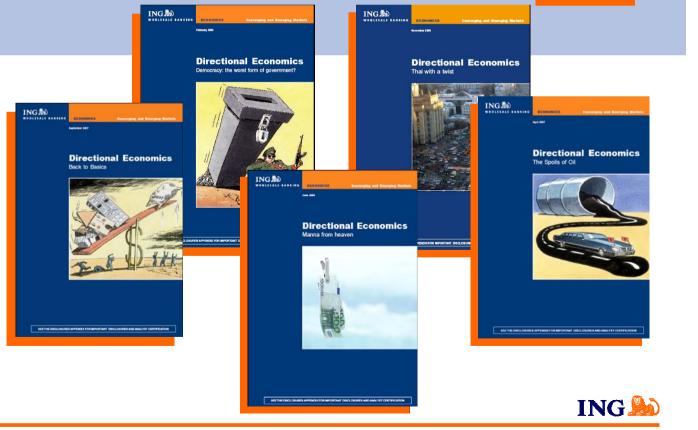
Directional Economics

Emerging and Converging Markets The opportunity of "sub-prime" lending

Charles Robertson

Head of Research and Chief Economist, EEMEA 2008

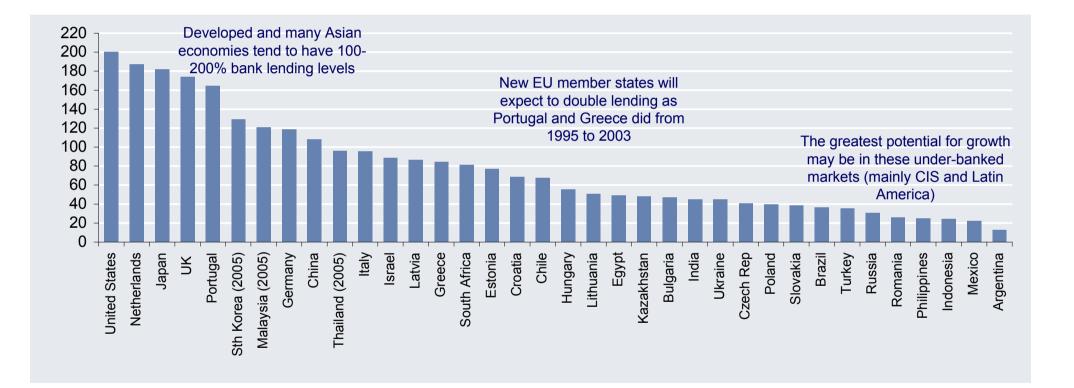
charles.robertson@uk.ing.com +44 20 7767 5310



WHOLESALE BANKING

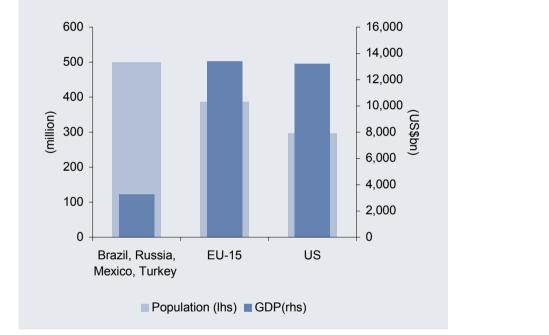
Bank lending – good prospects for EM

2006 bank lending to corporates/households (% of GDP)



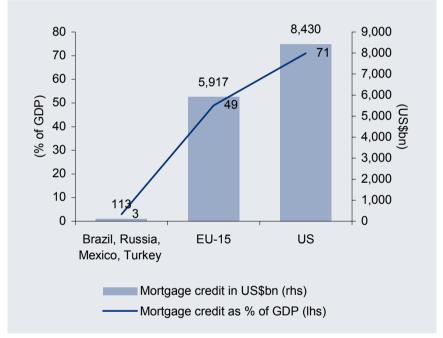


High debt might imply high wealth



GDP and population (2006)

Mortgage credit (2006)



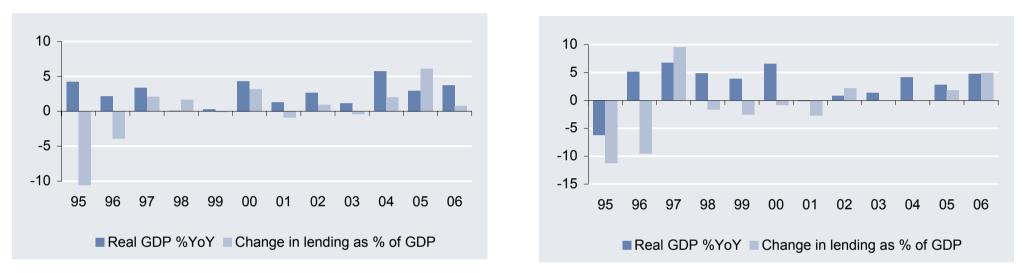
The biggest emerging markets in the debt world – accounting for 60% of the EMBIG – have per capita GDP in the US\$5,000-10,000 range – and very little debt. Their populations are bigger than the EU-15 and nearly double that of the USA, but their total GDP is ¼ of the USA's.

One reason may be a lack of "sub-prime" lending. Mortgage debt is roughly US\$100bn and just 3% of GDP in these countries vs US\$8 trillion and 71% of GDP in the USA. Less debt = less wealth.

If mortgage levels rise by 20 percentage points of GDP in the coming 10 years – to 21% in Russia, 22% in Brazil, 23% in Turkey and 28% in Mexico – mortgage credit would increase by half a trillion dollars in Russia, Brazil and Mexico and US\$200bn in Turkey, helping double their GDP.



Bank lending – low lending explains low growth



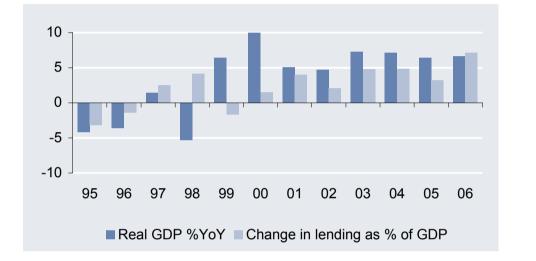
Mexico lending data

Brazil lending data

- Latin America has generally performed weakly in terms of economic growth and this may be closely linked to low levels of bank lending. Credit injection has been no more than 2% of GDP in the past 5 years in Mexico or Brazil.
- But consumer credit in Brazil (now 7% of GDP and rising fast) and mortgage lending in Mexico (+80% real YoY growth in 2005) may help diversify economic growth.

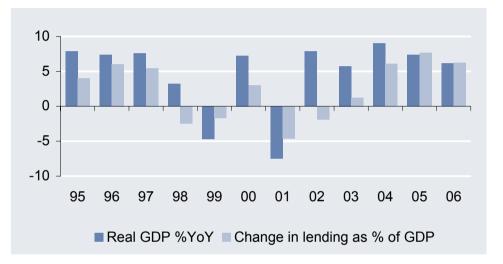


Bank lending – on the rise in EEMEA



Russia lending data

Turkey lending data



- Russian banks have not been protected by legislation, which has deterred them from lending. However credit growth is now rising by some 100% annually which again may help diversify growth. This is pushed by the Kremlin and state-owned banks.
- By contrast, in Turkey it is private sector banks that are renewing lending after the last crash in 2001. Scope for long-term growth means foreign ownership is rising from 2% of assets to 22% (early 2007).



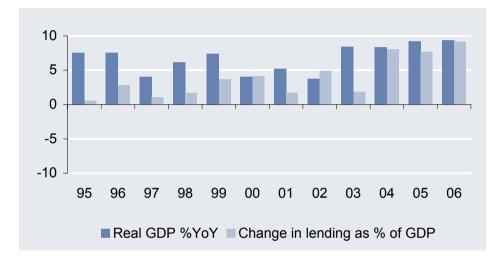
Bank lending – China and India

20 15 10 5 95 96 97 98 99 00 01 02 03 04 05 06 ■ Real GDP %YoY ■ Change in lending as % of GDP

China lending data



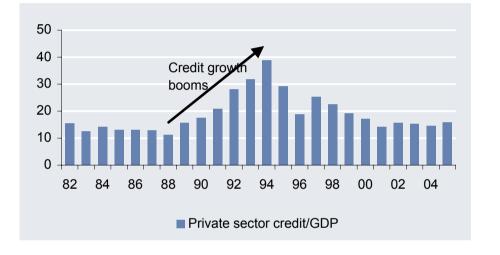
India lending data



- Revised GDP data for China show that bank lending growth was not quite so unsustainable as it previously appeared. The stock of lending remains worrying. But the slowdown in 2004, the sale of stakes to foreign groups/equity investors and a more realistic lending rate policy are helpful factors. The undervalued pegged exchange rate is a further support.
- China is more dependent on net exports than previously; a US slowdown could have a big impact.
- India seems to be experiencing a credit boom, with considerable potential to sustain growth in a 7-10% range over the medium term.

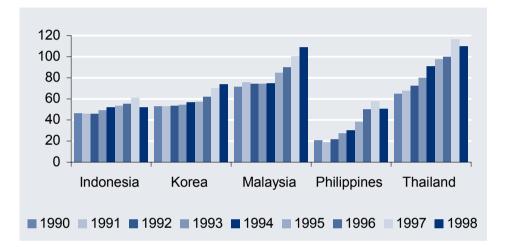


Too much bank lending – Tequila and Thai crises



Mexico – The Tequila crisis

The Thai crisis and Asian contagion



 Excessive bank lending contributed to both the Mexican "Tequila" crisis and to the Asian crisis of 1997-98. Post-communist banking crises have been seen in Russia (often), Bulgaria (1996) and the Czech Republic (1997). In all cases, the banking sectors were dominated by local operators and were poorly regulated. Up to half the loans in Bulgaria and Czech Republic were seen to be "bad" lending – a similar figure in China would be the equivalent of US\$1 trillion.



The external debt trigger

100% usually a threshold for a crisis

Argentina 25 29 26 42 86 126 194 164 134 137 154 139 152 133 114 144 167 155 Brazil 35 43 50 44 55 61 90 93 66 138 98 73 65 68 97 111 222 298 China 7 7 7 7 7 7 9 111 221 23 25 31 34 69 72 26 30 Hindies 25 25 24 04 9 14 24 28 23 13 56 43 499 49	External debt	due to f	oreign	banks	within	12 mon	ths as	% of fx	reserv	es (exc	l gold)								
Brazil 35 43 50 44 55 61 90 103 99 93 96 73 65 68 97 111 262 228 avector 30 34 28 32 46 46 59 63 73 92 93 138 154 528 104 121 130 183 Chira 7 7 7 7 7 7 7 7 7 9 11 122 21 23 25 31 34 69 72 26 30 India 25 25 24 20 16 9 14 24 28 28 31 35 43 37 43 71 88 268 incina 49 52 25 25 29 31 30 44 163 163 71 163 71 163 71 163 7		1Q07	4Q06	4Q05	4Q04	4Q03	4Q02	4Q01	4Q00	4Q99	4Q98	4Q97	4Q96	4Q95	4Q94	4Q93	4Q92	4Q91	4Q90
Ecuador Mexico 105 126 72 101 101 101 124 90 93 66 138 98 82 86 102 114 185 169 194 Mexico 30 34 28 32 46 46 59 63 73 92 93 138 154 528 104 121 130 138 China 7 7 7 7 7 9 11 12 21 23 33 34 69 72 26 30 India 25 25 24 20 16 9 14 24 26 28 31 35 43 37 43 71 88 269 India 25 25 24 23 130 34 47 57 289 188 166 157 14 156 174 138 Malaysia 24	Argentina	25	29	26	42	85	126	194	154	134	137	154	139	152	133	114	144	167	154
Mexico 30 34 28 32 46 46 59 63 73 92 93 138 154 528 104 121 130 183 China 7 7 7 7 7 9 111 12 21 23 25 31 34 69 72 26 30 India 25 25 25 24 20 16 9 14 24 26 28 31 35 43 37 43 71 78 82 165 174 188 209 188 166 157 145 156 174 188 Korea 42 24 22 23 19 20 26 25 26 66 9 41 33 26 27 24 27 21 141 141 13 15 35 207 46 70 660 50 14 130 183 44 140 141 141 141 141 141	Brazil	35	43	50	44	55	61	90	103	99	93	96	73	65	68	97	111	262	298
China 7 7 7 7 7 7 9 11 12 21 23 25 31 34 69 72 26 30 HK 60 64 56 53 53 44 55 65 16 104 181 266 376 430 409 440 53 India 25 25 24 20 16 9 14 24 28 31 35 43 37 43 71 78 280 175 167 164 163 160 167 164 163 160 171 145 156 174 188 260 177 64 53 50 71 79 93 316 7 64 53 50 71 74 97 93 341 121 121 121 106 87 78 74 66 Bulgaria 57 57 42 29 20 18 11 14 13 15 35 <th< td=""><td>Ecuador</td><td>105</td><td>126</td><td>72</td><td>101</td><td>101</td><td>124</td><td>90</td><td>93</td><td>66</td><td>138</td><td></td><td>82</td><td>86</td><td></td><td>114</td><td>185</td><td>169</td><td>194</td></th<>	Ecuador	105	126	72	101	101	124	90	93	66	138		82	86		114	185	169	194
HK 60 64 56 53 53 44 55 65 76 104 181 268 376 430 409 409 480 554 India 25 25 24 20 16 9 14 24 26 28 31 35 43 37 43 71 88 260 Korea 42 35 25 25 25 29 31 30 34 47 57 289 198 166 157 145 156 174 180 Malaysia 24 24 22 23 19 20 25 25 36 69 41 33 26 27 24 27 21 21 121 106 87 78 74 65 35 207 46 70 660 520 1586 NA	Mexico	30	34	28	32	46	46	59	63	73	92	93	138	154	528	104	121	130	183
India 26 25 24 20 16 9 14 24 26 28 31 35 43 37 43 71 88 269 Indonesia 49 52 53 46 38 43 62 71 72 104 75 122 188 201 175 167 164 163 176 164 156 174 138 Malaysia 24 24 22 23 19 20 26 25 25 36 69 41 33 26 27 24 27 21 78 74 26 78 74 26 78 74 76 78 78 74 76 78 74 78 74 76 78 74 76 77 74 27 20 18 11 141 13 15 55 207 46 76 76 76 77 76 76 77 77 78 76 77 77 78 76	China	7	7	7	7	7	7	9	11	12	21	23	25	31	34	69	72	26	30
Indonesia 49 52 53 46 38 43 62 71 72 104 212 188 201 175 167 164 163 180 Korea 42 35 25 25 29 31 30 34 47 57 289 198 166 157 145 156 174 138 Malaysia 24 24 22 23 19 20 26 25 25 36 69 41 33 26 27 24 27 21 21 106 87 78 74 96 34 36 207 145 156 174 138 147 121 101 166 176 167 167 167 168 NA NA Malaysia 27 24 22 13 24 22 20 188 11 14 13 15 35 207 46 70 660 50 38 28 27 24 NA NA	HK	60	64	56	53	53	44	55	65	76	104	181	268	376		409			534
Korea 42 35 25 25 29 31 30 34 47 57 289 198 166 157 145 156 174 138 Malaysia 24 24 22 23 19 20 26 25 25 36 69 41 33 26 27 24 27 21 29 20 19 32 32 42 83 147 121 121 106 87 78 74 66 Bulgaria 57 57 42 29 20 18 11 14 13 15 35 207 46 70 660 520 1586 NA Croatia 122 78 74 65 42 58 45 48 56 33 28 27 24 NA NA NA Croatia 225 213 242 223 100 147 110 141 42 42 13 4 2 2 0 NA	India	25	25	24	20	16	9	14	24	26	28	31	35	43	37	43	71	88	269
Malaysia 24 24 24 24 22 23 19 20 26 25 25 36 69 41 33 26 27 24 27 21 Philippines 45 45 64 60 61 46 49 50 57 93 163 77 64 53 50 71 99 347 Bulgaria 57 57 42 29 20 18 11 14 13 15 35 207 46 70 660 520 1586 NA Czech 47 41 37 22 21 23 40 44 41 60 56 38 28 27 24 NA NA NA Czech 47 41 37 22 21 23 40 44 41 60 56 38 28 27 24 NA NA NA Estonia 112 106 122 78 74 65 50 <td>Indonesia</td> <td>49</td> <td>52</td> <td>53</td> <td>46</td> <td>38</td> <td>43</td> <td>62</td> <td>71</td> <td>72</td> <td>104</td> <td>212</td> <td>188</td> <td>201</td> <td>175</td> <td>167</td> <td>164</td> <td>163</td> <td>180</td>	Indonesia	49	52	53	46	38	43	62	71	72	104	212	188	201	175	167	164	163	180
Philippines 45 45 64 60 61 46 49 50 57 93 163 77 64 53 50 71 99 347 Thailand 16 17 22 19 20 19 32 32 42 83 147 121 121 106 67 78 74 66 Bulgaria 57 57 42 29 20 18 11 14 13 15 35 207 46 70 660 520 1586 NA Croatia 112 106 122 78 74 65 42 58 45 48 56 34 23 13 16 0 NA NA Libroania 226 213 242 223 160 204 147 14 42 42 13 4 2 2 0 NA NA <td< td=""><td>Korea</td><td>42</td><td>35</td><td>25</td><td>25</td><td>29</td><td>31</td><td>30</td><td>34</td><td>47</td><td>57</td><td>289</td><td>198</td><td>166</td><td>157</td><td>145</td><td>156</td><td>174</td><td>138</td></td<>	Korea	42	35	25	25	29	31	30	34	47	57	289	198	166	157	145	156	174	138
Thailand 16 17 22 19 20 19 32 32 42 83 147 121 121 106 87 78 74 66 Bulgaria 57 57 42 29 20 18 11 14 13 15 35 207 46 70 660 520 1586 NA Croatia 112 106 122 78 74 65 42 58 45 48 56 38 28 27 24 NA NA NA Croatia 112 106 122 78 74 65 51 47 44 61 46 47 26 41 31 50 68 24 24 13 4 2 2 0 NA NA <td< td=""><td>Malaysia</td><td>24</td><td>24</td><td></td><td></td><td>19</td><td></td><td></td><td>25</td><td></td><td></td><td></td><td>41</td><td>33</td><td>26</td><td>27</td><td>24</td><td></td><td></td></td<>	Malaysia	24	24			19			25				41	33	26	27	24		
Bulgaria 57 57 42 29 0 18 11 14 13 15 207 46 70 660 520 1586 NA Czech 47 41 37 22 21 23 40 44 41 60 56 38 28 27 624 NA NA NA Croatia 112 106 122 78 74 65 42 58 45 48 56 34 23 13 16 0 NA NA Estonia 225 213 242 223 160 204 147 110 141 42 42 13 4 2 2 0 NA NA Lithuania 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA NA NA NA Poland 40 36 39 32 33 43 49 76 53 33	Philippines	45	45	64	60	61	46	49	50	57	93	163	77	64	53	50	71	99	347
Czech 47 41 37 22 21 23 40 44 41 60 56 38 28 27 24 NA NA NA Croatia 112 106 122 78 74 65 42 58 45 48 56 34 23 13 16 0 NA NA Estonia 225 213 242 223 160 204 147 110 141 42 42 13 4 2 2 0 NA NA Hungary 82 83 78 85 76 65 51 47 44 61 46 47 26 41 31 50 68 240 Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA	Thailand	16	17	22	19	20	19	32	32	42	83	147	121	121	106	87	78	74	66
Czech 47 41 37 22 21 23 40 44 41 60 56 38 28 27 24 NA NA NA Croatia 112 106 122 78 74 65 42 58 45 48 56 34 23 13 16 0 NA NA Estonia 225 213 242 223 160 204 147 110 141 42 42 13 4 2 2 0 NA NA Hungary 82 83 78 85 76 65 51 47 44 61 46 47 26 41 31 50 68 240 Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA	Bulgaria	57	57	42	29	20	18	11	14	13	15	35	207	46	70	660	520	1586	NA
Croatia 112 106 122 78 74 65 42 58 45 48 56 34 23 13 16 0 NA NA Estonia 225 213 242 223 160 204 147 110 141 42 42 13 4 2 2 0 NA NA NA Hungary 82 83 78 85 76 65 51 47 44 61 46 47 26 41 31 50 68 240 Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA NA NA Lithuania 86 89 101 72 52 47 57 58 50 28 15 20 6 6 1 0 NA NA Romania 133 164 52 42 33 43 49 76 53								40								24	NA	NA	NA
Hungary 82 83 78 85 76 65 51 47 44 61 46 47 26 41 31 50 68 240 Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA																			NA
Hungary 82 83 78 85 76 65 51 47 44 61 46 47 26 41 31 50 68 240 Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA	Estonia	225	213	242	223	160	204	147	110	141	42	42	13	4	2	2	0	NA	NA
Latvia 244 216 176 91 99 62 43 46 28 23 8 5 5 1 NA	Hungary	82	83	78	85	76	65	51	47	44	61	46	47	26	41	31	50	68	240
Poland 40 36 39 32 38 42 39 28 25 22 18 14 14 28 92 89 96 73 Romania 135 144 52 42 35 33 43 49 76 53 33 55 76 35 58 50 40 44 Slovakia 38 51 38 24 22 19 44 35 56 87 69 38 22 19 18 NA NA <t< td=""><td></td><td>244</td><td>216</td><td>176</td><td>91</td><td>99</td><td>62</td><td>43</td><td>46</td><td>28</td><td>23</td><td>8</td><td>5</td><td>5</td><td>1</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></t<>		244	216	176	91	99	62	43	46	28	23	8	5	5	1	NA	NA	NA	NA
Poland 40 36 39 32 38 42 39 28 25 22 18 14 14 28 92 89 96 73 Romania 135 144 52 42 35 33 43 49 76 53 33 55 76 35 58 50 40 44 Slovakia 38 51 38 24 22 19 44 35 56 87 69 38 22 19 18 NA NA <t< td=""><td>Lithuania</td><td>86</td><td>89</td><td>101</td><td>72</td><td>52</td><td>47</td><td>57</td><td>58</td><td>50</td><td>28</td><td>15</td><td>20</td><td>6</td><td>6</td><td>1</td><td>0</td><td>NA</td><td>NA</td></t<>	Lithuania	86	89	101	72	52	47	57	58	50	28	15	20	6	6	1	0	NA	NA
Slovakia 38 51 38 24 22 19 44 35 56 87 69 38 22 19 18 NA	Poland	40	36	39	32	38	42	39	28	25	22	18	14	14	28	92	89	96	73
Russia 18 17 26 23 33 33 45 44 129 226 251 235 142 432 142 NA NA NA NA Kazakhstan 51 57 77 38 47 48 45 28 32 34 21 19 20 17 2 NA NA NA NA Ukraine 33 36 22 16 14 15 22 31 39 71 45 19 18 40 133 0 NA NA NA Georgia 11 12 13 25 24 20 40 48 28 23 9 16 16 NA NA <td>Romania</td> <td>135</td> <td>144</td> <td>52</td> <td>42</td> <td>35</td> <td>33</td> <td>43</td> <td>49</td> <td>76</td> <td>53</td> <td>33</td> <td>55</td> <td>76</td> <td>35</td> <td>58</td> <td>50</td> <td>40</td> <td>44</td>	Romania	135	144	52	42	35	33	43	49	76	53	33	55	76	35	58	50	40	44
Kazakhstan 51 57 77 38 47 48 45 28 32 34 21 19 20 17 2 NA NA NA NA Ukraine 33 36 22 16 14 15 22 31 39 71 45 19 18 40 133 0 NA NA NA Georgia 11 12 13 25 24 20 40 48 28 23 9 16 16 NA NA <td< td=""><td>Slovakia</td><td>38</td><td>51</td><td>38</td><td>24</td><td>22</td><td>19</td><td>44</td><td>35</td><td>56</td><td>87</td><td>69</td><td>38</td><td>22</td><td>19</td><td>18</td><td>NA</td><td>NA</td><td>NA</td></td<>	Slovakia	38	51	38	24	22	19	44	35	56	87	69	38	22	19	18	NA	NA	NA
Ukraine Georgia 33 11 36 12 22 13 16 24 14 20 15 40 22 40 31 48 39 28 71 23 45 9 19 16 18 16 40 NA 133 NA 0 NA NA NA NA	Russia	18	17	26	23	33	33	45	44	129	226	251	235	142	432	142	NA	NA	NA
Georgia 11 12 13 25 24 20 40 48 28 23 9 16 16 NA	Kazakhstan	51	57	77	38	47	48	45	28	32	34	21	19	20	17	2	NA	NA	NA
Egypt 39 35 28 22 26 28 31 32 27 23 15 14 15 16 16 22 55 111 Israel 21 17 17 17 17 22 19 17 13 16 13 14 18 27 27 25 33 30 34 South Africa 51 62 40 72 136 149 160 182 212 284 292 1157 369 513 643 743 667 683 Turkey 64 71 74 82 56 55 100 117 91 107 87 70 72 102 182 128 139 128 Iceland 632 589 833 355 378 600 635 531 430 375 223 187 241 202 141 157 135 138 US 2080 1933 1592 1027 842 806 <td>Ukraine</td> <td>33</td> <td>36</td> <td>22</td> <td>16</td> <td>14</td> <td>15</td> <td>22</td> <td>31</td> <td>39</td> <td>71</td> <td>45</td> <td>19</td> <td>18</td> <td>40</td> <td>133</td> <td>0</td> <td>NA</td> <td>NA</td>	Ukraine	33	36	22	16	14	15	22	31	39	71	45	19	18	40	133	0	NA	NA
Israel 21 17 17 17 17 12 19 17 13 16 13 14 18 27 27 25 33 30 34 South Africa 51 62 40 72 136 149 160 182 212 284 292 1157 369 513 643 743 667 683 Turkey 64 71 74 82 56 55 100 117 91 107 87 70 72 102 182 128 139 128 Iceland 632 589 833 355 378 600 635 531 430 375 223 187 241 202 141 157 135 138 US 2080 1933 1592 1027 842 806 975 938 764 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Georgia	11	12	13	25	24	20	40	48	28	23	9	16	16	NA	NA	NA	NA	NA
Israel 21 17 17 17 17 12 19 17 13 16 13 14 18 27 27 25 33 30 34 South Africa 51 62 40 72 136 149 160 182 212 284 292 1157 369 513 643 743 667 683 Turkey 64 71 74 82 56 55 100 117 91 107 87 70 72 102 182 128 139 128 Iceland 632 589 833 355 378 600 635 531 430 375 223 187 241 202 141 157 135 138 US 2080 1933 1592 1027 842 806 975 938 764 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Egypt	39	35	28	22	26	28	31	32	27	23	15	14	15	16	16	22	55	111
South Africa 51 62 40 72 136 149 160 182 212 284 292 1157 369 513 643 743 667 683 Turkey 64 71 74 82 56 55 100 117 91 107 87 70 72 102 182 128 139 128 Iceland 632 589 833 355 378 600 635 531 430 375 223 187 241 202 141 157 135 138 US 2080 1933 1592 1027 842 806 975 938 764 0 <td< td=""><td></td><td></td><td>17</td><td></td><td></td><td>22</td><td>19</td><td>17</td><td></td><td>16</td><td></td><td>14</td><td>18</td><td>27</td><td>27</td><td>25</td><td></td><td>30</td><td>34</td></td<>			17			22	19	17		16		14	18	27	27	25		30	34
Turkey 64 71 74 82 56 55 100 117 91 107 87 70 72 102 182 128 139 128 Iceland 632 589 833 355 378 600 635 531 430 375 223 187 241 202 141 157 135 138 US 2080 1933 1592 1027 842 806 975 938 764 0	South Africa	51	62				149	160		212									683
US 2080 1933 1592 1027 842 806 975 938 764 0 0 0 0 0 0 0 0 0 0 0		64						100											128
US 2080 1933 1592 1027 842 806 975 938 764 0 0 0 0 0 0 0 0 0 0 0	Iceland	632	589	833	355	378	600	635	531	430	375	223	187	241	202	141	157	135	138
																			0
	New Zealand	85	102	141	196	182	131	178	135	144	179	145	83	96	87	126	155	157	84

Bold is crisis year. Shading indicates a number >=100%. Source: JEDH



Emerging Markets safer than some developed markets

The great EM disasters of the 1990s were usually the consequence of poor policy choices by EM governments, with the crisis occurring when foreign financing for these bad policies disappeared. The triggers came when:

1) Governments could no longer borrow money (Russia in 1998, Argentina in 2001, Turkey in 2001, Brazil in 2002).

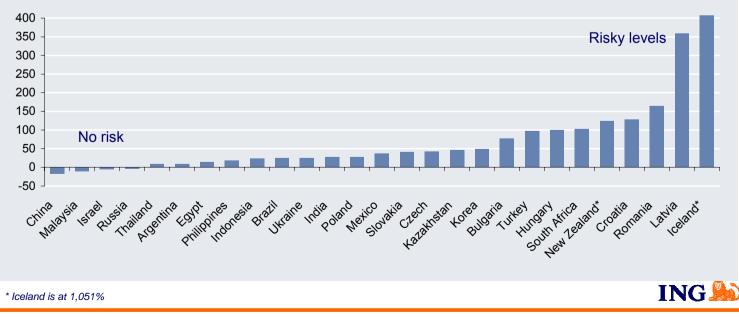
2) Foreign banks would not roll over private sector external debt (Korea in 1997, Mexico in 1994, Brazil in 2002).

3) The current account position made them vulnerable (Turkey in 2001, Mexico in 1994, Thailand in 1997).

Now governments do not borrow money – or not much. Short-term external borrowing is low. The current account + FDI picture is much improved.

External debt due in 12 months + FDI + C/A, all as % of fx reserves in 2007

The chart shows the total of the external debts due within 12 months + the C/A + FDI, as a ratio of fx reserves. le, it would take South Africa and Turkey a year to run out of reserves if they could not roll-over any debt. But it would take Iceland just 3 weeks (Iceland is off the scale of our chart). Russia's reserves would still grow!



Foreign bank ownership

Poland	% of assets (2005)	Assets (€bn)
Unicredito (Bank Pekao - Bank BPH)	20	<u>A33613 (CDI)</u> 31
PKO BP	16	23.8
ING (Bank Slaski)	7	10.9
Commerzbank (BRE)	6	8.6
Citigroup (Handlowy)	6	8.5
AIB (Bank Zachodni WBK)	5	7. <u>7</u>
Hungary	% of assets (2005)	Assets (€bn)
OTP	19	14.2
KBC (K&H)	10	7.5
Bayerische Landesbank (MKB)	9	6.5
Intesa (CIB)	8	5.8
Erste	8	5.7
Raiffeisen	7	5
Unicredito (HVB)	5	4
Czech Republic	% of assets (2005)	Assets (€bn)
KBC (CSOB)	25	25.4
Erste (Ceska Sporitelna)	22	22.6
Soc Gen (Komercni)	17	17.8
Unicredito	7	7.4
Commerzbank	4	3.6
Raiffeisenbank	3	2.7

Bulgaria	% of assets (2005)	Assets (€bn)
Unicredito (Bulbank, Hebros, Biochim)	21	3.5
OTP (DSK)	14	2.3
NBG (UBB)	10	1.6
Raiffeisen	9	1.4
First Investment Bank	8	1.3
EFG Eurobank (Bulgarian Post Bank)	5	0.9
Romania	% of assets	Assets (€bn)
	(2005)	`
Erste (BCR)	26	9
Soc Gen (BRD)	15	5.2
Unicredito	9	3.1
Raiffeisen	9	3
ING	5	1.8
EFG Eurobank	4	1.6
CEC	4	1.5

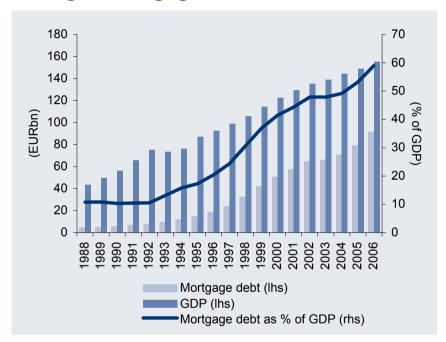
Russia	% of assets (2005)	Assets (€on)
Sberbank	26	73.7
Vneshtorgbank	6	18.4
Gazprom	4	12.4
Alfa	2	6.8
Uralsib	2	6.7
Bank of Moscow	2	6.5
Rosbank	2	5.9
Ukraine	% of assets	Assets (€bn)
	(2005)	
Privatbank	11	4.2
Raiffeisen (Aval)	8	3.3SG was reportedly interested
Prominvestbank	6	2.4
BNP Pari. (UkrSibbank)	6	2.3SG was reportedly interested
Ukreximbank	5	2State
Unicredito (Ukrsotsbank)	5	1.9
Oshchadbank	4	1.5State
OTP	3	1.3Was Raiffeisenbank
Nadra	3	1.2Possible take-over target
Finance and Credit Bank	2	0.8Possible take-over target
Turkey		Assets (€on)
	(Jun-06)	
ls	15	
Ziraat	15	
AK	12	
YKB	10	
Garanti	10	
Vakif	7	16.9State 59% and may sell in 2008, employees 16%, free-float 25%
Halk	7	
NBG (Finansbank)	4	8.6NBG owns 87% with strat stake (46%) + after buying shares
ING (Oyakbank)	4	5.3ING bought 100% in Dec-07
Dexia (Denizbank)	2	5.3Dexia owns over 95%

Source: National sources

Just 1% of the Mexican banking sector was foreign owned in 1994, 16% in 1997 and 82% in 2004. Just 2% of Turkey's banking sector was foreign owned in 2004, but around 40% now.

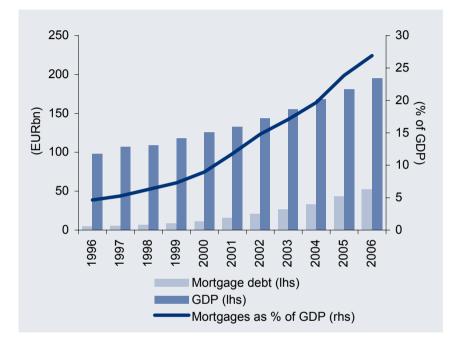


The precedent of Greece and Portugal



Portugal: mortgages and GDP

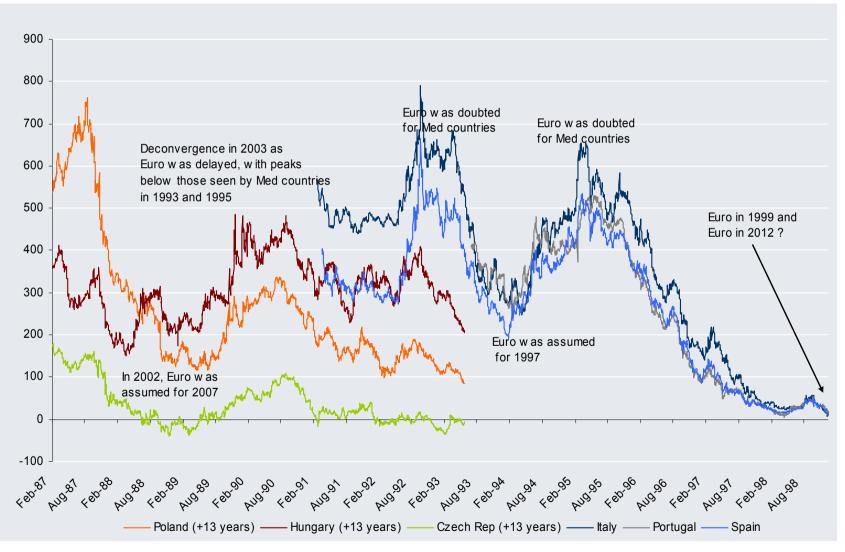
Greece: mortgages and GDP



- Portugal was a typical emerging market in the early 1990s when mortgage lending was just 10% of GDP. It soared along with Euro adoption in 1999.
- Greece has lagged Portugal due to high transaction taxes on property (roughly 25% of property value) but has risen five-fold in 10 years.



Nominal convergence but not yet

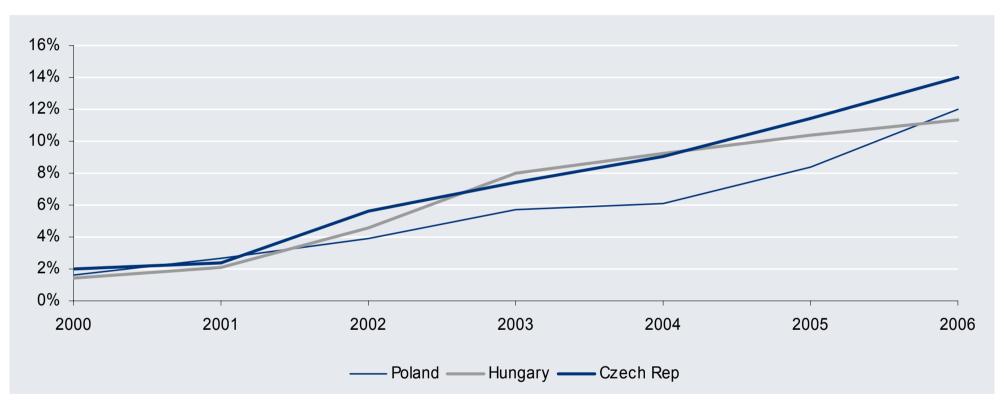


Note: CE4 data lagged by 13 years



Central Europe – steady convergence

Mortgage levels as % of GDP

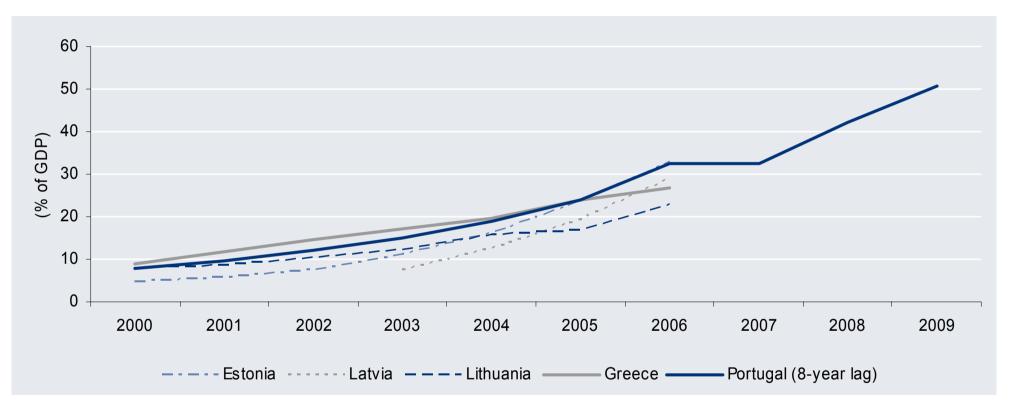


By contrast, central Europe's mortgage growth seems limited, sustainable and on course to continue converging with other EU member states.

We assume fx borrowing has an inbuilt protection mechanism – which is that the greatest risk (of HUF devaluation) should be avoided by interest rate hikes which would encourage more fx borrowing rather than less. However, forced sale of assets and repayment of loans means significant economic problems cannot be totally discounted.

Baltic states – mortgage levels similar to Greece

Mortgage levels as % of GDP

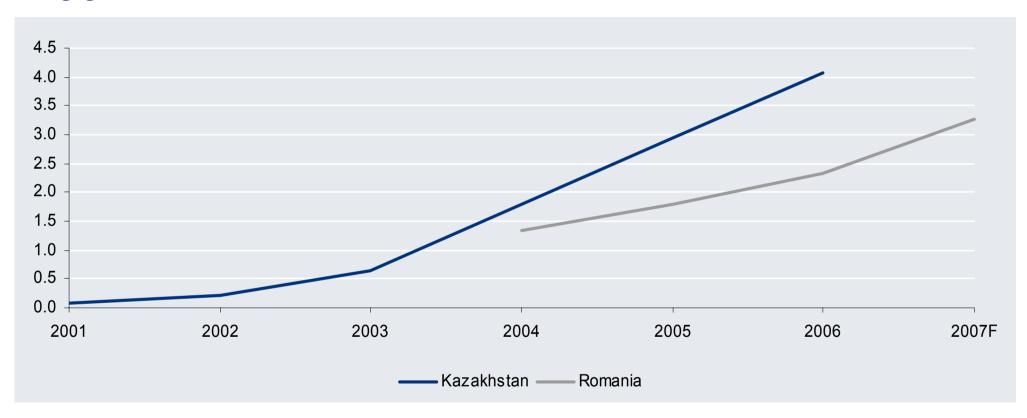


Mortgage levels in the Baltic states echo that of Greece, and Portugal with an eight-year lag. Portugal's economy hit a brick wall in 2001 and stopped converging with Germany. Deconvergence lasted some 4-5 years as Portugal grew at just 1% a year. This precedent suggests the Baltic states will hit difficulties in 2009 and have to face either stagnation or devaluation.



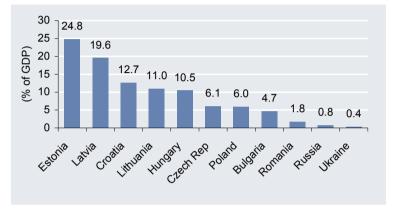
Frontier markets have much potential

Mortgage levels as % of GDP



 In Kazakhstan and Romania by contrast, mortgage levels seem very modest. But rapid growth in lending has led to excesses in both countries – as seen in the Kazakh crisis in October 07 and Romania's C/A deficit.

The outlook for mortgage lending and C/A risks



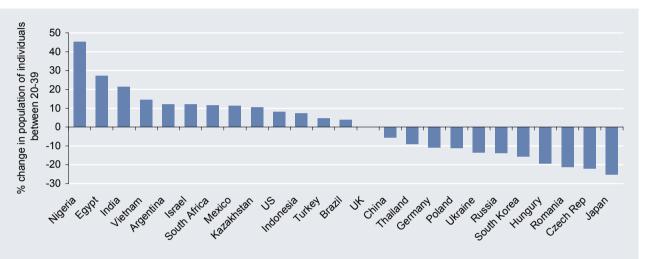
Mortgage comparison (2005)

Mortgage lending and other consumer credit growth is a key factor behind the booming C/A deficits in emerging Europe.

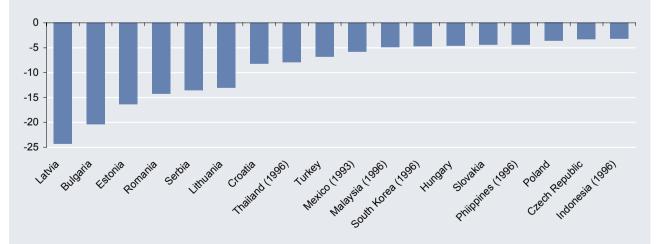
Compared to one year ago, we have more concerns because:

- 1) ERM membership has not been extended to Bulgaria
- 2) Foreign ownership of the banking sectors could be a threat
- 3) The markets are less forgiving of excessive risk-taking
- 4) Current accounts keep rising

Projected %ch in 20-39-year-olds from 2005 to 2020



Current account deficits breaching 7% of GDP danger level (2007F)



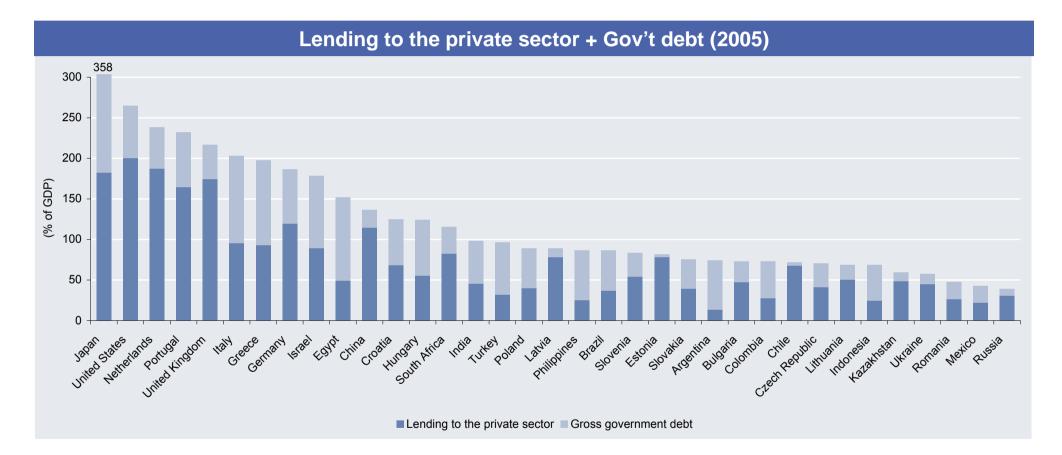


No risk of a crisis in EEMEA (*but see latest thoughts*)

- The external debt trigger is a fairly reliable signal of problems but not perfect (see Czech Republic in 1997). It suggests only the Baltics and Balkans are at risk.
- The Baltics and Balkans do not offer contagion risk to EEMEA in the same way that Thailand did for other Asian countries, but Hungary and Turkey may be vulnerable.
- EU member states have an exit strategy from a currency peg they can adopt the Euro, *but not if inflation misses the target by 0.1%*. Mexico and Thailand could not adopt the US dollar.
- ERM-2 member states are protected from very significant devaluations by the ECB, but see Bulgaria's rejection by Trichet.
- Banks are (hopefully) better regulated and better run than they were in Mexico in the early 1990s or Asia in the mid-1990s. Foreign ownership is much higher. *This might however carry its own risks given the credit crunch since August 2007*.
- Ukraine carries long-term risk that can easily be removed by widening its currency bands anytime in the next 2-3 years.
- Lastly note that economists can be particularly bad at forecasting an end to currency regimes. Most investment bank reports as late as 4q1994 predicted Mexico would not be forced to devalue!



Most high debt countries not growing fast



• Countries with the best outlook are on the right-hand side of this chart and include former Soviet countries as well as Romania and Mexico.



ING Emerging Markets Research Contacts

London	Charles Robertson	Head of research and chief Economist, EMEA	(44 20) 7767 5310	charles.robertson@uk.ing.com
	Agata Urbańska	Senior economist, Emerging Europe	(44 20) 7767 6970	agata.urbanska@uk.ing.com
	Dorothée Gasser	Senior economist, Middle East and Africa	(44 20) 7767 6023	dorothee.gasser@uk.ing.com
	Courtney Ruesch	Research Assistant, Baltics	(44 20) 7767 5567	courtney.ruesch@uk.ing.com
	Andre Andrijanovs	Credit Analyst	(44 20) 7767 6540	andre.andrijanovs@uk.ing.com
	Oksana Reinhardt	Credit Analyst	(44 20) 7767 6535	oksana.reinhardt@uk.ing.com
	Dmitrij Tichonov	Research assistant	(44 20) 7767 6464	
Bratislava	Jan Toth	Chief Economist, Slovakia	(421 2) 5934 6381	jan.toth@ing.sk
	Eduard Hagara	Economist, Slovakia	(421 2) 5934 6392	eduard.hagara@ing.sk
Budapest	David Nemeth	Economist, Hungary	(36 1) 255 5581	nemeth.david@ing.hu
Kiev	Alexander Valchyshen	Economist/Credit Analyst, Ukraine	(38 044) 230 3017	alexander.valchyshen@ingbank.com
Mexico City	Salvador Moreno	Chief Economist, Mexico	(52 55) 5258 2199	salvador.moreno@americas.ing.com
	David Jaime	Economist, Mexico	(52 55) 5258 2045	david.jaime@americas.ing.com
	Rogelio Urrutia	Corporate Debt Analyst	(52 55) 5258 2144	rogelio.urrutia@americas.ing.com
Moscow	Stanislav Ponomarenko	Head of Research, Credit Analyst, Russia	(7 495) 755 5480	stanislav.ponomarenko@ingbank.cor
	Tatiana Orlova	Economist, Russia, Kazakhstan and other CIS	(7 495) 755 5489	tatiana.orlova@ingbank.com
	Ivan Bokmat	Research analyst, Russia	(7 495) 771 7994	Ivan.bokhmat@ingbankcom
	Olga Golub	Credit Analyst, Russia	(7 495) 755 5176	olga.golub@ingbank.com
Mumbai	Harish Menon	Economist, India	(91 22) 2499 8128	harishm@ingvysyabank.com
New York	H David Spegel	Global Head of Emerging Markets Strategy	(1 646) 424 6464	david.spegel@americas.ing.com
	WR Eric Ollom	Head of Corporate Debt Research (Latam)	(1 646) 424 7913	william.ollom@americas.ing.com
	Diego Torres	Corporate Debt Analyst	(1 646) 424 7247	diego.torres@americas.ing.com
Prague	Vojtech Benda	Senior Economist, Czech Republic	(420 2) 5747 4432	vojtech.benda@ing.cz
Sao Paulo	Pedro Jobim	Chief Economist, Brazil	(55 11) 4504 6131	pedro.jobim@americas.ing.com
Singapore	Tim Condon	Head of Research & Chief Economist, Asia	(65) 6232 6020	tim.condon@asia.ing.com
	Prakash Sakpal	Economist, Asia	(65) 6232 6181	prakashb.sakpal@asia.ing.com
	Warut Promboon	Credit Analyst, Corporates	(65) 6232 6031	warut.promboon@asia.ing.com
Warsaw	Mateusz Szczurek	Chief Economist, Poland	(48 22) 820 4698	mateusz.szczurek@ingbank.pl
	Rafal Benecki	Senior Economist, Poland	(48 22) 820 4696	rafal.benecki@ingbank.pl

