



Non-resident holdings of French CAC 40 shares at end-2017

At the end of 2017, non-residents held EUR 569 billion worth of shares in French CAC 40 companies out of a total market capitalisation of EUR 1,332 billion, representing an ownership rate of 42.7% – down for the fourth consecutive year.

Based on end-2016 prices, non-residents sold a net total of EUR 9.1 billion of CAC 40 shares in 2017, while residents invested a net total of EUR 19.4 billion.

Some 44.6% of foreign investments in French equities and investment fund shares came from the euro area, 32.8% from the United States, 7.7% from the United Kingdom and just 14.9% from the rest of the world.

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JEL codes
F21, F23, F36,
G15, G34

42.7%

share of capital in French CAC 40 companies held by non-residents

9.1 billion euro

net sales of French CAC 40 shares by non-residents in 2017

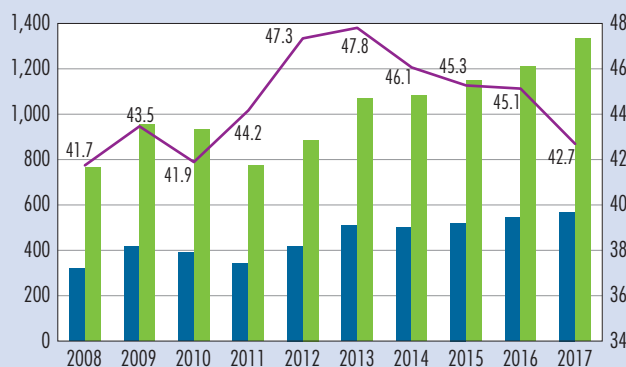
29%

proportion of French CAC 40 companies majority-owned by foreign investors

Non-resident ownership of the capital of French CAC 40 companies

(amounts in EUR billions, rate in %)

- Non-resident holdings (market value)
- Market capitalisation
- Non-resident ownership rate (right-hand scale)



Sources: Banque de France (balance of payments) and Euronext.



1 Non-resident ownership of French shares

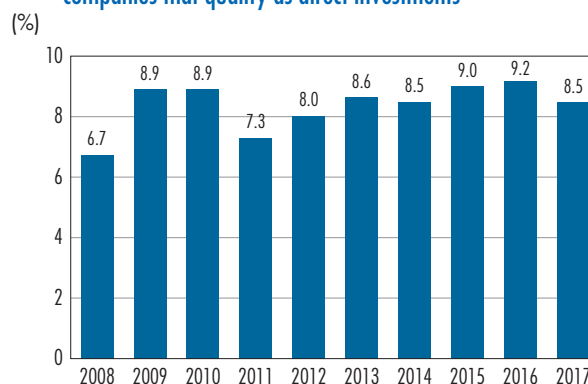
Decline in non-resident ownership of French listed shares

As at 31 December 2017, non-resident investors held 42.7% of the total value of shares in the 34 French companies listed in the CAC 40.¹ The figure was down 2.4 percentage points compared with the previous year (see Chart 1), continuing the decline observed since 2014.

Non-resident holdings of CAC 40 shares can be broken down into portfolio investments,² which accounted for 91.5%, and direct investments, which accounted for 8.5%; the latter proportion was down 0.7 percentage point relative to 2016 (see Chart 2).

After declining for three consecutive years, non-resident ownership of French companies listed outside the

C2 Proportion of non-resident holdings in French CAC 40 companies that qualify as direct investments

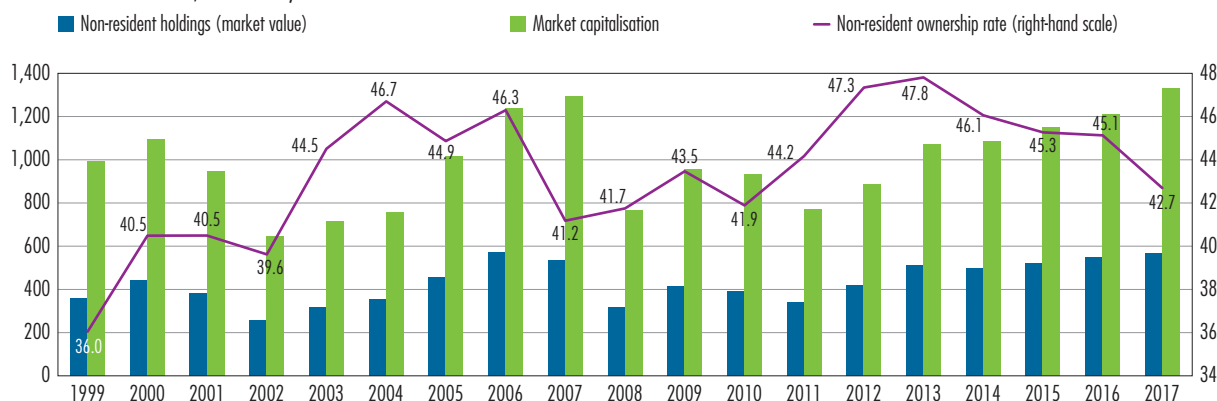


Source: Banque de France (balance of payments).

CAC 40 increased by 0.6 percentage point. Measured across all French listed stocks, non-resident ownership fell by 1.7 percentage points to a total of 37.4% (see Chart 3).³

C1 Non-resident ownership of the capital of French CAC 40 companies

(amounts in EUR billions, rate in %)



Sources: Banque de France (balance of payments) and Euronext.

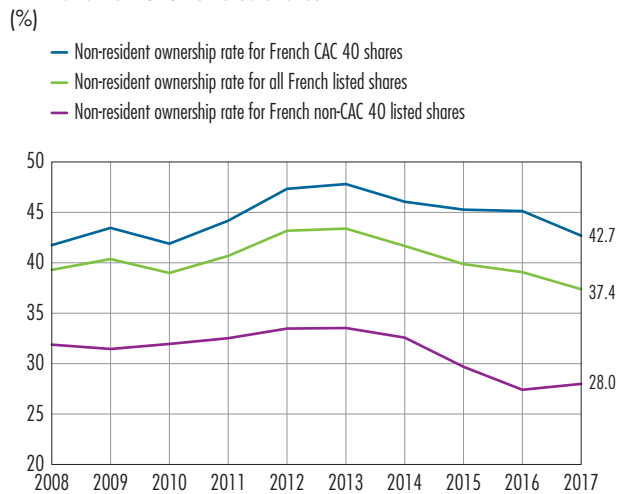
1 Six CAC 40 companies are excluded from the scope of this study as their headquarters are not located in France (ArcelorMittal, EADS, LafargeHolcim, Solvay, STMicroelectronics and Technip; see Appendix 1: Composition of the CAC 40 in 2017). Non-resident ownership rates depend on the index composition and the country of domiciliation of the individual companies during the reference period, and may thus be affected by changes in either of these factors. The impact of these changes in scope is described in Section 2, "Factors behind the change".

2 "Portfolio investments" refers to individual holdings accounting for less than 10% of the shares in a company. Beyond this threshold, holdings are considered to be "direct investments" within the meaning of the balance of payments. A company may be majority-owned by non-residents but without any of these holdings constituting a direct investment if no individual stake exceeds the threshold of 10%.

3 Calculated using aggregated portfolio data. The sources available do not make it possible to determine whether the change is broadly spread across all listed companies or concentrated within certain sectors.



C3 Change in non-resident ownership of French CAC 40 and non-CAC 40 listed shares



Sources: Banque de France (balance of payments) and European Central Bank (quarterly sector accounts, securities issues statistics).

Less than 30% of French CAC 40 companies are more than 50%-owned by foreign investors

As at 31 December 2017, of the 34 French companies included in the CAC 40 index, only ten were majority-owned by non-resident investors, down from 11 in 2016 and from 19 in 2013 (see Table 1).⁴

T1 Breakdown of French CAC 40 companies by size of non-resident stake

Share of capital held by non-residents	Number of companies					
	2012	2013	2014	2015	2016	2017
0-25%	2	2	2	1	1	1
25-50%	17	15	16	21	23	23
More than 50%	16	19	18	14	11	10
Total	35	36	36	36	35	34

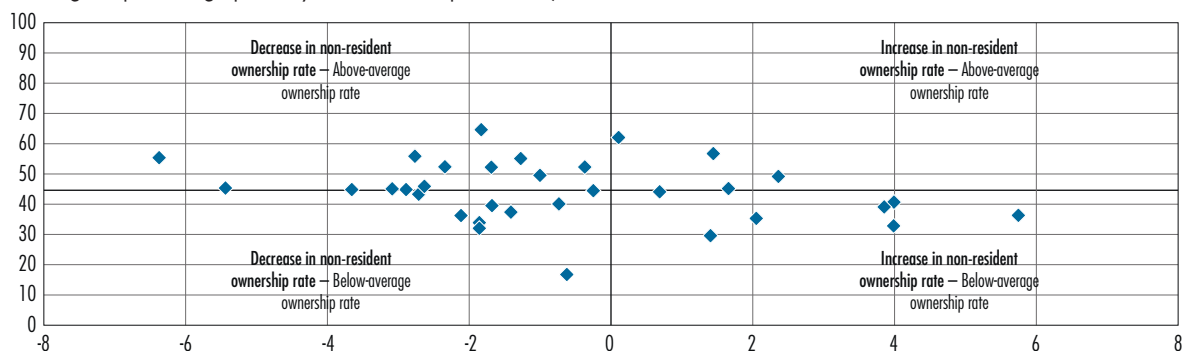
Source: Banque de France (balance of payments).

In general, those companies with the highest rates of non-resident ownership in 2016 were also those that registered the biggest falls in this rate in 2017. Conversely, the biggest rises were seen mainly at companies with the lowest rates of non-resident ownership in 2016 (see Chart 4).

On average, the more volatile a company's share price, the smaller the proportion of its capital that will be held by non-residents.⁵ This cross-sectional correlation holds true for nearly every year since 2008, suggesting that investors have a preference for stable stocks – as confirmed by an econometric analysis (see Appendix 2).

C4 2016-17 change in non-resident ownership, and position versus average at end-2016

(x-axis: change in percentage points; y-axis: ownership rate in %)



Source: Banque de France (balance of payments).

Note: Average percentage of shares in French CAC 40 companies held by non-residents in 2016 and 2017, weighted by the value of outstanding non-resident investments. At end-2016, it was 44.6%.

⁴ The difference between the weighted average and the simple average is attributable to differences in market capitalisation between CAC 40 companies.

⁵ Excluding direct investments.



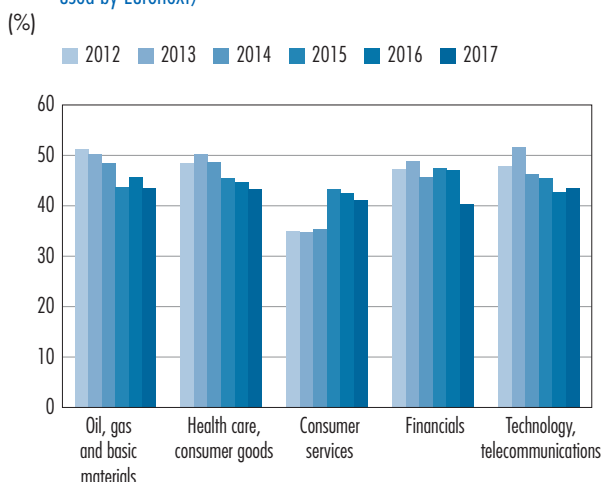
Non-resident ownership has declined in the majority of sectors

Only the technology and telecommunications sector saw a rise in the proportion of shares owned by non-residents in 2017. Financial corporations, meanwhile, registered the biggest fall (see Chart 5).

Non-resident ownership of French listed shares is low compared with rates in other European countries

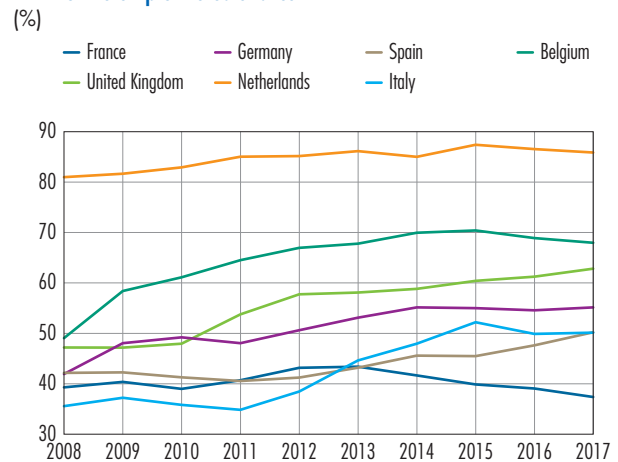
Non-residents held 37% of all listed shares in France at end-2017 (with a market value of EUR 2,087 billion), compared with 50% in Spain and Italy (market value of EUR 715 billion and EUR 557 billion respectively), 55% in Germany (EUR 1,934 billion), 63% in the United Kingdom (EUR 2,218 billion), 68% in Belgium (EUR 390 billion) and 86% in the Netherlands (EUR 859 billion). Contrary to France, all these countries have seen rises in non-resident ownership of listed shares since 2008 (see Chart 6).

C5 Rate of non-resident ownership of French CAC 40 companies, by sector
(defined according to the Industry Classification Benchmark (ICB) used by Euronext)



Source: Banque de France (balance of payments).

C6 International comparison of rates of non-resident ownership of listed shares

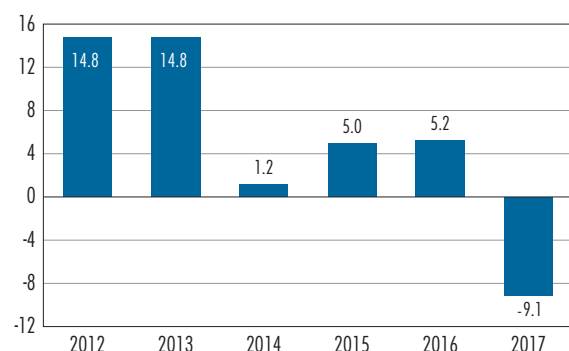


Source: European Central Bank (quarterly sector accounts, securities issues statistics).

2 Factors behind the change: non-residents were net sellers of French CAC 40 shares

Based on prices at end-December 2016 (in order to neutralise the impact of changes in valuation), resident investors purchased a net total of EUR 19.4 billion worth of shares in 2017, while non-residents sold off a net total of EUR 9.1 billion (see Chart 7).

C7 Net non-resident flows into French CAC 40 shares
(EUR billions, based on prices at the start of the period)



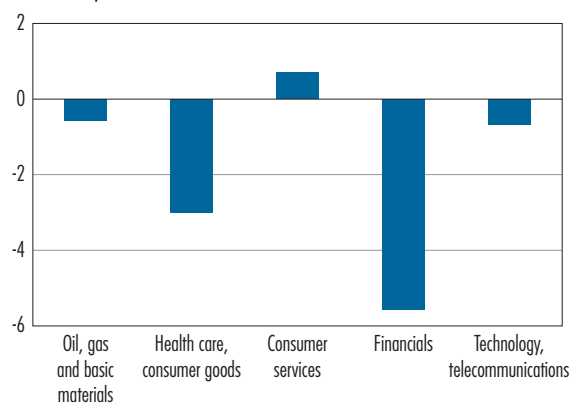
Source: Banque de France (balance of payments).



C8 Breakdown by sector of non-resident purchases of French CAC 40 shares

Prices as at 31 December 2016 (excluding valuation effect) and according to the ICB used by Euronext

(EUR billions)



Source: Banque de France (balance of payments).

In particular, non-residents sold off EUR 5.6 billion of shares in financial corporations and EUR 3 billion of shares in healthcare and consumer goods companies (see Chart 8).

Variations in stock market prices had a significant negative impact of 0.7 percentage point on the rate of non-resident ownership of French CAC 40 shares.

Similarly, changes in the index composition (inclusion of Atos, exclusion of Klépierre, merger of Technip with FMC Technologies and transfer of its headquarters abroad) lowered the rate by a further 0.5 percentage point.

3 Increase in the proportion of French equities and investment fund shares owned by euro area investors

At end-2017, 44.6% of the French equities and investment fund shares owned by non-residents were held by euro area investors, 32.8% by US investors and 7.7% by UK investors. Between 2012 and 2017, the proportion held by euro area investors increased by 3.6 percentage points, while the proportion held by US investors shrank by 1.4 percentage points (see Table 2).

The International Monetary Fund's annual *Coordinated Portfolio Investment Survey* (CPIS),⁶ to which the Banque de France contributes, details individual countries' total holdings of French equities and investment fund shares combined.

T2 Country of residence of foreign holders of French equities and investment fund shares

(%)

	Share of total non-resident holdings at year-end					
	2012	2013	2014	2015	2016	2017 ^{a)}
Euro area, of which:	41.0	40.5	41.3	41.8	44.1	44.6
Luxembourg ^{b)}	11.9	12.4	12.6	13.3	13.4	13.6
Germany	7.8	7.6	7.5	7.8	7.8	7.8
Italy	6.2	6.4	6.8	6.2	7.1	7.2
United States	34.2	34.4	33.4	33.3	33.3	32.8
United Kingdom	7.3	8.9	8.8	8.1	6.6	7.7
Norway	4.0	3.6	3.5	2.9	2.9	2.3
Japan	2.8	2.3	2.9	3.0	2.7	2.6
Canada	3.0	2.9	2.7	2.7	2.6	2.6
Switzerland	3.0	2.8	2.8	2.6	2.3	2.5
Others ^{c)}	4.7	4.6	4.5	5.6	5.4	5.0

Sources: Banque de France (balance of payments) and International Monetary Fund (CPIS).

a) Projection based on the relative weights of non-residents in the first half of 2017, due to time needed to collect data.

b) Luxembourg's percentage holding includes equities held by Luxembourg-based investments funds, shares of which may be owned by residents of other countries, including France.

c) The "Others" category mainly comprises Australia (0.93%), Sweden (0.83%), Denmark (0.58%) and China (0.35% for mainland China, 0.45% including Hong Kong and Macau).

⁶ The CPIS survey conducted by the IMF provides data on the portfolio investment positions of almost 80 countries, broken down by security type (equities and investment fund shares, short- and long-term debt instruments) and by counterparty country. CPIS data and explanations of the statistics can be found on the IMF's website: <http://data.imf.org/>



Appendix 1

Sources and methodology

Composition of the CAC 40 in 2017 and scope of the study

For a company to be included in the scope of the study, it must be listed in the CAC 40 index and the registered offices of its parent company must be located in French territory. Of the two companies that joined the CAC 40 index over the course of 2017 (Atos and STMicroelectronics), only Atos qualifies as a French

listed company. Klépierre and Technip were both excluded from the scope of the study, the former because it dropped out of the CAC 40 index, and the latter because it moved its registered offices abroad following its merger with FMC Technologies. Nokia's exit from the CAC 40 had no impact on the scope of the study relative to 2016 as it is domiciled abroad. Consequently, the number of resident companies listed in the CAC 40 fell from 35 in 2016 to 34 at end-2017.

Ta List of the 34 resident companies in the CAC 40 at 31 December 2017

AccorHotels	Capgemini	Kering	Pernod Ricard	Sanofi	Valeo
Air Liquide	Carrefour	Legrand	Groupe PSA	Schneider Electric	Veolia
Atos	Crédit agricole	L'Oréal	Publicis Groupe	Société Générale	Vinci
Axa	Danone	LVMH	Renault	Sodexo	Vivendi
BNP Paribas	Engie	Michelin	Safran	Total	
Bouygues	Essilor International	Orange	Saint-Gobain	Unibail-Rodamco	

Source: Euronext.

Note: ArcelorMittal, EADS, LafargeHolcim, Solvay, STMicroelectronics and Technip are excluded from the scope of the survey as their headquarters are located outside France.

Revisions to data

Data on French assets and liabilities positions for the last three years are revised when the Banque de France publishes its *Annual report on the French balance of payments and international investment position*.¹ The figures published in this article take account of these corrections.

Revisions to security holdings stem from additional data collected from securities custodians, the integration of additional foreign direct investments or corrections to the valuation of certain securities. However, stock market capitalisation data, produced by Euronext, do not lead to any revisions.

¹ The 2017 *Annual report on the French balance of payments and international investment position* is available on the Banque de France website at (French version, English version forthcoming) <https://www.banque-france.fr/statistiques/balance-des-paiements/la-balance-des-paiements-et-la-position-exterieure/balance-des-paiements-et-la-position-exterieure-de-la-france-donnees-annuelles>



As such, non-resident holdings of CAC 40 shares in 2016 were adjusted upwards from a published figure of EUR 539.6 billion to EUR 546.9 billion, leading to an increase in the ownership rate from 44.5% to 45.1%.

Tb Revisions to 2015 and 2016 data (EUR billions and %)

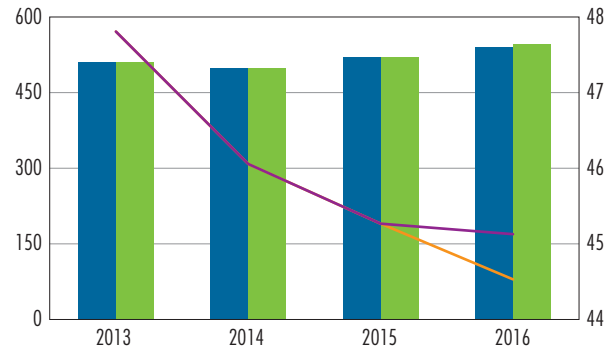
	2017 data		2018 data	
	2015	2016	2015	2016
Equity capital held by non-residents	520.5	539.6	520.5	546.9
Market capitalisation	1,149.9	1,211.8	1,149.9	1,211.8
Non-resident ownership rate	45.3	44.5	45.3	45.1

Sources: Banque de France (balance of payments) and Euronext.

Revisions to data since 2013

(EUR billions and %)

- Capital held by non-residents (2017 data)
- Capital held by non-residents (2018 data)
- Non-resident ownership rate (2017 data) (right-hand scale)
- Non-resident ownership rate (2018 data) (right-hand scale)



Source: Banque de France (balance of payments).



Appendix 2

Econometric analysis of the impact of volatility on non-resident investments

The negative cross-sectional correlation between non-resident holdings and share price volatility suggests that non-residents tend to favour less volatile stocks.

To confirm this interpretation, we tested several panel data regression models on all French shares in the extended CAC 40,¹ at a quarterly frequency from 2008 to 2017.

In these models, differences between non-resident² and resident purchases (expressed as a percentage of capitalisation) are explained by the volatility and rate of growth of share prices in the previous quarter, controlling for the VIX³ and for changes in the index composition (see table).

The model results clearly indicate that volatility has a negative impact on non-resident investment. All other things being equal, the more volatile a company's share price over a given quarter, the lower the proportion of its shares that will be held by non-resident investors in the subsequent quarter.

We also find that non-residents tend to prefer those shares that have risen most in value over the previous quarter. Changes in the composition of the index also appear to have an impact on non-resident purchases – a positive one for shares joining the index and a negative one for those exiting the index – but this result is not significant in all models.

Results of the econometric analysis

$$\text{Dependent variable: } 100 \times \frac{F.IP_{NR}(i,t) - F_R(i,t)}{K(i,t)}$$

Where *i* refers to a share in the “extended” CAC 40, *t* is a quarter between Q1 2008 and Q4 2017, *F.IP_{NR}* is the net flow of purchases by non-resident portfolio investors, *F_R* is the net flow of purchases by resident investors and *K* is the total market capitalisation of the company's shares.

Comparison of the model results

	(1)	(2)	(3)	(4)	(5)
Intercept			-3.52*** (1.244)	-2.74*** (0.092)	
Volatility over the previous quarter (log)	-1.75** (0.729)	-1.75** (0.843)	-1.29*** (0.467)	-1.04*** (0.029)	-1.09*** (0.062)
Change in share price over the previous quarter (log)	2.68** (1.177)	2.68** (1.276)	3.37*** (1.13)	2.5*** (0.104)	3.11*** (0.118)
Entry into the CAC 40	2.28 (1.958)	2.28 (1.722)	3.19 (2.165)	2.31*** (0.169)	2.17*** (0.19)
Exit from the CAC 40	-1.17 (1.876)	-1.17 (2.575)	0.68 (2.167)	-2.32*** (0.167)	-1.14*** (0.207)
VIX			0.05* (0.03)	0.03*** (0.004)	0.04*** (0.004)
R ²	0.008	0.008	0.014	0.014	0.032
Number of observations	1,738	1,738	1,599	1,738	1,738

Notes:

Significance: 1% = ***, 5% = ** and 10% = *.

Model (1): Two-way fixed effects model.

Model (2): Two-way fixed effects model with Newey-West standard errors.

Model (3): Two-way random effects model.

Model (4): Generalised least squares model with cross-sectional independence.

Model (5): Generalised least squares model with cross-sectional independence and individual fixed effects.

1 Including all French companies which have been listed in the index since 2008.

2 Only portfolio investments are taken into account as direct investments are more long-term, strategic holdings and probably exhibit a different pattern of behaviour.

3 The VIX is an index that measures expectations of volatility in the US financial market.



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