

Annexe 4

Matrice de variance-covariance

	derives	AutreD ériv	Pays_Pr ésence	Pays_Pr oduction	Dispers ion	Pays	Régions	CA_hors sEurope	Employé sHorsEU	EmployésHo rsEU/Total	RD	Market- to-book	Prop_CAH orsEurope	Dettes	Dettes/ Actif	VolProfi tNet/CA	Actif	Capit_B oursièr e	CA	Coût_Ve ntes	ROA	CFOp	CFInv
derives	1																						
AutreDeriv	0.1287	1																					
Pays_Présence	0.0335	0.2179	1																				
Pays_Production	-0.0643	0.1636	0.7986	1																			
Dispersion	-0.0050	-0.1573	0.3776	0.3149	1																		
Pays	0.0324	0.2139	0.9997	0.7973	0.3757	1																	
régions	-0.0909	0.1114	0.8075	0.4814	0.3580	0.8090	1																
CA_hors_Europe	0.6729	0.0483	0.3262	0.1537	0.2915	0.3200	0.3680	1															
Employs_HorsEU	0.3169	0.1233	0.7755	0.7226	0.3490	0.7689	0.5249	0.5330	1														
EmployésHorsEU/Total	-0.1769	-0.0312	0.2288	0.0878	0.2933	0.2306	0.3792	0.0020	0.0989	1													
RD	0.3062	-0.0923	0.2488	-0.1499	0.4158	0.2490	0.3912	0.5209	0.2295	0.1488	1												
Market-to-Book	-0.1862	0.0382	0.0754	0.0100	0.2223	0.0752	0.1812	-0.1171	-0.1184	0.0815	-0.0142	1											
Prop_CAH_ors_EU	-0.0711	-0.4394	0.0527	-0.2725	0.4645	0.0529	0.2650	0.2726	0.0289	0.3057	0.5093	0.1313	1										
Dettes	0.6279	0.1772	0.1482	0.3219	-0.0938	0.1426	-0.1641	0.3879	0.4376	-0.3034	-0.0212	-0.2835	-0.4386	1									
DettesActif	0.1599	0.2888	0.0622	0.2839	-0.3714	0.0543	-0.2092	-0.0435	0.2996	-0.3068	-0.4488	-0.2566	-0.5378	0.5906	1								
VolProfitNet/CA	0.0544	-0.1770	-0.0916	-0.0520	-0.0546	-0.0911	-0.0589	0.0574	0.0899	0.0235	0.0405	-0.1098	0.0974	0.0718	0.1383	1							
Actif	0.6970	0.1344	0.1088	0.2762	-0.0442	0.1044	-0.1607	0.4639	0.4035	-0.2967	0.0846	-0.3178	-0.4268	0.9730	0.4588	0.0648	1						
Cap_boursière	0.2509	0.0328	0.1647	0.0421	0.3834	0.1603	0.2364	0.4893	0.1305	0.0534	0.6433	0.0299	0.1331	0.0870	-0.4176	-0.0352	0.2320	1					
CA	0.7839	0.2181	0.0589	0.2024	-0.1283	0.0565	-0.1390	0.6447	0.3368	-0.2974	0.0563	-0.2785	-0.3986	0.7328	0.3286	0.0842	0.7992	0.2547	1				
Coût_Ventes	0.7746	0.2055	-0.0103	0.1202	-0.2326	-0.0074	-0.1891	0.5032	0.2206	-0.3172	-0.0421	-0.2080	-0.4477	0.6774	0.3274	0.0955	0.7327	0.0838	0.9448	1			
ROA	-0.0918	-0.1319	0.0784	-0.0934	0.2721	0.0781	0.1282	0.0538	-0.1164	0.0867	0.1045	0.4032	0.3165	-0.3048	-0.4652	-0.3538	-0.2860	0.2235	-0.2173	-0.2307	1		
CFOp	0.3699	0.1165	-0.2387	-0.1227	0.0326	-0.2520	-0.2522	0.4623	0.0195	-0.2527	0.2538	-0.2069	-0.2179	0.4289	0.0966	-0.0462	0.5263	0.5960	0.5584	0.3645	-0.0239	1	
CFInvest	-0.3707	-0.0242	0.0133	-0.0613	-0.0040	0.0111	0.0336	-0.2640	-0.0981	0.1550	-0.0495	0.1054	0.2370	-0.3571	-0.1237	0.0439	-0.4131	-0.1514	-0.4362	-0.4506	0.0796	-0.2054	1

Annexe 5

Analyse primaire

. xtreg log(dérivés)	%CA_étranger	Log(Tot_Actif)	Dettes/Actif	ROA	Vol_Monnaie	AutreDeriv	Log(VolProfitNet/CA),	Level(90)
Random-effects GLS regression	Number of obs		211					
Group variable: firms1	Number of groups		18					
R-sq:	Obs per group:	min = 4						
within	= 0.5066							
between	= 0.7013	avg =11.7						
overall	= 0.6253	max =13						
corr(u_i, X) = 0 (assumed)	Wald chi2(7) = 212.90							
	Prob > chi2 = 0.0000							
Log(dérivés)	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]		
%CA_étranger	.4513736	.162795	2.77	0.006	.1835997	.7191476		
Log(Tot_Actif)	.8717978	.0745388	11.70	0.000	.7491924	.9944033		
Dettes/Actif	-.4058853	.1465544	-2.77	0.006	-.646946	-.1648247		
ROA	.4148617	.2873194	1.44	0.149	-.0577367	.8874602		
Vol_Monnaie	.0201932	.0071432	2.83	0.005	.0084437	.0319427		
AutreDeriv	.1765438	.0761725	2.32	0.020	.0512512	.3018364		
Log(VolProfitNet/CA)	.04925	.0240226	2.05	0.040	.0097364	.0887636		
_cons	-.5085948	.3519581	-1.45	0.148	-1.087514	.0703247		
sigma_u	.33943586							
sigma_e	.19585115							
rho	.7502339							

Annexe 6

Test de racine unique

6.1 Chiffre d'affaire hors Europe

```
. xtunitroot llc Prop_CAhorsEU
```

Levin-Lin-Chu unit-root test for Prop_CAhorsEU

Ho: Panels contain unit roots	Number of panels =	19
Ha: Panels are stationary	Number of periods =	13

AR parameter: Common Asymptotics: N/T -> 0

Panel means: Included

Time trend: Not included

ADF regressions: 1 lag

LR variance: Bartlett kernel, 7.00 lags average (chosen by LLC)

Statistic p-value

Unadjusted t -8.2937

Adjusted t* -4.1727 0.0000

6.2 Total Actif

```
. xtunitroot llc logActif
```

Levin-Lin-Chu unit-root test for logActif

Ho: Panels contain unit roots	Number of panels =	19
Ha: Panels are stationary	Number of periods =	13

AR parameter: Common Asymptotics: N/T -> 0

Panel means: Included

Time trend: Not included

ADF regressions: 1 lag

LR variance: Bartlett

kernel, 7.00 lags average (chosen by LLC)

Statistic	p-value	
Unadjusted t	-8.8279	
Adjusted t*	-7.2339	0.0000

6.3 Dettes/Actif

```
. xtunitroot llc DettesActif

Levin-Lin-Chu unit-root test for DettesActif

Ho: Panels contain unit roots      Number of panels =      19
Ha: Panels are stationary          Number of periods =     13

AR parameter: Common              Asymptotics: N/T -> 0
Panel means: Included
Time trend: Not included

ADF regressions: 1 lag
LR variance:  Bartlett kernel, 7.00 lags average (chosen by LLC)

Statistic    p-value
Unadjusted t   -10.9215
Adjusted t*    -6.1418    0.0000
```

6.4 GDP_US

```
. xtunitroot llc GDP_US

Levin-Lin-Chu unit-root test for GDP_US

Ho: Panels contain unit roots      Number of panels =      19
Ha: Panels are stationary          Number of periods =     13

AR parameter: Common              Asymptotics: N/T -> 0
Panel means: Included
Time trend: Not included

ADF regressions: 1 lag
LR variance:  Bartlett kernel, 7.00 lags          average (chosen by LLC)

Statistic    p-value
```

6.5 VIX

```
. xtunitroot llc VIX

Levin-Lin-Chu unit-root test for VIX_FinPriode

Ho: Panels contain unit roots      Number of panels      19
=                                  =
Ha: Panels are stationary          Number of periods     13
=                                  =

AR parameter: Common              Asymptotics: N/T -> 0
Panel means: Included
Time trend: Not included

ADF regressions: 1 lag
LR variance:  Bartlett kernel, 7.00 lags average (chosen by LLC)

Statistic    p-value
Unadjusted t   -13.9802
Adjusted t*    -9.0999    0.0000
```

Unadjusted t	-10.0782	
Adjusted t*	-9.9010	0.0000

6.6 Volatilité profit net

```
. xtunitroot llc logVol_ProfitNetCA

Levin-Lin-Chu unit-root test for logVol_ProfitNetCA

Ho: Panels contain unit roots      Number of panels =      1
                                   Number of periods =      9
Ha: Panels are stationary          Number of periods =      1
                                   Number of periods =      3
AR parameter: Common              Asymptotics: N/T -> 0
Panel means: Included
Time trend: Not included

ADF regressions: 1 lag
LR variance:  Bartlett kernel, 7.00 lags average (chosen by LLC)

Statistic    p-value

Unadjusted t    -10.2082
```

6.4, 6.6

6.8 Volatilité Monnaie particulière

Adjusted t*	-4.0158	0.0000
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. xtunitroot ht Vol_MonnaiePartic			
Harris-Tzavalis unit-root test for Vol_MonnaiePartic			
Ho: Panels contain unit roots	Number of panels = 19		
Ha: Panels are stationary	Number of periods = 13		
AR parameter: Common	Asymptotics: N -> Infinity		
Panel means: Included	T Fixed		
Time trend: Not included			
Statistic	z	p-value	
rho	0.0444	-14.7610	0.0000

6.7 ROA

. xtunitroot llc ROA		
Levin-Lin-Chu unit-root test for ROA		
Ho: Panels contain unit roots	Number of panels =	19
	Number of periods	
Ha: Panels are stationary	=	13
AR parameter: Common	Asymptotics: N/T -> 0	
Panel means: Included		
Time trend: Not included		
ADF regressions: 1 lag		
LR variance: Bartlett kernel, 7.00 lags	average (chosen by LLC)	

6.6, 6.7, 6.8

Statistic	p-value	
Unadjusted t	-15.7448	
Adjusted t*	-11.6320	0.0000

Annexe 8

Test de Breusch-Pagan

. gen résidus=(residual_e)^2 (36 missing values generated)							
. reg résidus	logActif	Prop_CAhorsEU	ROA	Vol_MonnaiePartic	AutreDeriv	logVol_ProfitNetCA	DettesActif
Source	SS	df	MS	Number of obs = 211 F(7, 203) = 1.65			
Model	.025987844	7	.003712549	Prob > F = 0.1242			
Residual	.457793236	203	.002255139	R-squared = 0.0537 Adj R-squared = 0.0211			
Total	.48378108	210	.002303719	Root MSE = .04749			
résidus	Coef.	Std.Err	t	P>t	[95% Conf.	Interval]	
logActif	-.0222981	.0092352	-2.41	0.017	-.0405072	-.0040889	
Prop_CAhorsEU	-.0158931	.016392	-0.97	0.333	-.0482135	.0164272	
ROA	-.113829	.0646899	-1.76	0.080	-.2413793	.0137212	
MonnaiePartic	.0008488	.0012176	0.70	0.487	-.0015519	.0032495	
AutreDeriv	-.0064194	.0153096	-0.42	0.675	-.0366057	.0237668	
log_ProfitNetCA	-.0075985	.0056657	-1.34	0.181	-.0187696	.0035727	
DettesActif	-.001525	.0227461	-0.07	0.947	-.046374	.043324	
_cons	.1585811	.0494193	3.21	0.002	.0611402	.256022	

Annexe 9

Structure d'erreurs autocorrélée et hétéroscédastique

.xtgls logderives	logActif	Prop_CAhorsEU	AutreDeriv	ROA	logVol_ProfitNetCA	Vol_MonnaiePartic	DettesActif,	level(90)	panels(heterosk) corr(psar1)
Cross-sectional time-series FGLS regression									
Coefficients:	generalized least squares								
Panels:	heteroskedastic								
Correlation:	panel-specific AR(1)								
Estimated covariances	18	Number of obs	211						
Estimated autocorrelations	18	Number of groups	18						
Estimated coefficients	8	Obs per group:	min =	4					
			avg =	11.72222					
Wald chi2(7)	=	260.11	max =	13					
Prob > chi2	=	0.0000							
logderives	Coef.	Std. Err.	z	P>z	[90% Conf. Interval]				
logActif	1.028222	.068852	14.93	0.000	.9149704	1.141473			
Prop_CAhorsEU	.2502714	.1400418	1.79	0.074	.0199231	.4806196			
AutreDeriv	.3185842	.0871646	3.65	0.000	.1752112	.4619572			
ROA	.4772974	.2593968	1.84	0.066	.0506276	.9039671			
logVol_ProfitNetCA	.013988	.0155175	0.90	0.367	-.0115361	.0395121			
Vol_MonnaiePartic	.0075992	.0047116	1.61	0.107	-.0001507	.0153492			
DettesActif	-.0894089	.1081442	-0.83	0.408	-.2672903	.0884725			
cons	-1.45197	.3513125	-4.13	0.000	-2.029827	-.8741121			

Annexe 10

Correction de l'endogénéité ; variable de retard

. xtglm logderives	AutreDeriv	ROA	logVol_ProfitNetCA	LagLogActif	Prop_CAhorsEU	Vol_MonnaiePartic	DettesActif,	level(90)	panels(heterosk) corr(pсар1)
Cross-sectional time-series FGLS regression									
Coefficients:	generalized least squares								
Panels:	heteroskedastic								
Correlation:	panel-specific AR(1)								
Estimated covariances	18	Number of obs = 211							
Estimated autocorrelations	18	Number of groups = 18							
Estimated coefficients	8	Obs per group: min = 4 avg = 11.72222							
Wald chi2(7)	= 177.75	max = 13							
Prob > chi2	= 0.0000								
logderives	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]			
LagLogActif	.8966396	.0758638	11.82	0.000	.7718548	1.021424			
Prop_CAhorsEU	.3049391	.1464766	2.08	0.037	.0640064	.5458717			
AutreDeriv	.4615003	.1025696	4.50	0.000	.2927883	.6302123			
ROA	.123733	.2923514	0.42	0.672	-.3571423	.6046084			
logVol_ProfitNetCA	.0072799	.0167802	0.43	0.664	-.0203211	.0348808			
Vol_MonnaiePartic	.0151171	.006915	2.19	0.029	.0037429	.0264912			
DettesActif	-.0717274	.1094198	-0.66	0.512	-.251707	.1082522			
_cons	-.9708445	.3820009	-2.54	0.011	-1.59918	-.342509			

Annexe 11

Correction de l'endogénéité ; instrument « chiffre d'affaire »

. ivregress 2sls logderives							(logActif=logCA , robust level(90))
	Prop_CAhorsEU	ROA	Vol_MonnaiePartic	AutreDeriv	logVol_ProfitNetCA	DettesActif	
Instrumental variables (2SLS) regression							
Number of obs	=211						
Wald chi2(7)	= 343.78						
Prob > chi2	= 0.0000						
R-squared	= 0.6467						
Root MSE	= .37045						
logderives	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]	
logActif	1.510598	.0873858	17.29	0.000	1.366861	1.654335	
Prop_CAhorsEU	.9141698	.1572762	5.81	0.000	.6554735	1.172866	
ROA	.403687	.502338	0.80	0.422	-.4225855	1.22996	
Vol_MonnaiePartic	.0058991	.0105886	0.56	0.577	-.0115176	.0233159	
AutreDeriv	.4880314	.092043	5.30	0.000	.3366342	.6394286	
logVol_ProfitNetCA	.0216157	.0442156	0.49	0.625	-.0511124	.0943438	
DettesActif	-.6330534	.1878442	-3.37	0.001	-.9420296	-.3240773	
_cons	-3.813519	.4563316	-8.36	0.000	-4.564118	-3.06292	
Instrumented:	logActif Prop_Cahors						
Instruments:	EU ROA	Vol_MonnaiePartic	AutreDeriv	logVol_ProfitNetCA	DettesActif	logCA	

Annexe 12

Régression « first-stage » de l'instrument « chiffre d'affaire »

estat firststage

First-stage regression summary statistics

Adjusted	Partial	Robust			
Variable	R-sq.	R-sq.	R-sq.	F(1,203)	Prob > F
-					
logActif	0.8132	0.8067	0.7459	768.756	0.0000

Annexe 13

Correction de l'endogénéité ; instrument « capitalisation boursière »

. ivregress 2sls		logderives	Prop_CAhorsEU	ROA	Vol_MonnaiePartic	AutreDeriv	logVol_ProfitNetCA	DettesActif	(logActif=marketcap),	robust level(90)
Instrumental variables (2SLS) regression										
Number of obs = 203										
Wald chi2(7)	=	278.96								
Prob > chi2	=	0.0000								
R-squared	=	0.6535								
Root MSE	=	.37133								
logderives	Coef.	Robust Std. Err.	z	P>z	[90% Conf.	Interval]				
logActif	1.231992	.0984428	12.51	0.000	1.070068	1.393916				
Prop_CAhorsEU	.7241166	.1476249	4.91	0.000	.4812953	.9669379				
ROA	.1690909	.5042709	0.34	0.737	-.6603608	.9985427				
Vol_MonnaiePartic	.0075371	.0091182	0.83	0.408	-.0074609	.0225352				
AutreDeriv	.5261774	.0809794	6.50	0.000	.3929781	.6593767				
logVol_ProfitNetCA	.0417749	.0462397	0.90	0.366	-.0342825	.1178324				
DettesActif	-.6551458	.1699204	-3.86	0.000	-.93464	-.3756515				
_cons	-2.44615	.4652001	-5.26	0.000	-3.211336	-1.680964				
Instrumented: logActif										
Instruments:	Prop CAhorsEU	ROA	Vol MonnaiePartic	AutreDeriv	logVol ProfitNetCA	DettesActif	marketcap			

Annexe 14

Régression first-stage de l'instrument « capitalisation boursière »

.	estat firststage				
	First-stage regression summary statistics				

	Adjusted	Partial	Robust		
	Variable	R-sq.	R-sq.	R-sq.	F(1,195) Prob > F
	-----+-----				
	-				
	logActif	0.6536	0.6411	0.5117	178.374 0.0000

Annexe 15

Test de l'endogénéité

.	estat endog				
	Tests of endogeneity				
	Ho: variables are exogenous				
	Durbin (score)				
	chi2(1)	=	150.946	(p	= 0.0001)
	Wu-Hausman				
	F(1,202)	=	155.642	(p	= 0.0001)

Annexe 16

Test d'Hausman pour l'effet fixe

. hausman fixed random				
	---- Coefficients ----			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
propSalest~g	.55037	.4513736	.0989964	.0981256
logTotalAs~s	.7969093	.8717978	-.0748886	.0336987
detteactifs	-0,3792502	-.4058853	.0266352	.0266677
ROA	.420658	.4148617	.0057962	.
Vol_Monnai~c	.021653	.0201932	.0014598	.0009508
OtherDeriv	.1532455	.1765438	-.0232983	.
logVolNetl~s	.0508425	.04925	.0015925	.
b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg Test: Ho: difference in coefficients not systematic chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 20.73 Prob>chi2 = 0.0042 (V_b-V_B is not positive definite)				

Annexe 17

Dispersion

.xtgls logderives	logActif	Dispersion	AutreDeriv	ROA	logVol_ProfitNetCA	Vol_MonnaiePartic	DettesActif,level(90)	panels(heterosk) corr(psar1)
Cross-sectional time-series FGLS regression								
Coefficients:	generalized least squares							
Panels:	heteroskedastic							
Correlation:	panel-specific AR(1)							
Estimated covariances	17	Number of obs	198					
Estimated autocorrelations	17	Number of groups	17					
Estimated coefficients	8	Obs per group:						
		min =	4					
		avg =	11.64706					
Wald chi2(7)	= 338.45	max =	13					
Prob > chi2	= 0.0000							
logderives	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]		
logActif	1.013187	.0657529	15.41	0.000	.9050328	1.121341		
Dispersion	1.525816	.5979876	2.55	0.011	.5422136	2.509418		
AutreDeriv	.3440101	.0829062	4.15	0.000	.2076415	.4803786		
ROA	.5555432	.2629217	2.11	0.035	.1230755	.988011		
logVol_ProfitNetCA	.0194706	.0160765	1.21	0.226	-.0069728	.0459141		
Vol_MonnaiePartic	.0059824	.0045743	1.31	0.191	-.0015416	.0135064		
DettesActif	-.1427567	.1255579	-1.14	0.256	-.3492811	.0637676		
_cons	-2.640148	.5886132	-4.49	0.000	-3.60833	-1.671965		

Annexe 18

Opportunités de développement

.xtgls	logderives	logActif	Dispersion	AutreDeriv	RDActif	ROA	logVol_ProfitNetC A	Vol_MonnaiePartic	DettesActif,level(90)	panels(heterosk) corr(psar1) force
Cross-sectional time-series FGLS regression										
Coefficients:	generalized least squares									
Panels:	heteroskedastic									
Correlation:	panel-specific AR(1)									
Estimated covariances	17	Number of obs		191						
Estimated autocorrelations	17	Number of groups		17						
Estimated coefficients	9	Obs per group:		min = 4 avg = 11.23529 max = 13						
Wald chi2(8)	= 293.35									
Prob > chi2	= 0.0000									
logderives	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]				
logActif	1.070685	.0723812	14.79	0.000	.9516282	1.189741				
Dispersion	.8318755	.5194776	1.60	0.109	-.022589	1.68634				
AutreDeriv	.3111248	.081429	3.82	0.000	.1771859	.4450636				
RDActif	1.502511	.6441336	2.33	0.020	.4430059	2.562017				
ROA	.6548199	.2671459	2.45	0.014	.2154041	1.094236				
logVol_ProfitNetCA	.0236861	.015586	1.52	0.129	-.0019506	.0493227				
Vol_MonnaiePartic	.0049655	.0043819	1.13	0.257	-.0022421	.012173				
DettesActif	-.0279838	.1268463	-0.22	0.825	-.2366273	.1806597				
_cons	-2.378535	.5510357	-4.32	0.000	-3.284.909	-1.472162				

Annexe 19

Variables macroéconomiques

. xtglm logderives	logActif	Prop_CAhorsEU	AutreDeriv	GDP_US	VIX	ROA	logVol_ProfitNetCA	DettesActif,level(90)	panels(heterosk) corr(pсар1)
Cross-sectional time-series FGLS regression									
Coefficients:	generalized least squares								
Panels:	heteroskedastic								
Correlation:	panel-specific AR(1)								
Estimated covariances	18	Number of obs = 211							
Estimated autocorrelations	18	Number of groups = 18							
Estimated coefficients	9	Obs per group:							
		min = 4							
		avg = 1.172222							
Wald chi2(8) =	252.46	max = 13							
Prob > chi2 =	0.0000								
logderives	Coef.	Std. Err.	z	P>z	[90% Conf.	Interval]			
logActif	.9656555	.0731371	13.20	0.000	.8453556	1.085955			
Prop_CAhorsEU	.2435857	.143458	1.70	0.090	.0076183	.4795531			
AutreDeriv	.3209067	.0861785	3.72	0.000	.1791558	.4626577			
GDP_US	.0075606	.0032914	2.30	0.022	.0021468	.0129745			
VIX_FinPriode	.0026796	.0012781	2.10	0.036	.0005774	.0047819			
ROA	.4436771	.2500317	1.77	0.076	.0324116	.8549427			
logVol_ProfitNetCA	-.0050287	.0166208	-0.30	0.762	-.0323674	.02231			
DettesActif	-.1131171	.1086207	-1.04	0.298	-.2917822	.0655481			
_cons	-1.919985	.4036845	-4.76	0.000	-2.583987	-1.255983			

Annexe 20

Résultats généraux

.xtgls logderives	logActif	Dispersion	RDActif	AutreDeriv	ROA	GDP_US	VIX_FinPriode,	panels(heterosk)	corr(psar1)	force
Cross-sectional time-series FGLS regression										
Coefficients:	generalized least squares									
Panels:	heteroskedastic									
Correlation:	panel-specific AR(1)									
Estimated covariances	17	Number of obs = 191								
Estimated autocorrelations	17	Number of groups = 17								
Estimated coefficients = 8	Obs per group:	min = 4								
		avg = 11.23529								
Wald chi2(7) =	326.33	max = 13								
Prob > chi2 =	0.0000									
logderives	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]				
logActif	1.05996	.0691482	15.33	0.000	.9244321	1.195488				
Dispersion	.8623968	.4362047	1.98	0.048	.0074512	1.717342				
RDActif	2.183406	.5916027	3.69	0.000	1.023886	3.342926				
AutreDeriv	.2903618	.07098	4.09	0.000	.1512436	.42948				
ROA	.648024	.2347738	2.76	0.006	.1878759	1.108172				
GDP_US	.0082413	.0029377	2.81	0.005	.0024835	.0139991				
VIX_FinPriode	.0027669	.0011969	2.31	0.021	.000421	.0051127				
_cons	-3.208239	.4925841	-6.51	0.000	-4.173686	-2.242792				

Annexe 21

Amélioration de l'analyse

. xtgls derivatif	RDActif	Prop_CAhorsEU	MarkettoBook	logCA	DettesActif	ROA,	panels(heterosk)	corr(psar1)	force
Cross-sectional time-series FGLS regression									
Coefficients:	generalized least squares								
Panels:	heteroskedastic								
Correlation:	panel-specific AR(1)								
Estimated covariances	= 19	Number of obs	=232						
Estimated autocorrelations	=19	Number of groups	=19						
Estimated coefficients	=7	Obs per group:	min =	5					
			avg =	12.21053					
Wald chi2(6)	=	67.62	max =	13					
Prob > chi2	=	0.0000							
derivatif	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]			
RDActif	.5292321	.2068079	2.56	0.010	.1238961	.9345681			
Prop_CAhorsEU	.0657534	.029038	2.26	0.024	.00884	.1226668			
MarkettoBook	.0029354	.0012453	2.36	0.018	.0004947	.0053762			
logCA	.1075233	.0154933	6.94	0.000	.0771569	.1378897			
DettesActif	.0168763	.0263976	0.64	0.523	-.034862	.0686145			
ROA	.2073306	.0645051	3.21	0.001	.0809028	.3337583			
_cons	-.43231	.0748594	-5.77	0.000	-.5790317	-.2855883			