, Fin. (bps)	44.37	45.07	70.83	48.19	44.52		
IGBM	961	1085	1004	1079	1050		
EUR/USD	1.22	1.36	1.34	1.42	1.45		
3m Treas. Yield (%)	0.97	1.00	1.18	1.27	1.40		
10Y Treas. Yield (%)	4.56	4.12	5.45	5.30	5.45		
3m Interbank (%)	0.77	0.89	1.01	1.24	1.55		
GDP (YoY%)	0.0	0.2	0.6	0.8	0.7		
OECD CLI (YoY%)	103.06	102.64	102.64	102.28	101.07		
PPI (YoY%)	3.2	3.4	5.3	7.8	6.7		
Money Supply (YoY%)	0.2	1.2	1.7	2.2	2.2		
Sov. Rating, Moody's	Aaa	Aa1	Aa1	Aa2	Aa2		
Sov. Rating, S&P	AA	AA	AA	AA	AA		
5Y CDS (bps)	265.44	229.82	349.51	233.46	269.91		
Fiscal Budget (%GDP)	-	-	-9.20	-	-		



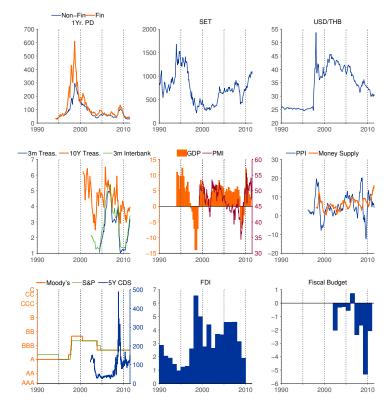
Sweden		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	45.18	37.08	45.41	65.65	42.42
1Yr. PD, Fin. (bps)	39.00	46.22	64.44	95.42	81.31
OMX Stockholm PI	313.0	342.8	368.5	364.3	353.9
USD/SEK	7.79	6.74	6.71	6.32	6.33
3m Treas. Yield (%)	0.28	0.58	1.35	1.70	1.80
10Y Treas. Yield (%)	2.67	2.52	3.27	3.35	2.90
3m Interbank (%)	0.79	1.28	1.95	2.39	2.48
GDP (YoY%)	4.5	6.6	7.6	6.4	5.3
OECD CLI (YoY%)	102.42	104.03	103.35	102.35	102.19
PMI (YoY%)	62.4	63.3	60.2	58.6	52.9
PPI (YoY%)	1.6	2.6	4.3	1.7	-0.2
Money Supply (YoY%)	2.95	5.82	6.41	5.39	5.48
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	41.63	33.60	34.02	26.83	27.12
Fiscal Budget (%GDP)	_	_	0.00	_	_



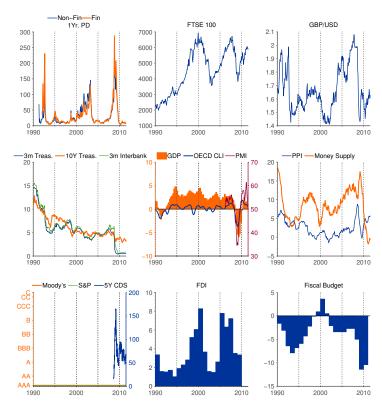
Switzerland		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	11.83	11.72	11.04	16.32	15.14
1Yr. PD, Fin. (bps)	22.64	18.13	16.14	13.40	11.10
SPI	5408	5595	5791	5792	5685
USD/CHF	1.08	0.98	0.94	0.92	0.84
10Y Treas. Yield (%)	1.48	1.40	1.72	1.96	1.73
3m Interbank (%)	0.05	0.12	0.11	0.12	0.11
GDP (YoY%)	2.8	2.8	3.1	2.5	-
OECD CLI (YoY%)	102.47	102.28	103.24	103.43	101.29
PMI (YoY%)	64.8	60.2	61.2	59.3	53.4
PPI (YoY%)	0.2	0.1	0.1	-0.1	-0.8
Money Supply (YoY%)	7.38	6.66	7.05	6.84	5.19
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA
5Y CDS (bps)	53.10	41.63	45.52	46.51*	-
Fiscal Budget (%GDP)	-	-	0.50	-	-



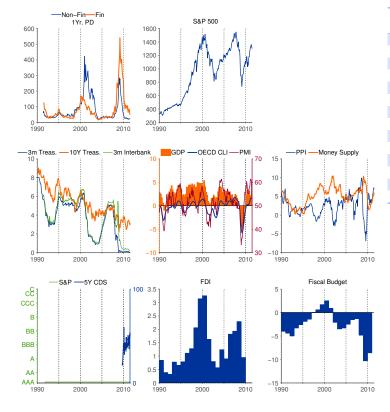
Taiwan		2010			2011	
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	51.20	55.61	58.82	56.83	67.90	
1Yr. PD, Fin. (bps)	80.50	56.06	46.75	54.25	47.80	
TAIEX	7329	8238	8973	8683	8653	
USD/TWD	32.13	31.24	29.30	29.41	28.72	
10Y Treas. Yield (%)	1.41	1.20	1.55	1.36	1.55	
3m Interbank (%)	0.62	0.60	0.72	0.73	0.82	
GDP (YoY%)	12.86	10.69	7.13	6.16	5.02	
Money Supply (YoY%)	3.99	4.72	5.34	5.93	5.86	
Sov. Rating, S&P	AA-	AA-	AA-	AA-	AA-	
Fiscal Budget (%GDP)	-	-	-0.12	-	_	



Thailand		2010		20	11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	33.25	31.30	29.32	28.67	32.93
1Yr. PD, Fin. (bps)	45.58	37.26	42.34	37.96	45.65
SET	797	975	1033	1047	1041
USD/THB	32.45	30.35	30.06	30.28	30.73
3m Treas. Yield (%)	1.21	1.67	1.97	2.50	3.06
10Y Treas. Yield (%)	3.15	3.09	3.73	3.71	3.88
3m Interbank (%)	1.39	1.91	2.15	2.70	3.29
GDP (YoY%)	9.2	6.6	3.8	3.0	_
PMI (YoY%)	52.1	50.6	51.6	54.1	53.1
PPI (YoY%)	10.12	11.61	4.68	5.86	4.52
Money Supply (YoY%)	7.03	9.92	10.92	13.12	16.27
Sov. Rating, Moody's	Baa1	Baa1	Baa1	Baa1	Baa1
Sov. Rating, S&P	BBB+	BBB+	BBB+	BBB+	BBB+
5Y CDS (bps)	133.7	102.4	97.5	115.4	132.4
Fiscal Budget (%GDP)	_	_	-2.07	_	_



United Kingdom		2010		20	2011	
	Q2	Q3	Q4	Q1	Q2	
1Yr. PD, Non-Fin. (bps)	8.00	10.27	9.48	12.16	6.25	
1Yr. PD, Fin. (bps)	10.07	10.34	9.94	11.72	5.36	
FTSE 100	4917	5549	5900	5909	5946	
GBP/USD	1.49	1.57	1.56	1.60	1.61	
3m Treas. Yield (%)	0.49	0.50	0.50	0.56	0.51	
10Y Treas. Yield (%)	3.36	2.95	3.40	3.69	3.38	
3m Interbank (%)	0.73	0.73	0.76	0.82	0.83	
GDP (YoY%)	1.6	2.5	1.5	1.6	0.7	
OECD CLI (YoY%)	102.76	102.04	101.95	101.70	100.96	
PMI (YoY%)	57.6	53.5	58.7	56.7	51.4	
PPI (YoY%)	4.4	3.8	4.2	5.6	5.7	
Money Supply (YoY%)	2.9	1.1	-1.6	-1.3	-0.7	
Sov. Rating, Moody's	Aaa	Aaa	Aaa	Aaa	Aaa	
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AAA	
5Y CDS (bps)	79.39	65.70	72.41	54.75	60.70	
Fiscal Budget (%GDP)	_	_	-10.40	_	_	



United States		2010			11
	Q2	Q3	Q4	Q1	Q2
1Yr. PD, Non-Fin. (bps)	30.40	26.56	23.20	24.04	20.64
1Yr. PD, Fin. (bps)	111.97	101.51	90.55	84.74	49.37
S&P 500	1031	1141	1258	1326	1321
3m Treas. Yield (%)	0.17	0.15	0.12	0.09	0.01
10Y Treas. Yield (%)	2.93	2.51	3.29	3.47	3.16
3m Interbank (%)	0.45	0.35	0.40	0.35	0.20
GDP (YoY%)	3.3	3.5	3.1	2.2	1.6
OECD CLI (YoY%)	100.35	100.53	101.99	103.24	103.15
PMI (YoY%)	55.3	55.3	58.5	61.2	55.3
PPI (YoY%)	2.7	3.9	3.8	5.6	7.0
Money Supply (YoY%)	1.7	2.9	3.3	4.9	6.0
Sov. Rating, S&P	AAA	AAA	AAA	AAA	AA+
5Y CDS (bps)	37.97	46.40	42.01	40.97	50.36
Fiscal Budget (%GDP)	_	_	-8.60	_	_

# 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 on August 19 and every effort has been made to verify its accuracy.

The last section of this Appendix describes the Probability of Default implied Rating (PDiR). The PDiR has been introduced to aid intuition about PD values for individual companies.

**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. The following table lists the name of each stock index.

#### Stock Indices

Economy	Index Name
Australia	Australian All Ordinaries Index
Austria	Austrian Traded Index
Belgium	Brussels All-Share Net Return Index
Canada	S&P/Toronto Stock Exchange Composite Index
China	Shanghai Stock Exchange Composite Index
Denmark	OMX Copenhagen 20 Index
Finland	OMX Helsinki All-Share Index
France	CAC-40 Index
Germany	CDAX Performance Index
Greece	Athex Composite Share Price Index
Hong Kong	Hang Seng Index
Iceland	OMX Iceland All-Share Index
India	Bombay Stock Exchange SENSEX
Indonesia	Jakarta Composite Index

Economy	Index Name
Italy	Italy Stock Market BCI Comit Globale Index
Japan	Nikkei 500
Malaysia	FTSE Bursa Malaysia KLCI
Netherlands	AEX Index
Norway	OBX Price Index
Philippines	Philippine Stock Exchange PSEi Index
Portugal	PSI Geral (General) Index
Singapore	Straits Times Index
South Korea	KOSPI Index
Spain	Madrid Stock Exchange General Index
Sweden	OMX Stockholm All-Share Index
Switzerland	Swiss Performance Index
Taiwan	Taiwan TAIEX Index
Thailand	Bangkok SET Index
United Kingdom	FTSE 100 Index
United States	Standard and Poor's 500 Index

**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.

#### Conversion to Euro

Economy	Conversion Date	Conversion Rate (per Euro)	_	Economy	Conversion Date	Conversion Rate (Per Euro)
Austria	31/12/1998	13.7603		Greece	31/12/2000	340.75
Belgium	31/12/1998	40.3399		Italy	31/12/1998	1936.27
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		Spain	31/12/1998	166.386

**3-month government bond yield (middle-left graph)** The primary sources of the 3-month government bond yields are listed in the table below. The asterisk indicates that data was retrieved directly from the indicated source, and not from Bloomberg.

### 3-month government bond yields

Economy	Source	Economy	Source	Economy	Source
Australia Reserve Bank	Italy	Bloomberg	South Korea	Korea	
	of Australia*	Australia* Japan Bloo	Bloomberg		Financial Investment Association
Belgium	National Bank of Belgium	Malaysia	Bank Negara Malaysia		
Canada	Bloomberg	Netherlands	Bloomberg	Spain	Corretaje E
China	Bank of Tianjin	Norway	Norges Bank Philippine		Informacion Monetaria Y
Denmark	Nykredit Bank	Philippines			De Divisas, S.
Finland	Svenska Han-		Dealing &	Sweden	Bloomberg
	delsbanken		Exchange	Thailand	Bloomberg
France	Bloomberg		Corp.	United	Thomson
Germany	Bloomberg	Portugal	Bloomberg	Kingdom	Reuters*
Greece	Bloomberg	Singapore	Monetary	United States	Bloomberg
Hong Kong	Bloomberg		Authority of Singapore		9
India	Bloomberg		Sirigapore	-	

**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 interbank rate (middle-left graph)** The primary sources of the 3-month interbank rates are listed in the following table.

# Interbank Lending Rates

Australia AUD Bank Bill 3-month Buribor 3-month European Banking Federation (EBF)  Belgium Euribor 3 month Canada Canada Bankers Acceptances 3 Month  China Shanghai Interbank Offered Rate Fixing - 3 Month  Denmark Copenhagen Interbank Offered Rates 3 Month  Finland Euribor 3 month EBF  Germany Euribor 3 month EBF  Germany Euribor 3 month EBF  Gerece Euribor 3 month EBF  Greece Euribor 3 month EBF  Hong Kong Dollar Hibor Fixings 3 Month  Iceland Central Bank of Iceland INR 3 Month  Iceland Central Bank of Iceland INR 3 Month  India INR 3 Month Deposit Composite(NY)  Indonesia Jakarta Interbank Offering Rate 3 Month  Italy Euribor 3 month EBF  Japan Tibor Fixing Rate 3 Month  Malaysia Malaysia Interbank Offered Rate Fixing Sank Negara Malaysia  Malaysia Malaysia Bank Negara Malaysia  Netherlands Euribor 3 month EBF  Bank Negara Malaysia Bank Negara Malaysia  Netherlands Euribor 3 month EBF	Economy	Interbank Rate	Source
Belgium Euribor 3 month Canada Canada Bankers Acceptances 3 Month  China Shanghai Interbank Offered Rate Fixing - 3 Month  Denmark Copenhagen Interbank Offered Rates 3 Month  Finland Euribor 3 month EBF  Germany Euribor 3 month EBF  Greece Euribor 3 month EBF  Greece Euribor 3 month Hong Kong Dollar Hibor Fixings 3 Month  Iceland Central Bank of Iceland Interest Rate Fixing  India INR 3 Month Deposit Composite(NY)  Indonesia Jakarta Interbank Offering Rate 3 Month  Italy Euribor 3 month EBF  Italy Euribor 3 month EBF  Japan Tibor Fixing Rate 3 Month  Malaysia Malaysia Interbank Offered Rate Fixing 3 Month  Malaysia Malaysia Interbank Offered Rate Sank Negara Malaysia  Malaysia Malaysia Interbank Offered Rate Fixing 3 Month  Malaysia Malaysia Bank Negara Malaysia  Malaysia Malaysia Bank Negara Malaysia	Australia		
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Bankers Acceptances 3 Month  China  Shanghai Interbank Offered Rate Fixing - 3 Month  Denmark  Copenhagen Interbank Offered Rates 3 Month  Finland  Euribor 3 month France Euribor 3 month Germany Euribor 3 month Hong Kong HKAB Hong Kong Dollar Hibor Fixings 3 Month  Iceland  Central Bank of Iceland ISK Reibor 3 Month Interest Rate Fixing  India  INR 3 Month Deposit  Indonesia Jakarta Interbank Offering Rate 3 Month  Italy Euribor 3 month EBF Central Bank of Iceland ISK Reibor 3 Month Interest Rate Fixing  Indonesia Jakarta Interbank Offering Rate 3 Month  Italy Euribor 3 month  Bank Indonesia Jakarta Interbank Offering Rate 3 Month  Italy Euribor 3 month  Bank Indonesia Jakarta Interbank Offering Rate 3 Month  Malaysia Malaysia Interbank Offered Rate Fixing 3 Month  Malaysia  Malaysia Interbank Offered Rate Fixing 3 Month  Malaysia		Euribor 3 month	
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Rate 3 Month Bankers Association  Malaysia Malaysia Bank Negara Interbank Malaysia Offered Rate Fixing 3 Month	Italy	Euribor 3 month	EBF
Interbank Malaysia Offered Rate Fixing 3 Month	Japan	· ·	Bankers
Netherlands Euribor 3 month EBF	Malaysia	Interbank Offered Rate	_
	Netherlands	Euribor 3 month	EBF

Economy	Interbank Rate	Source
Norway	Norway Interbank Offered Rate Fixing 3 Month	Bloomberg
Philippines	Bankers Association of the Philippines Interbank Offering Rates 3 Month PHIBOR	Bankers Association of the Philippines
Portugal	Euribor 3 month	EBF
Singapore	Association of Banks in Singapore SGD Sibor Fixing 3-Month	Association of Banks in Singapore
South Korea	Korea Federation of Banks KORIBOR 3 Month	Bank of Korea
Spain	Euribor 3 month	EBF
Sweden	Stockholm Interbank Offered Rates 3 Month	NASDAQ OMX
Switzerland	LIBOR Libid Limean CHF 3 Month	Bloomberg
Taiwan	Taiwan Interbank Money Center TAIBOR Fixing Rates 3 Month	Taiwan Interbank Money Center
Thailand	Thailand Bibor Fixings 3 Month	Bank of Thailand
United Kingdom	BA LIBOR GBP 3 Month	British Bankers Association
United States	ICAP Capital Markets Domestic Fed Funds 3 Month	CTRB ICAP Fixed Income & Money Market Products

**GDP** (middle-center graph, left axis) Real GDP year-on-year (YoY) changes are seasonally-adjusted except for China, Hong Kong, Iceland, India, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand. The following is a list of primary sources of the GDP data.

## Real GDP growth

Economy	Source
Australia	Australian Bureau of Statistics
Austria	Eurostat
Belgium	Eurostat
Canada	Statistics Canada
China	National Bureau of Statistics of China
Denmark	Eurostat
Finland	Eurostat
France	Eurostat
Germany	Eurostat
Greece	Eurostat
Hong Kong	Census & Statistics Department Hong Kong
Iceland	Statistics Iceland

Economy	Source
India	India Central Statistical Organisation
Indonesia	OECD
Italy	Eurostat
Japan	OECD
Malaysia	Department of Statistics Malaysia
Netherlands	Eurostat
Norway	Statistics Norway
Philippines	National Statistical Coordination Board
Portugal	Eurostat
Singapore	Singapore Ministry of Trade & Industry
South Korea	Bank of Korea
Spain	Eurostat

Economy	Source
Sweden	Eurostat
Switzerland	State Secretariat for Economic Affairs
Taiwan	Taiwan Directorate General of Budget Accounting & Statistics
Thailand	National Economic Development Board
United Kingdom	UK Office for National Statistics
United States	Bureau of Economic Analysis

**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 <a href="https://www.oecd.org/std/cli">www.oecd.org/std/cli</a>. 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 Managers 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. The following table lists the indices as well as their primary sources.

#### PMI

Economy	Index name	Source	Economy
Australia	Australian Performance of Manufacturing Index	Australian Industry Group	Singapore
Canada	Ivey Purchasing Managers Index (Canada)	Purchasing Management Association of Canada	South Korea
China	China Manufacturing PMI (seasonally adjusted)	China Federation of Logistics & Purchasing	Sweden
France	Markit France Manufacturing PMI	Markit	Switzerland
Germany	Markit/BME Germany Manufacturing PMI	Markit	Thailand
Italy	Markit/ADACI Italy Manufacturing PMI	Markit	United Kingo
Japan	Nomura/JMMA PMI (seasonally adjusted)	Markit/Nomura Securities Co.Ltd	United State
Norway	Norway PMI (Seasonally Adjusted)	Danske Bank	

Economy	Index name	Source
Singapore	Singapore Manufacturing PMI	Singapore Institute of Purchasing & Materials Management
South Korea	Business Survey Index on business conditions Manufacturing sector	Bank of Korea
Sweden	Swedbank PMI (seasonally adjusted)	Swedbank Markets
Switzerland	Switzerland procure.ch PMI	Credit Suisse
Thailand	Thailand Business Sentiment Index	Bank of Thailand
United Kingdom	Markit/CIPS UK Manufacturing PMI	Markit
United States	ISM Manufacturing PMI (seasonally adjusted)	Institute for Supply Management

**PPI (middle-right graph)** The Producers' Purchasing Index or similar indices are presented as YoY changes. The following table shows the indices used and the primary sources for the indices.

## PPI

Economy	Index name	Source	Economy	Index name	Source
Australia	Australia Manufacturing PPI YoY	Australian Bureau of Statistics	Malaysia	Malaysia Producer Price Index Goods in	Department of Statistics Malaysia
Austria	Eurostat PPI Austria Industry Excluding	Eurostat	Netherlands	Domestic Economy (2005=100) YoY	E water
Belgium	Construction YoY Belgium PPI YoY	Belgium National Institute of Statistics	Netherlands	Eurostat PPI Netherlands Industry Ex Construction YoY	Eurostat
Canada	STCA Canada Industrial Product Price YoY (not seasonally adjusted)	Statistics Canada	Norway	Norway PPI Domestic & Export Industry YoY New Classification	Statistics Norway
China	China PPI YoY	China Economic Information Network	Philippines	Philippines PPI Manufacturing YoY (2000=100)	National Statistics Office Philippines
Denmark	Denmark Wholesale Prices YoY (2005=100)	Denmark Statistics	Portugal	Portugal Producer Prices Total	Instituto Nacional de Estatistica
Finland	Finland PPI (2005=100) YoY	Finnish Statistics Office	Singapore	(2008=100) YoY IMF Singapore	Portugal International
France	France PPI (2005=100) YoY	INSEE National Statistics Office of France	South Korea	WPI South Korea PPI YoY	Monetary Fund Bank of Korea
Germany	Bundesbank Germany Producer Prices YoY (seasonally	Deutsche Bundesbank	Spain	(2005=100) Spain PPI YoY (2005=100)	Instituto Nacional de Estadstica
Greece	adjusted) Eurostat PPI Greece Industry Ex Construction	Eurostat	Sweden	Sweden Producers Prices YoY (2005=100)	Statistics Sweden
Hong Kong	YoY Hong Kong PPI All Manufacturing	Census & Statistics	Switzerland	Producers Price Index YoY	Federal Statistics Office of Switzerland
Iceland	Industries YoY (2000=100) Iceland PPI Main	Department Hong Kong Statistics Iceland	Thailand	Thailand PPI All Products YoY (2005=100)	Commerce Ministry
	Index YoY		United Kingdom	UK PPI	UK Office for
India	India Wholesale Price All Commodities YoY	Press Information Bureau of India		Manufactured Products YoY (not seasonally adjusted)	National Statistics
Indonesia	Indonesia Wholesale Prices YoY	Badan Pusat Statistik Indonesia	United States	PPI By Processing Stage Finished Goods Total	U.S. Bureau of Labor Statistics
Italy	Italy PPI Manufacturing YoY (2005=100)	The Italian National Institute of Statistics		YoY (not seasonally adjusted)	

**Money Supply (middle-right graph)** YoY growth of money supply uses M3 when it is available for an economy. The exceptions are: China, Indonesia, Norway, Taiwan, Thailand and the United States where M2 is used; 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. The following is a list of primary sources for the money supply data.

#### Money Supply

Economy	Source
Australia	Reserve Bank of
	Australia
Austria	Eurostat
Belgium	Eurostat
Canada	Bank of Canada
China	The People's Bank
	of China
Denmark	Danish Central
	Bank
Finland	Eurostat
France	Eurostat
Germany	Deutsche
	Bundesbank
	/Eurostat
Greece	Eurostat
Hong Kong	Hong Kong
	Monetary Authority

Economy	Source
Iceland	Statistics Iceland
India	OECD
Indonesia	Bank Indonesia
Italy	Eurostat
Japan	Bank of Japan
Malaysia	Bank Negara Malaysia
Netherlands	Eurostat
Norway	Central Bank of Norway
Philippines	Bangko Sentral ng Pilipinas
Portugal	Banco de Portugal /Eurostat
Singapore	Monetary Authority of Singapore

Economy	Source
South Korea	Bank of Korea
Spain	Eurostat
Sweden	Sveriges Riksbank
Switzerland	Swiss National Bank
Taiwan	The Central Bank of China
Thailand	Bank of Thailand
United Kingdom	Bank of England
United States	Federal Reserve

**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 India, Japan, Netherlands, Singapore, Switzerland, Taiwan and the United States are foreign currency long term issuer ratings instead. Among the above mentioned economies, France, Switzerland 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. According to S&P, Indonesia has selective default events on March 29, 1999; April 17, 2000 and April 23, 2002. For graphical purposes these are reflected as C grades in the graphs.

**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)** The Foreign Direct Investment (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. The primary sources are shown in the following table.

# Fiscal Budget

Economy	Source
Australia	Bloomberg Indices
Austria	Eurostat
Belgium	Eurostat
Canada	Bloomberg Indices
China	Bloomberg Indices
Denmark	Eurostat
Finland	Eurostat
France	Eurostat
Germany	Eurostat
Greece	Eurostat
Hong Kong	Bloomberg Indices

Economy	Source
Iceland	OECD
India	Bloomberg Indices
Indonesia	World Bank
Italy	Eurostat
Japan	Bloomberg Indices
Malaysia	Bloomberg Indices
Netherlands	Eurostat
Norway	Bloomberg Indices
Philippines	Bloomberg Indices
Portugal	Eurostat

Economy	Source
Singapore	World Bank
South Korea	Bloomberg Indices
Spain	Eurostat
Sweden	Eurostat
Switzerland	Bloomberg Indices
Taiwan	Bloomberg Indices
Thailand	Bloomberg Indices
United Kingdom	Eurostat
United States	U.S. Treasury

#### **PDiR**

The Probability of Default implied Rating (PDiR) has been introduced to aid intuition about what different values of 1-year PD from RMI's default forecast model imply about a firm's credit quality. In short, the 1-year PD for a firm is used to imply a credit rating based on historically observed default rates for credit rating agency ratings.

The table at right is used to classify firms into PDiR based on their 1-year PD. For example, if a firm has a 1-year PD of 50bps, then it will be classifed as BB. The upper bounds for each PDiR are derived using S&P's historical default rates.† These default rates are taken as the average one-year default rates (ADR) from 1992-2010 to coincide with the period of RMI's PD.

	Upper
	bound
PDiR	(bps)
AAA	0.28
AA	5
Α	13
BBB	42
BB	194
В	1075
CCC/C	_

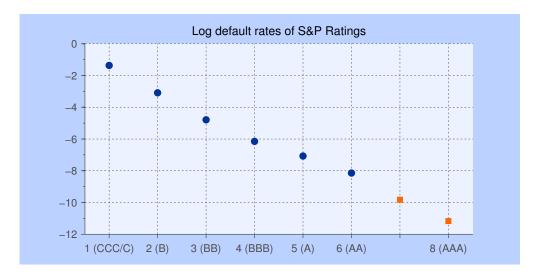
Computing the boundaries between different PDiR classes: The blue circles in the graph below indicate the logarithm of the ADR for S&P firms with ratings from AA down to CCC/C. There have been no defaults within one year for S&P rated AAA firms.

Given the linear relationship between the log default rates and the ratings, it makes sense to take the boundary between PDiR classes as the mid-point of the log default rates.

For example, the upper bound for BBB is computed as:

$$UB (BBB) = \exp \left( \frac{\log (ADR (BBB)) + \log (ADR (BB))}{2} \right).$$

For the upper boundary of AAA firms, a mid-point of observed log ADR cannot be taken since the ADR is zero for S&P rated AAA firms. Instead, a line of best fit can be plotted through the six observed points (blue circles) in order to extrapolate the orange squares. Taking the default rate based on the the first extrapolated orange square results in a boundary that leads to far larger fraction of PDiR AAA firms as compared to S&P rated AAA firms. Therefore, the boundary between AA and AAA is taken as the mid-point between the first and second orange square.



<sup>&</sup>lt;sup>†</sup>March 2011, Default, Transition, and Recovery: 2010 Annual Global Corporate Default Study And Rating Transitions, Standard & Poor's.

# **About RMI and the Credit Rating Initiative**

The NUS Risk Management Institute (RMI) was established in August 2006 as a research institute at NUS dedicated to the area of financial risk management. The establishment of RMI was supported by the Monetary Authority of Singapore (MAS) under its program on Risk Management and Financial Innovation. RMI seeks to complement, support and develop Singapore's financial sector's knowledge and expertise in risk management, and thereby help to take on the challenges arising from globalization, structural change and volatile financial markets.

Credit Rating Initiative (CRI) is a non-profit project undertaken by NUS-RMI in response to the 2008-2009 financial crisis. The CRI takes a "public good" approach to credit ratings by providing the outputs from our default forecast system in a transparent, non-profit basis. In the current phase, the CRI model generates probabilities of default (PD) on a daily basis for corporate entities in 30 economies in Asia-Pacific, Western Europe and North America. Our PD can serve as a benchmark against traditional rating agencies' systems or internal credit analyses for industry analysts and business professionals. For more information about NUS-RMI and the CRI project, please visit our main site at rmi.nus.edu.sg

### Usage, redistribution and publication of data

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