



Real decoupling & financial recoupling

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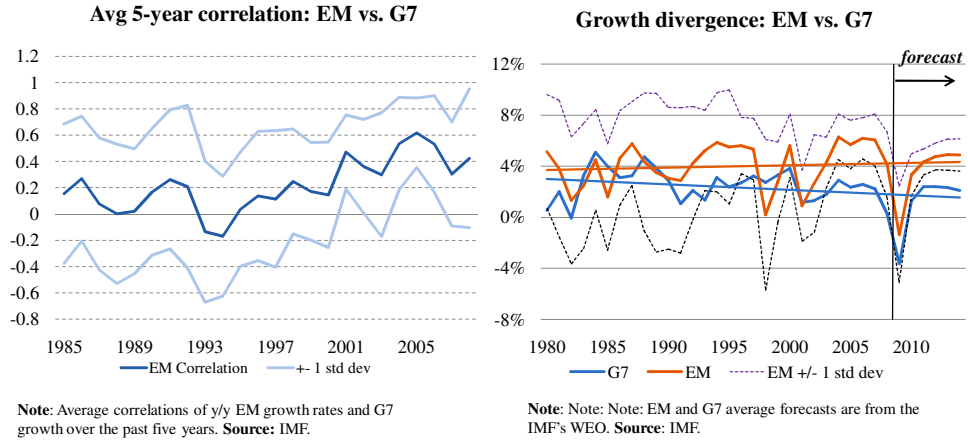
Banco de España, July 2010

Plan

- Real decoupling?
 - The China factor
- Financial recoupling
 - Growing betas (before the crisis)
- Do we care?
 - Financial shocks & the real economy
- Why?
 - Financial globalization (FG) & market betas

Real decoupling: Stylized facts

Growth alphas and betas: High correlation & diverging trends



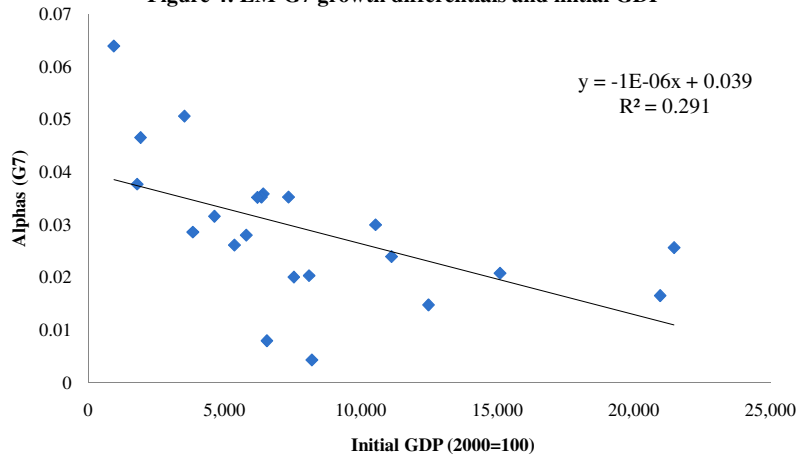
Real decoupling in the 2000s: Moving East

Real decoupling – Growth as a function of G7 and China, EM and PCE (y/y, quarterly data)

Variable	EM Panel			CRB	WTI	PCE Panel	
	(1)	(2)	(3)			(9)	(10)
G7	0.432*** (0.0000)	1.636*** (0.0000)	0.988*** (0.0000)	0.96 (0.2530)	7.728*** (0.0000)	0.327* (0.0810)	0.1690 (0.4350)
G7_late	0.146** (0.0430)	-1.299*** (0.0000)	-0.763*** (0.0000)			0.492** (0.0330)	0.487** (0.0390)
China		0.850*** (0.0000)	0.557*** (0.0000)	2.826*** (0.0000)	0.184 (0.9110)	0.121* (0.0670)	0.0500 (0.5110)
China_late		0.420*** (0.0000)	0.174*** (0.0060)			-0.153*** (0.0050)	-0.223*** (0.0020)
crb			0.091*** (0.0000)			0.0000 (0.0000)	0.028* (0.0690)
wti			0.013*** (0.0050)			0 (0.0000)	0.002 (0.6110)
α	0.028*** (0.0000)	-0.086*** (0.0000)	-0.040*** (0.0000)	-0.269*** (0.0000)	-0.124 (0.4610)		
Observations	1357	1357	1357	63	63	264	264
R-squared	0.123	0.258	0.301	0.267	0.289	0.419	0.426
G7	0.578*** (0.0000)	0.347*** (0.0000)	0.226*** (0.0000)			0.818*** (0.0000)	0.657*** (0.0000)
+G7_late							
China		1.270*** (0.0000)	0.731*** (0.0000)			-0.054 (0.5790)	-0.172 (0.1230)
+China_late							

Diverging trends: Growth convergence?

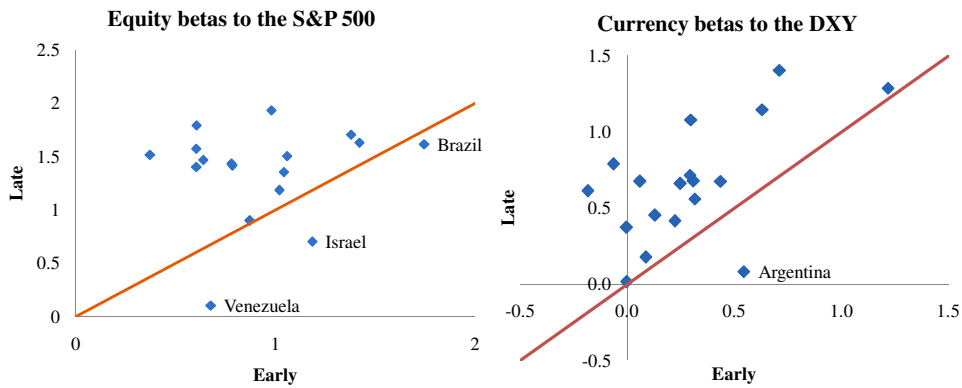
Figure 4: EM-G7 growth differentials and initial GDP



Note: Alphas are from country-by-country regressions reported in Table 2. Initial GDP is real per capita GDP in 1992 (base 2000=100). Source: IMF's IFS.

Financial recoupling

- EM asset betas before & after (2000-2004 vs. 2005-2009)



Source: Bloomberg.

Source: Bloomberg.

Financial recoupling

EM equity betas: No sign of asymmetric crisis effect

		Coefficients				% significant β - DIF
		2000-2004	2005-2009	2005-2007	2008-2009	
EM	Annual	1.25	1.70	-	-	
	Quarterly	1.18	1.56	1.56	1.53	
	Monthly	0.97	1.46	1.52	1.43	
PCE	Annual	1.26	1.63	-	-	
	Quarterly	1.13	1.52	1.23	1.53	
	Monthly	0.96	1.35	1.35	1.36	
		Coefficients				% significant β - DIF
		α	β - POS	β - NEG	β - DIF	
Median - EM		0.01958	1.28**	1.54**	-0.21	5.26%
Subgroup I - AEM		0.01728	1.28**	1.49**	-0.21	0.00%
Subgroup II - LAC		0.02433	1.12**	1.54**	-0.36	12.50%
Median - PCE		0.00685	1.27**	1.40**	-0.14	0.0%

Do we care? The real-financial link

EM growth residuals & financial shocks

Dependent Variable	1993-2001	1993-2001	2001-2009	2001-2009	2001-2009
	residual	residual	residual	residual	residual
	(8)	(9)	(11)	(12)	(13)
msci_1	0.027***	0.035***	0.014***	0.016***	0.026***
	0.000	0.000	0.003	0.007	0.000
EMP_1	-0.006***	-0.002	-0.003*	-0.008***	-0.008***
	0.000	0.187	0.092	0.000	0.000
spread_1		-0.021***		0.006**	
		0.001		0.017	
HY_1					0.017***
					0.000
α	-0.002	0.127***	-0.003	-0.042***	-0.117***
	0.162	0.001	0.107	0.007	0.000
Observations	522	234	693	448	448
R-squared	0.189	0.373	0.042	0.102	0.117

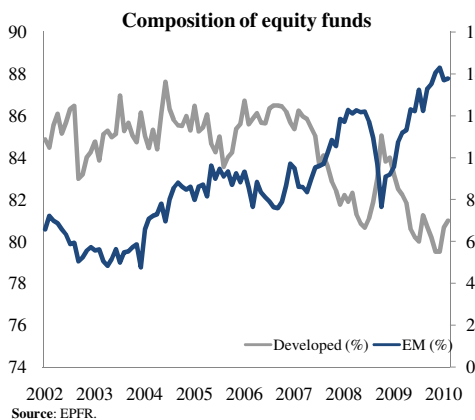
Financial recoupling: Why?

Financial globalization (FG):

- What do we talk about
 - De facto & de jure
 - Stocks & flows
- Priors
 - Globalization of the EM investor base & technical contagion: proxy hedging, benchmarking, global sentiment, etc. (Didier et al., 2010)
- Evidence

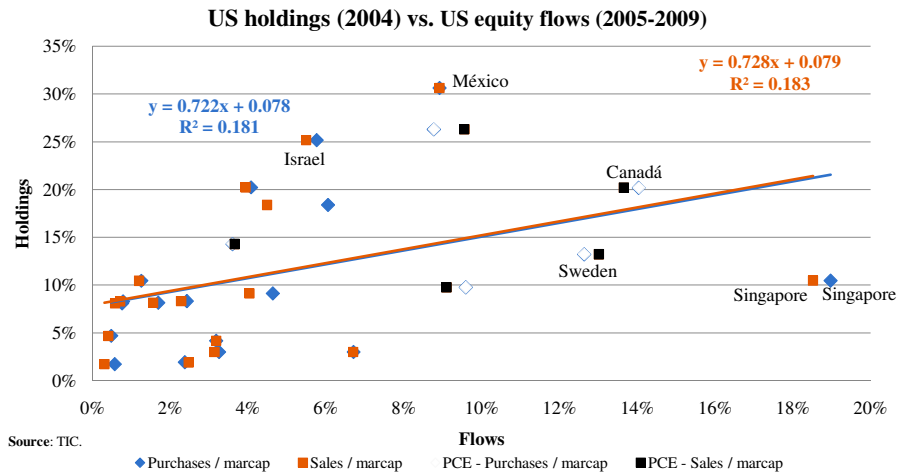
FG: Globalization of the investor base

- Growing share in the global portfolio
- High-alpha, high-beta pattern



Comparing FG proxies: US holdings vs US gross flows

- Do larger holdings lead to larger flows?



Financial recoupling & FG: US holdings

EM equity response to S&P changes as a function of US holdings (crisis period)

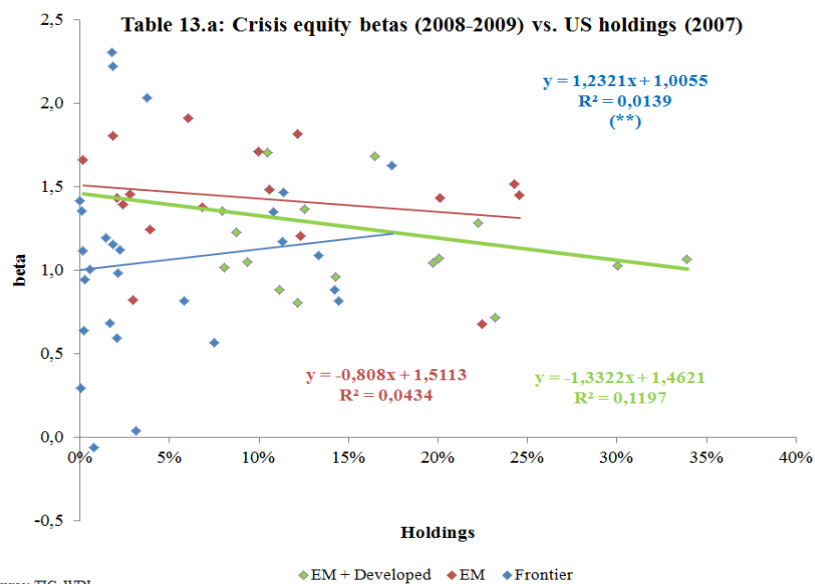
Variable	Time dummies, Lehman interaction			Replacing time dummies by SPX					
	All (Didier et al., 2010)	EM +Developed	Frontier	All	No Lehman interaction	EM +Developed	Frontier	EM	EM (MSCI)
SPX* US Holdings *Pre Lehman	0.2783*** (0.0000)	-0.002 (0.9830)	0.4869*** (0.0010)	0.0141* (0.0680)					
SPX* US Holdings *Post Lehman	0.2149*** (0.0000)	0.072 (0.3970)	0.3234** (0.0180)	0.0113 (0.1060)					
SPX* US Holdings					.0118* (0.0910)	-0.004 (0.6170)	.0382** (0.0270)	0.0016 (0.8680)	-0.004 (0.7020)
SPX				0.8549*** (0.0000)	0.8549*** (0.0000)	1.080*** (0.0000)	0.7516*** (0.0000)	1.071*** (0.0000)	1.506*** (0.0000)
R-squared	0.5575	0.6817	0.4669	0.3469	0.3469	0.5538	0.2742	0.4882	0.5542
Observations	1539	651	802	1628	1628	682	858	391	391
Time dummies	Yes	Yes	Yes	No	No	No	No	No	No
Countries	74	31	39	74	74	31	39	17	17

Financial recoupling & FG: Other FG proxies

EM equity response to S&P changes as a function of FG proxies

FG proxy	US equity holdings	LMF equity liabilities	Avg US sales and purchases	US equity holdings	LMF equity liabilities	Avg US sales and purchases	LMF equity liabilities
	2008-2009			2005-2009			2001-2009
S&P Returns*FG	-0.0038 (0.5910)	0.0038 (0.3520)	-0.0083 (0.4610)	-0.0044 (0.3980)	0.0028 (0.3970)	-0.0069 (0.4870)	0.0003 (0.9370)
S&P Returns	1.489*** (0.0000)	1.274*** (0.0000)	1.464*** (0.0000)	1.544*** (0.0000)	1.325*** (0.0000)	1.499*** (0.0000)	1.251*** (0.0000)
R-squared	0.5839	0.5849	0.5839	0.4944	0.4946	0.4940	0.3599
Observations	408	408	408	1020	1020	1020	2023
Time dummies	No	No	No	No	No	No	No
Countries	17	17	17	17	17	17	17

Financial recoupling and FG: Crisis betas



In sum...

- Real decoupling: Diversification away from G7
- Financial recoupling: Growing betas to G7 markets
- Do we care? Yes, to the extent that big market swings influence real economic outcomes
- Is recoupling related to FG? Not through the usual FG proxies...but the link between FG and market betas remains open



Thank you
