

The .FR in 2021



March 2022

CONTENTS

- Definitions.....4**
- Preamble5**
- Executive summary6**
- 1. Growth of the .FR.....7**
- 2. Market share in France.....8**
- 3. Activity of the .FR.....10**
- 4. Structure of the .FR net balance.....12**
- 5. Key parameters of .FR14**
 - 5.1. Slight decline in creation rate14**
 - 5.2. Increasing retention rate16**
 - 5.3. Repartition of .FR names, by age, an explanatory factor17**
 - 5.4. Change in the number of .FR names since 1998.....20**
- 6. .FR market concentration.....21**

7. Geographical distribution of .FR nationwide.....	26
8. Foreign holders	28
9. DNSSEC	30
10. Internationalized domain names under .FR.....	32
11. Multi-year registrations	33
12. The .FR and business creation.....	35
13. 2022 outlook for the .FR	38

Definitions

TLD (top-level domain): the last segment or extension of a domain name; the part that follows after the “dot” symbol. .FR and .ORG are top-level domains.

ccTLD (country-code top-level domain): a TLD specific to a country or territory. The ccTLD for France is .FR, but there are other French ccTLDs such as .RE (Réunion), .PM (Saint Pierre and Miquelon), etc.

gTLD (generic top-level domain): generic TLD, not attached to a particular country or territory. .COM, .NET and .ORG are gTLDs.

Legacy gTLD: generic TLD created before 2014. These are “legacy” TLDs, such as .COM, .NET, .ORG or more recently (2001-2004) .INFO, .BIZ, .MOBI, etc.

nTLD (new top-level domain): generic TLD created after 2014. nTLDs are divided into several sub-segments such as geoTLDs (regions, cities, etc.), Community TLDs (community-based), .BRANDs (TLD suffix corresponding to major brands) or generic nTLDs (common dictionary terms).

Preamble

Like 2020, the year 2021 saw exceptional conditions, with the persistence of the health crisis. As registry for the .FR TLD, Afnic was well placed to observe the adaptation of French society to these exceptional conditions, particularly from the viewpoint of the digital transition process.

Looking only at the domain names market in France, the trend seen in 2020 continued until the spring of 2021, before dipping below the 2020 trend from May on. Overall, the all-time record number of create operations set in 2020 (793,000) was not repeated, but the 777,000 create operations of 2021 - 12% more than in 2019 - show that French users were continuing to discover and take ownership of the benefits of digitisation.

This report details the activity of .FR over the past months. It also throws some light on how to read the more general trends while attempting to anticipate how they might evolve in 2022.

Executive summary

The .FR TLD maintained a steady dynamic in 2021, albeit slightly down on 2020. Create operations were down by 2% and growth in the stock of domain names went from 7.0% to 5.8%.

These changes result from the change of pace in the digital transformation, which led numerous VSEs and SMEs to develop their online activities. This dynamic remained strong in 2021 although a slowdown has been seen with businesses that still do not have an online presence becoming increasingly rare.

The market share of .FR in France continued to grow, reaching 38.75% at the end of 2021.

The retention rate also improved, reaching 84.6% compared with 83.9% in 2020. The age structure of .FR domain names has contributed so far to the TLD's stability, but also to its growth.

"Deconcentration" of the .FR TLD continues, with create operations being less concentrated than the stock of names. This was even more marked in 2021 than in 2020 for the three main registrars active in .FR.

Regional dynamics do not show the same "catch-up" effect in certain regions as in 2020, this phenomenon no doubt being related to the slowdown in create operations.

There is a positive correlation, more or less marked depending on the years, between .FR create operations and business creation, even though not all .FR domain names are registered by start-ups and not all start-ups turn exclusively to the .FR TLD.

Prospects for the .FR TLD in 2022 are determined by two phenomena, the extent of which it is difficult to predict. On the one hand, a digital transformation that may establish itself permanently in users' behaviour. On the other hand, the general state of the economy, which may weigh on investment in the medium term, in a context of widespread failures of businesses kept afloat by government aid in 2020 and 2021.

At 31 December 2021, the .FR domain had 3,882,488 names in stock, compared with 3,670,372 at 31 December 2020.

1. Growth of the .FR

After two years of slowdown, .FR almost doubled its growth in 2020 relative to 2019 (7.0% as against 3.7%). In 2021, growth slowed slightly, while still remaining at the historically very high level of 5.8%. This growth also remained higher than that of the French market for all TLDs together (3.6% in 2021 compared with 6.1% in 2020).

The growth of all ccTLDs of the European Union (which now excludes .UK) followed the same trend as that of .FR: a slight downturn following the explosion of 2020 (2.9% as against 3.4%), while remaining above its 2019 level of 0.7%.

Lastly growth in the world market showed the opposite trend to that of Europe due to the effect of fluctuations in the numbers of Legacy TLDs and new TLDs. New TLDs had suffered particularly in 2020, and the global market trend was down by -0.2%. The year 2021 saw the start of a recovery (+0.7%) following the end of the purges in the major nTLDs. Growth remains fragile however, being exposed to substantial negative variations, particularly in the .CN domain (China) which at one stage in 2021 had lost as much as 40% of its stock on a sliding 12-month basis.

The volatility of TLDs whose volumes rely on mass “domaining” remains high and may also lead to the perception of a market “recovery” which in reality is merely the reflection of the adaptation of these players’ business models to the conditions brought about by the pandemic.

Change in annual growth rates

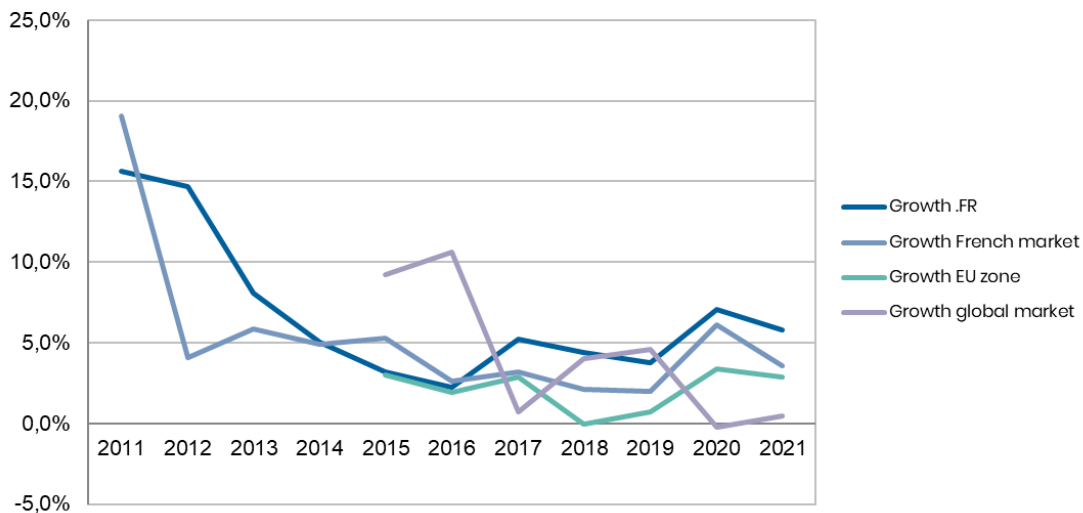


Figure 1: Change in annual growth rates

2. Market share in France

Having grown faster than its local market in 2019 (see Figure 1), the market share of the .FR domain stood at 38.75% at the end of 2021 (compared with 38.0% at the end of 2020). This market share constitutes a new all-time high for the .FR TLD.

The gain in market share was thus 0.8 of a percentage point (pp) in 2021, whereas the .COM TLD for its part gained 0.6 of a pp. The differential between the two TLDs thus remained fairly stable in 2021, with a slight advantage to the .FR TLD.

	2017	2018	2019	2020	2021
.FR	0.7%	0.8%	0.5%	0.3%	0.8%
.COM	0.1%	1.2%	0.6%	-0.6%	0.6%
Other Legacy TLDs	-1.0%	-0.9%	-0.8%	-0.3%	-0.3%
Other ccTLDs	-0.1%	-0.3%	-0.2%	-0.4%	-0.2%
nTLDs	0.3%	-0.9%	-0.1%	1.0%	-0.9%

Table 1: Changes in market share in France (2017-2021)

Table 1 shows the gains and losses in market share over the past five years. During this period, the situation of the .FR TLD improved constantly with a total gain of 3.1 pp. The .COM domain for its part gained 1.9 pp, Other Legacies lost 3.3 pp, Other ccTLDs lost 1.2 pp and nTLDs lost 0.6 pp.

The year 2021 saw a return to these long-term trends following the ‘anomalies’ of 2020 (losses of the .COM TLD, one-point gain of the nTLDs). This observation allows us to establish that the pandemic may have had the effect of accelerating some trends that were already there, but that it did not really change things. The two TLDs best known to French users continued to be much in demand while the rest struggled to keep in step with the market dynamic.

Their declining market shares can still be explained by the same factors as in previous years: defensive registrations, ‘Other Legacies’ suffering from ‘portfolio clear-outs’ not offset by a strong volume of create operations.

nTLDs for their part follow two quite different rationales. On the one hand there are the low-cost nTLDs attracting bargain create operations with subsequent low retention rates. And on the other hand, the more “classic” nTLDs, compelled by the fixed charges imposed by ICANN and by their relatively low volumes to charge rates that make them uncompetitive while at the same time not allowing them to obtain sufficient margins to finance the promotional operations they would need to carry out in order to make themselves widely known to their targets.

Figure 2 below shows that over a long period, the reality of the market is that of use, and that the great challenge for secondary TLDs such as “Other Legacy TLDs”, or newcomers to the market such as nTLDs, is how to anchor themselves in real use.

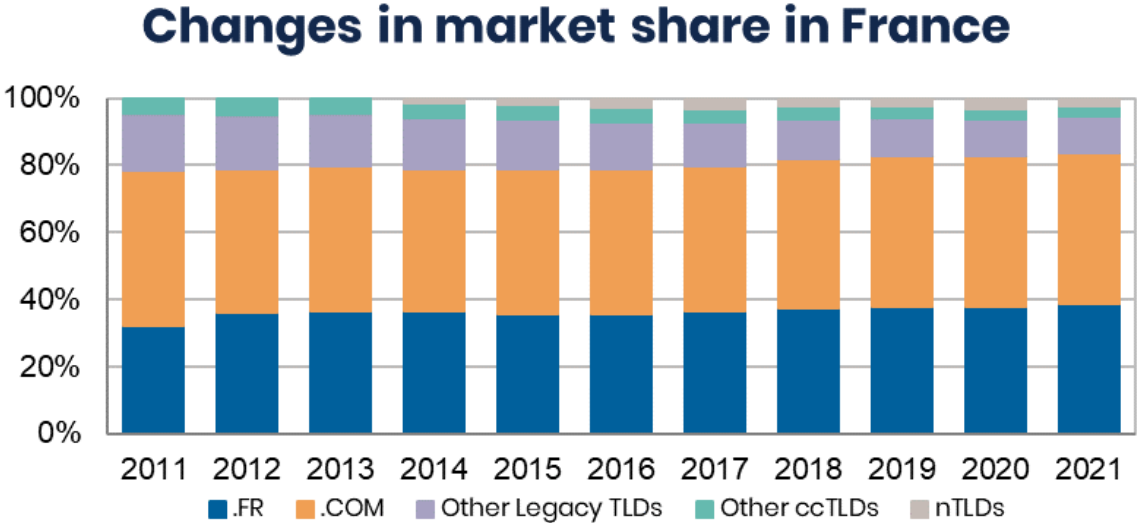


Figure 2: Changes in market share in France

Data for TLDs other than .FR are estimates provided by ZookNIC.

As a result, the durability and the success of a TLD are less measurable by the volumes of stocks or the creation dynamics than by the use made of the names. This aspect is unfortunately also one of the most difficult to assess, and for the time being we are not in a position to present reliable data on the subject.

3. Activity of the .FR

The activity of the .FR TLD in 2021 was characterised by a level of create operations that was still high (down by 2% on 2020 but up by 12% on 2019);

The number of delete operations increased, but by 2.1% only, while the stock of names grew by 5.8%, with a consequent improvement in the retention rate.

Both phenomena are interesting in the current context: on the one hand, create operations held up better than might have been expected, reflecting the continuation of the dynamic of 2020 into part of 2021; and on the other hand, delete operations did not take off as might have been feared in a context of latent economic crisis caused by the pandemic.

Table 2 shows the differences by type of flow.

Flows	2020	2021	Change (abs.)	Change (%)
Create operations	793,441	776,514	-16,927	-2.2%
Net delete operations ¹	551,994	564,245	12,251	2.1 %
Net balance	241,447	212,269	-29,178	-12.1%

Table 2: Flows of .FR activity in 2020

Consequently the net balance was more than 200,000 names.

Figure 3 presents the trends in .FR flows since 2011 and shows the habitual levels of create and delete operations and the net balance.

¹ Net delete operations correspond to gross delete operations less operations to “restore” names deleted then kept by their holders, plus the delete operations carried out at the initiative of Afnic, notably in the context of verification operations.

Change in .FR activity

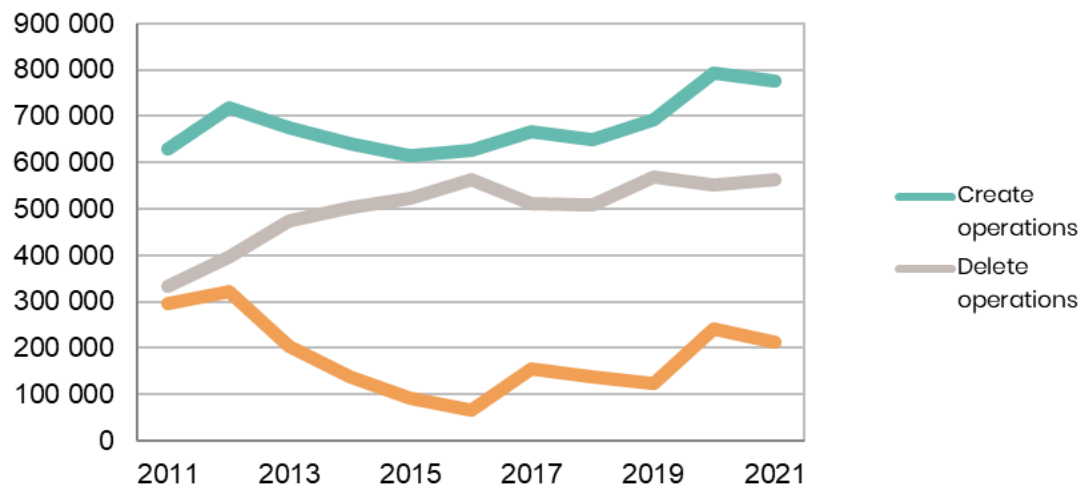


Figure 3: Change in .FR activity

Since the peak in 2012, create operations have varied between 600,000 and 700,000 a year, 2015 and 2016 having been the weakest years. The trend had been improving since 2016, but the level of 2020 seems clearly in excess of the trend and was virtually maintained in 2021.

Delete operations, for their part, have been in the range of 500,000 to 600,000 a year since 2013, with two peaks in 2016 and 2019 associated with specific one-off incidents. In 2021 they were once again close to 600,000 without actually reaching this figure. Their relative stability in a context of growing stock implies a constantly improving retention rate: as we shall see hereunder, in 2021 this rate reached the historic level of 84.6%².

² The retention rate is calculated using the following formula: $(\text{Stock 1 Jan. 2022} - \text{Create operations 2021}) / \text{Stock 1 Jan. 2021}$. It therefore measures the proportion of names present at 1 January 2021 that were still present at 1 January 2022. Purists distinguish between this retention rate and the Renewal rate, which measures the number of names renewed as a proportion of all those expiring in the period considered. For reasons of benchmarking, we prefer to use the retention rate, which can be calculated without having expiry dates for renewed names.

4. Structure of the .FR net balance

A study of the components of the net balance and their changes highlights the dynamics underlying the performance characteristics discussed above.

Figure 4 shows the variations in domain name renew and create operations from one year to another, their addition forming the net balance.

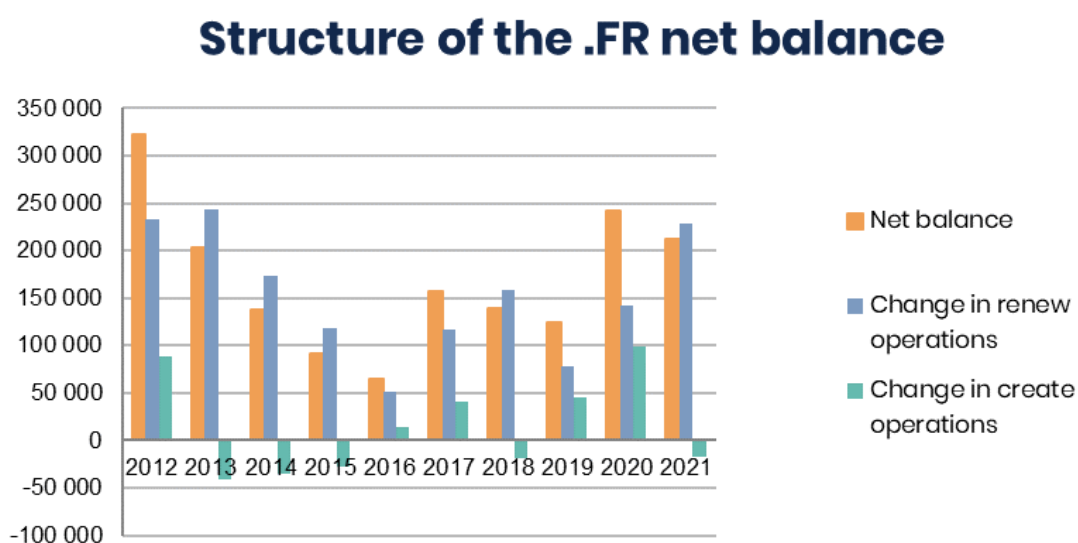


Figure 4: Structure of the .FR net balance

The variation in renew operations was positive in all years from 2012 to 2021, reflecting the fact that the absolute number of domain name renewals continued to grow (2021 being the first year in which more than three million .FR names were renewed.) This positive variation decreased from year to year between 2012 and 2016 before returning in 2017 to the 2015 level and passing the >150,000 names mark in 2018. The increase in delete operations weighed on this parameter in 2019, but in 2020 it once again came close to >150,000 names. In 2021, the positive variation was comparable with those of the years 2012 and 2013, as reflected in the significantly improved retention rate.

Changes in create operations followed a downward trend in 2013–2015 before recovering in 2016 and 2017, turning negative again in 2018 and finally re-establishing themselves in 2019. 2020 was both exemplary and atypical. The exceptional performance was not repeated in 2021, and create operations were down slightly.

Since at least 2012, the variation in the net balance has been caused more by changes in renewals (names maintained in the stock) than by changes in the number of create operations, and this factor has boosted or depressed results accordingly. This situation

applies to all TLDs that have existed for several decades. It highlights their registrars' interest in according particular importance to renew operations, even if create operations retain an obvious strategic interest.

A study of the key parameters of the .FR TLD helps to explain these factors and to illustrate the reasoning behind activity forecasts.

5. Key parameters of .FR

5.1. Slight decline in creation rate

The creation rate represents the percentage of names created during the year in stock at year-end.

The “younger” or more “dynamic” a TLD, the higher its creation rate. This rate tends to reduce over time, since the stock of names increases from year to year and the effort needed in terms of create operations (in absolute value) in order to maintain a similar rate from one year to the next is therefore automatically ever greater.

Figure 5 shows that the creation rate of the .FR TLD, which was very high in 2010–2012, fell sharply (–8 pp) in 2013–2015 before levelling out in 2016–2017, falling again in 2018 and recovering since 2019. It continued to increase in 2020, which was to be expected in view of the context of the accelerating digital transformation.

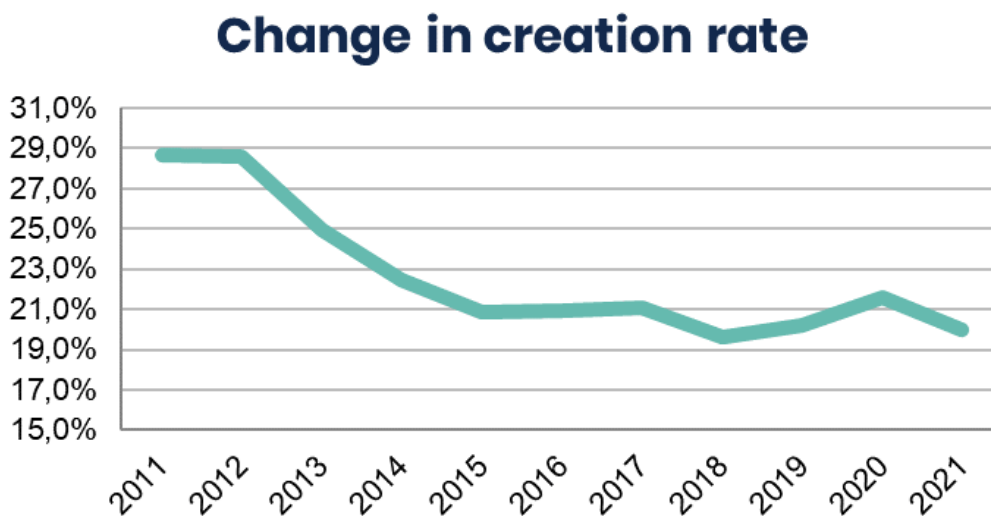


Figure 5: Change in creation rate

As forecast in the .FR Observatory in 2020, the creation rate for 2020 was not maintained in 2021, when it fell back to 20%. The scenarios referred to then in terms of possible future developments remain valid:

- **an optimistic scenario in which the digital transformation initiated in 2020 continues and sustains the dynamic of create operations;**
- **a pessimistic scenario in which the economic crisis reduces investment and discourages potential project promoters from starting up new businesses.**

The optimistic scenario presupposes the persistence of a dynamic we have already seen slowing in 2021 relative to 2020, while remaining above that of 2019. Figure 5.1 shows that the inflection point came in week 19 (May 2021). Creations declined continuously until week 33 (August) before picking up again after the summer recess and settling at an average of 15,000 a week between September and the beginning of December. They suffered a sharp slowdown in December due to the school break and the holiday season (a recurring effect every year).

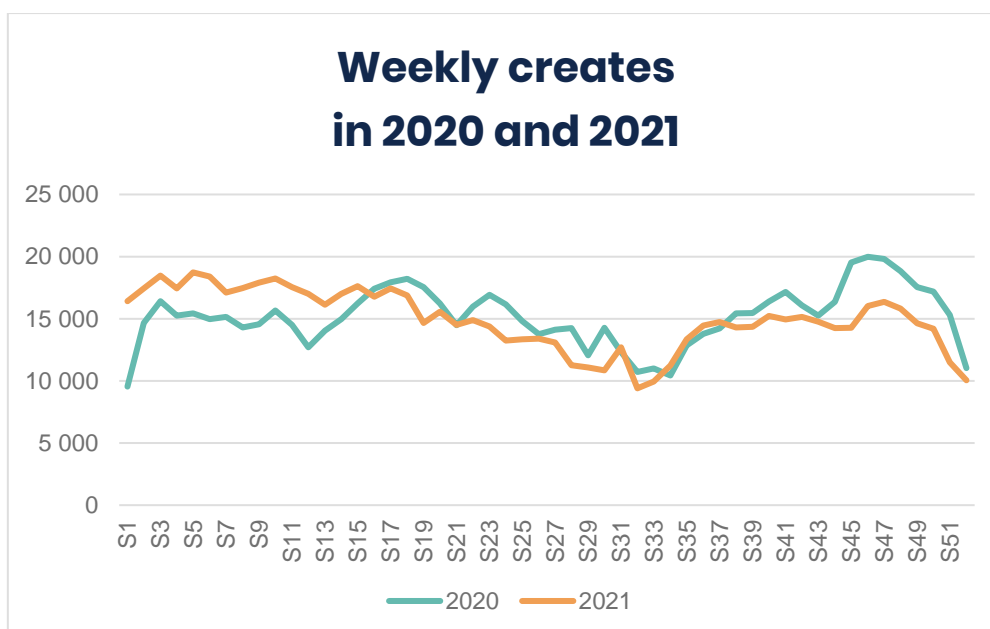


Figure 5.1: Comparison of levels of weekly creations in 2020 and 2021.

It seems reasonable to suppose that, all other things being equal, this trend will carry over into 2022 and that creations will once again drop slightly, coming in at around 750,000, with the creation rate fluctuating between 19% and 20%.

5.2. Increasing retention rate

The retention rate is calculated by subtracting the number of create operations during the year from the stock at year-end and comparing that balance with the stock at the beginning of the same year. It therefore measures the proportion of names in the portfolio at the start of the year that were still there, i.e. had not been deleted, at year-end.

We have seen that this retention rate increased in 2021 due to the number of delete operations increasing more slowly than the stock of names.

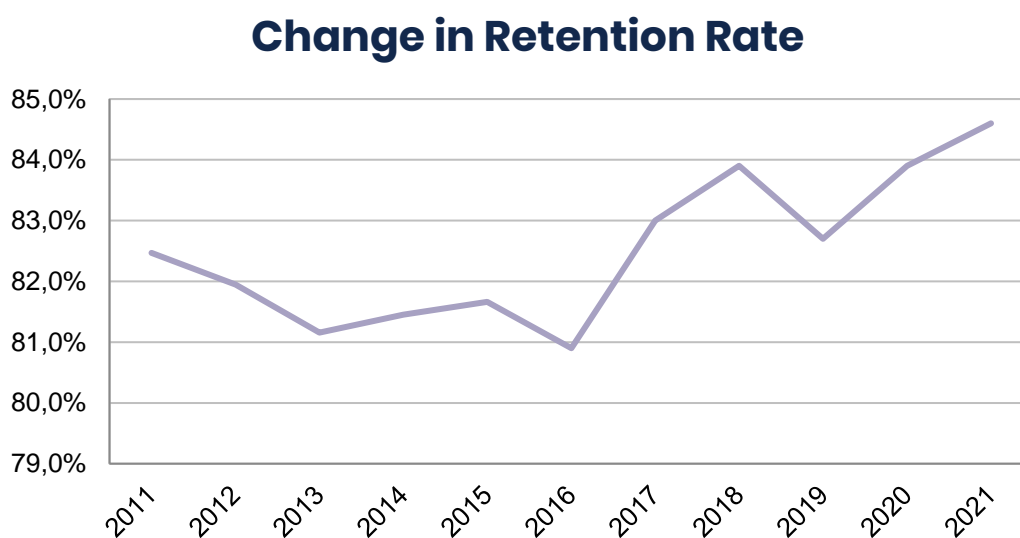


Figure 6: Change in retention rate

Figure 6 shows that this rate remained in the range of 81% to 82% until 2016, before shifting up to between 82.8% and 84% in 2018–2020. The increase in 2017 was linked directly to the introduction of automatic renewal systems by several major registrars, which led to a gain of 2 pp on average in the .FR retention rate, i.e. around 60,000 names in a stock of 3 million.

The fall in 2019 was caused by the deletion of the portfolio of a domainer declared ineligible under the .FR Naming Charter, but also likely by a catch-up effect in delete operations that it had not been possible to carry out due to automatic renewal, some holders having been caught unawares by this in 2017/2018. This phenomenon faded in 2020, thus contributing, together with the digital transformation, to enhancing the value perception of domain names as key elements in any online presence strategy.

This trend persisted in 2021, the retention rate reaching an all-time record of 84.6% – 88.2% for names held by legal persons and 79.0% for those held by natural persons (traditionally more volatile).

The improvement in the overall retention rate was determined mostly by legal persons, for which the rate increased by 0.9 pp in 2021 as against 0.6 pp for natural persons and 0.7 pp overall.

This development can be explained by the same factors as in 2020: a clearer perception of the value of domain names and more systematic renewal of these names. In fact, the older a name, the greater the probability of its being renewed. The ageing structure of the .FR portfolio is therefore a key factor in understanding the phenomenon.

5.3. Repartition of .FR names, by age, an explanatory factor

Figure 7 hereunder shows the distribution of extant .FR domain names by age at 31 December 2021. Names created in 2021 are 0 years old, those created in 2020 one year old and so on.

This structure has remained very stable over time, names created during the past year constantly representing around 20% of the stock (the same as the creation rate). Three tiers can be distinguished: names created in 2020 and 2021 (34%), names that are from two to six years old (36%) and those that are seven or more years old (30%).

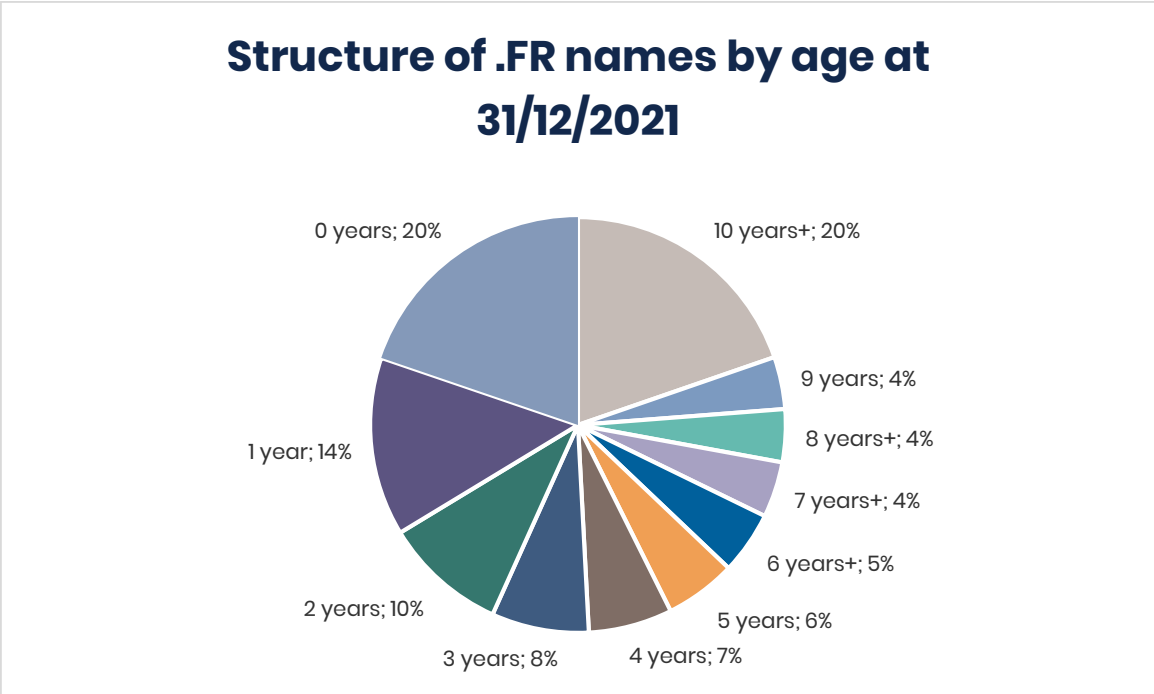


Figure 7: Structure of .FR names by age at 31 December 2021

The age structure of .FR names has a direct impact on the TLD's retention rate, since this rate varies with the age of the domain names (see Figure 8).

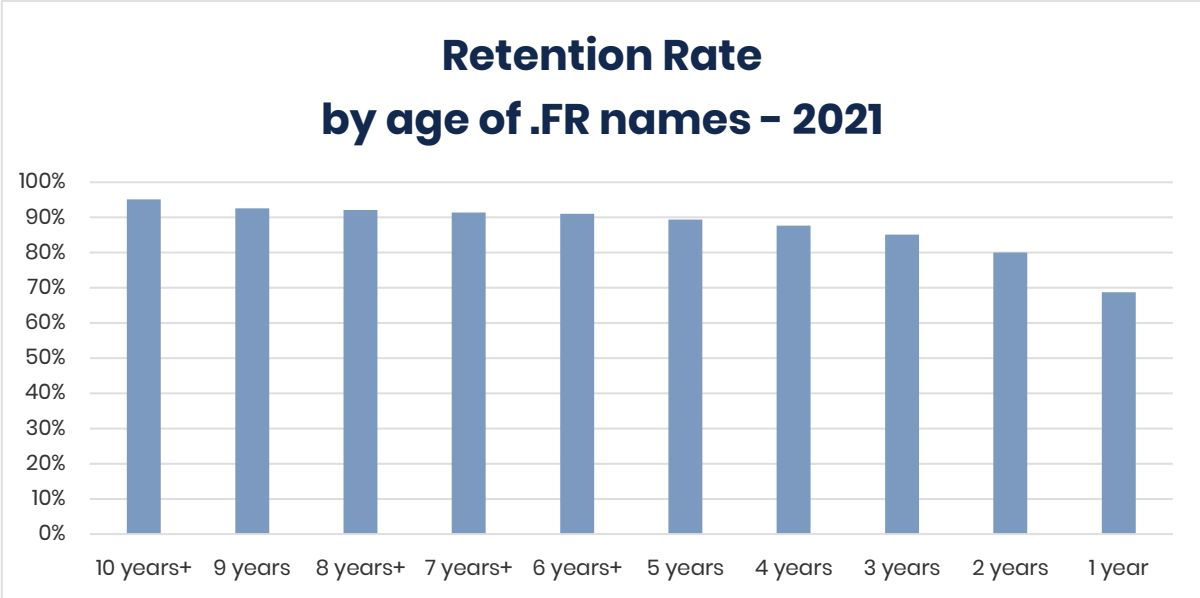


Figure 8: Retention rate by age of .FR names in 2021

The retention rate in year 1 (the first renewal) is close to 70% and subsequently increases to 80% or more. A domain name retained for several consecutive years has an ever-increasing probability of being retained in the future: after five years the retention rate is 90% or more.

The particularly low retention rate in year one (70%, as against an overall rate of 84.6%) shows that registrars could conduct effective loyalty campaigns at the time of this first anniversary when the expectancy of gain (renewal of names) is at its highest.

The retention rate is never 100%, reflecting the existence of a phenomenon of natural erosion, which decreases as the names age. In any case, the regular increase in the proportion of names that are five or more years old goes some way towards explaining the structural increase in the overall retention rate of .FR names.

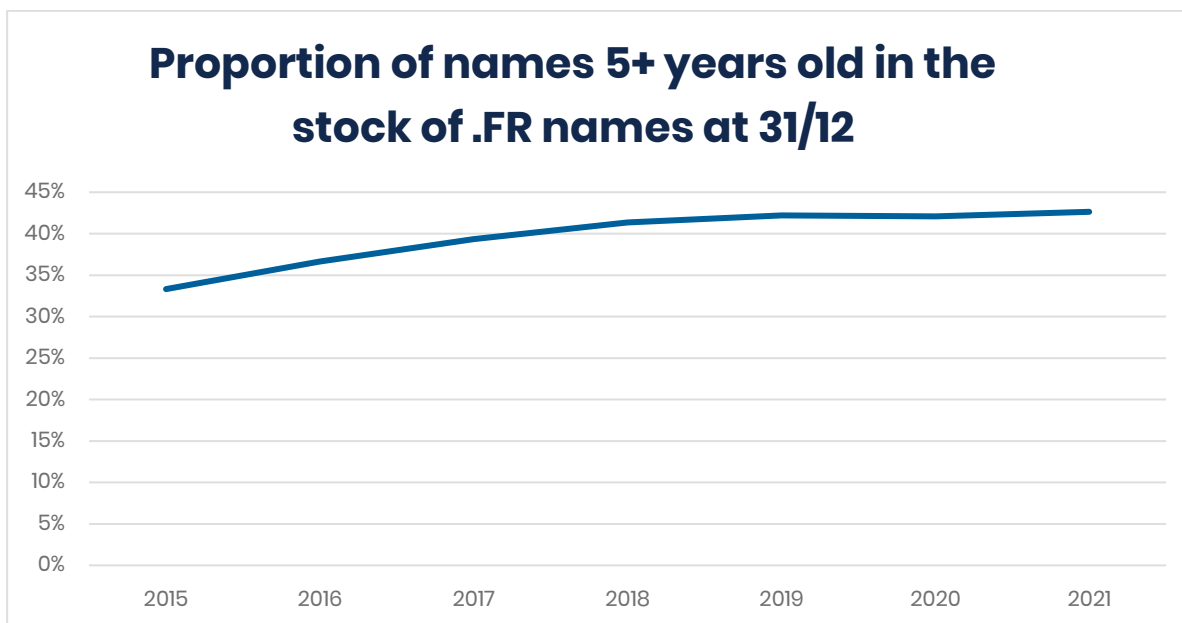


Figure 9: Proportion of names 5+ years old in the stock of .FR names at 31 December 2021

This indicator tells us that the retention rate of the .FR TLD should either stabilise at 84% or continue to increase slightly as the large volumes of names created prior to 2019 attain ages at which retention rates are of the order of 90%.

A significant fall in this rate could still be brought about by one-off mass delete operations on the part of a registrar or by an economic recession. But the more time passes, the greater such a phenomenon would have to be to have a significant impact on the retention rate.

There are thus two factors that could push the retention rate towards stability or decline in 2022:

- **on the one hand, names are always more volatile at the time of their first due date for renewal; and the proportion of names concerned is slightly higher in 2020/2021 than in previous years because of the pandemic and its consequences in terms of acceleration of the digital transition;**
- **on the other hand, the economic situation may end up leading to a greater than usual number of business failures and consequently higher levels of abandonment or deletion of .FR names than in the past few years. This scenario, already referred to last year as a possibility, did not materialise in 2021, but its materialisation in 2022 cannot be ruled out, even though it would no doubt be mitigated by State aid.**

5.4. Change in the number of .FR names since 1998

Figure 10 highlights the impacts of the various waves of openings (2004, 2006 and 2011) and of the pandemic (2020/2021) on the growth of the .FR TLD.

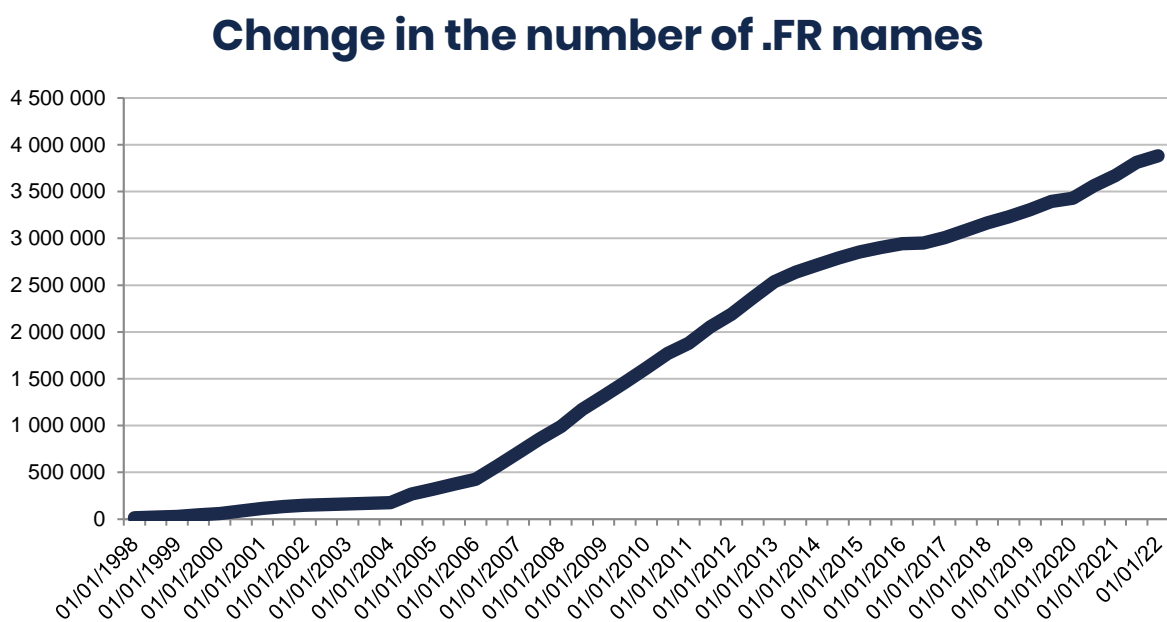


Figure 10: Change in the number of .FR names, 1998–2021

Note that the easing of the “right to the name” in May 2004, i.e. the abandonment of the requirement to substantiate a right to the name filed, was the first factor in the acceleration of growth.

However, the determining factor was the opening in 2006 to private individuals, the two “openings” combining their effects until 2013, with the opening up to the European Union in 2011 not having any substantial effect.

From 2013 onwards, growth slowed and we had to wait until the beginning of 2017 to pass the 3 million mark for the .FR TLD. The pace remained strong in 2018 and 2019 and stepped up again in 2020 due to the pandemic and the lockdowns; the 3.5 million mark was passed in the second half of 2020.

In 2021 the trend remained strong albeit with an appreciable inflection. Sights are set on four million .FR names in 2022.

6. .FR market concentration

The concentration index for the .FR domain is calculated by taking the sum of the squares of the market shares of the top 10 registrars (using the HHI or Herfindahl-Hirschmann Index).

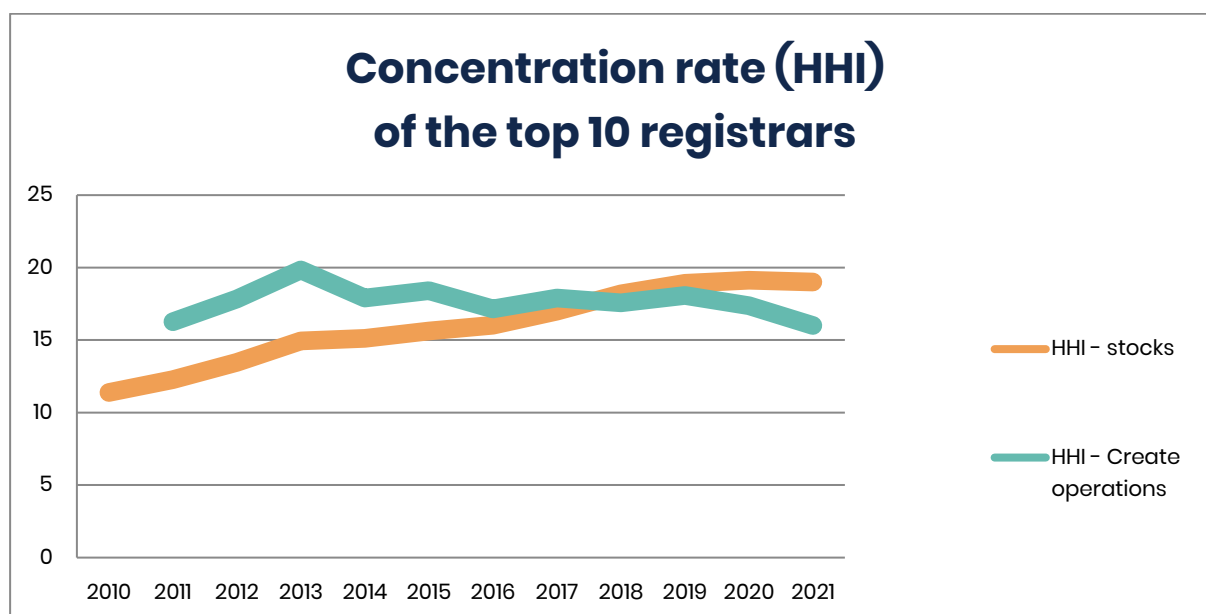


Figure 11: Concentration rate (HHI) of the top 10 registrars

Figure 11 shows the changes in the concentration of the .FR market since 2010.

At present, in terms of the HHI nomenclature, the .FR TLD is still considered a moderately concentrated market. However, it could be considered to be significantly concentrated beyond 20.

The HHI stock curve climbs steeply until 2013, and then tends towards the horizontal, before rising again in 2017/2019 at a rate comparable with that of 2010–2013. It flattens again in 2020 and stabilises in 2021 under the effect of the change in the HHI for creations.

In 2018, this index moved below the stock concentration index, inducing a medium- to long-term trend towards market deconcentration.

This situation was compounded in 2020 and 2021, which explains the stabilising concentration in terms of stock.

The fairly sharp fall in the concentration index for create operations in 2020/2021 leads us to believe that the particular conditions brought about by the acceleration of the digital transformation have benefited the leaders less than the challengers, who are better

equipped to seize opportunities on the fly: particularly those that have been able to rely on partnerships with website creation platforms.

In view of the growing differential between the two, we can predict that the stock concentration rate should start to fall from 2022. The phenomenon will remain fairly slow however, in view of the considerable inertia exerted by the names retained. These stocks have rather low volatility, the proportion of names changing registrar remaining marginal, as shown in Figure 12.

This proportion never exceeded 2.5% between 2014 and 2019; it established a one-off record of 3.5% in 2020 before reverting to its usual levels of around 2.3%.

In 2020, eight registrars made outward transfers of more than 1,000 names to eight other registrars, for a total of 39,228 names, some of these operations falling under the header of portfolio rationalisation within the same group.

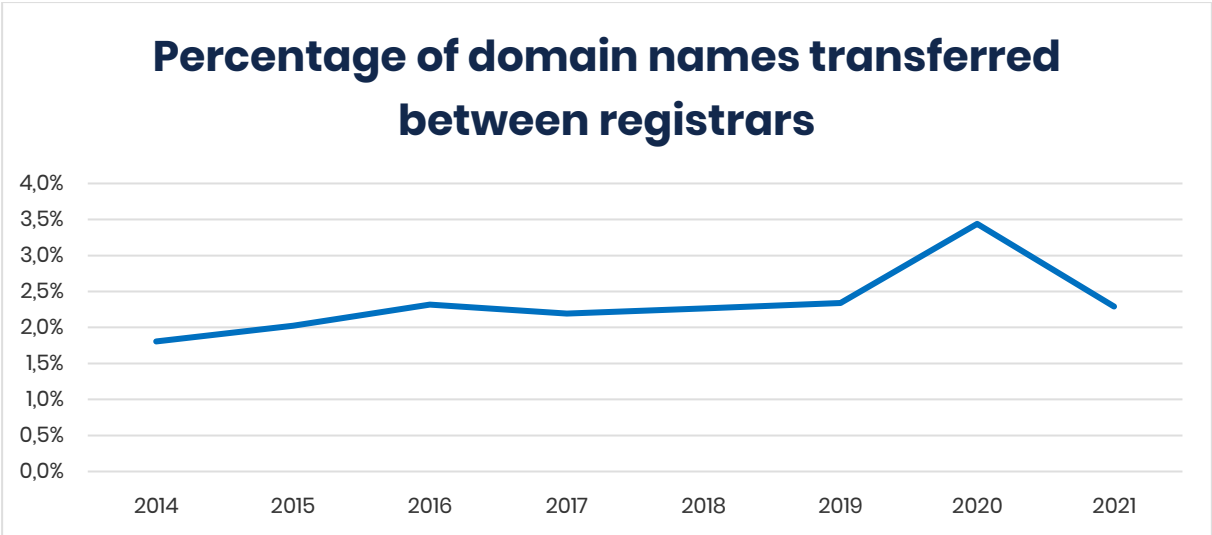


Figure 12: Percentage of domain names transferred between registrars, 2014-2021

The portfolios are therefore very stable, changes being dictated, as far as registrars are concerned, by the combined effects of create operations and renewals more than by the flow of customers won or lost.

These relatively flat inter-registrar transfer rates indicate that the French domain names market is still a growth market, in which competitors' efforts are focused much more on creations than on other registrars' existing clients.

As the market enters its mature phase (which seems to be still some way off) the inter-registrar transfer rate is likely to increase, reflecting increased competition for existing clients, the objective of some registrars being to gain market share by enticing their competitors' clients away.

However, this strategy would come up against a number of obstacles: domain names are often associated with various online presence services, which changing registrar may affect, so this would be a brake on any decision to transfer.

In this new competitive context, aggressive pricing policies would lead to an increase in the cost of acquiring clients, which could only be offset by selling packages of services including the domain names or by charging higher renewal rates relative to the initial transfer rate, which in turn would increase the volatility of the portfolio (increase in potential abandonments) and fuel the inter-registrar transfer dynamic.

Placed as they are at the very heart of online presence, domain names in themselves are not yet subject to very intense competition among players, as is shown by an analysis of inter-registrar transfer flows.

Flows of transfers between the three leading registrars and other registrars

2021	Incoming transfers			
Outgoing transfers	3 leaders	Others	Total	%
3 leaders	13,627	17,900	31,527	37%
Others	21,711	30,929	52,640	63%
Total	35,338	48,829	84,167	
%	42%	58%		

Table 3:Transfers

In 2021, out of 84,167 transfers between registrars, 35,338 (42%, as against 30% in 2020) were to one of the three leaders, whereas these same leaders lost only 31,527 names (37% of the total, as against 25% in 2020) to other registrars.

The net balance of transfers therefore came to 3,811 names in favour of the three leaders (4.5% of the total).

Flows of exchanges among these three leaders represented just 13,627 names (16% as against 11% in 2020), whereas those between other registrars accounted for 35% of the total (as against 56% in 2020).

Thus the flows of transfers are mainly in favour of the leaders, albeit in a less concentrated manner than the overall market level (42% compared with 64%). One can see in this dissonance the effect of business models disturbing the play of “pure and perfect competition” so dear to economists.

Not all registrars offer the same type of services to the customers that they target, and not at the same rates. Competition in terms of transfers is played out among registrars sharing

the same business model and offering similar ranges of services at fairly similar prices. A key account customer is thus unlikely to transfer to a registrar targeting the public at large and VSEs/SMEs, just as private individuals or VSEs are unlikely to be attracted by the high charges that include services they do not need.

The phenomenon of transfer flows also sheds light on the growing stakes linked to reseller networks, which can transfer from one to another the domain name portfolios that their customers have entrusted them to manage.

Although they do not account for a majority of inter-registrar flows, the three leaders are nonetheless a force to be reckoned with in the .FR market. Even so, we observe that their overall market share is tending to be eroded, in the context of the gradual deconcentration of the .FR market.

Figure 13 hereunder shows the trends since 2013 in the market shares of the top three players, in terms of stock and create operations. It shows that the phenomenon of deconcentration (where the concentration of create operations is below that of the stock) began for these three in 2017, with the concentration of stock continuing to grow, even though the pace of growth gradually slowed (+3.1 pp in 2017, +0.9 pp in 2018 and +0.4 pp in 2019) before declining in 2020 (-0.4 pp) and 2021 (-0.6 pp), the rate of decline seeming to intensify.

These data tend to confirm the idea that it is not the major leaders that benefited most in relative terms from the effects of the acceleration of the digital transformation in 2020, and that this held true for 2021 as well. The sharp differential between creations (56%) and stocks (64%) highlights the relative loss of speed of the three leaders in the most competitive market segment, that of creations. Despite their significantly more modest size, their challengers have managed to come up with offer profiles better adapted to the specific conditions arising from the pandemic.

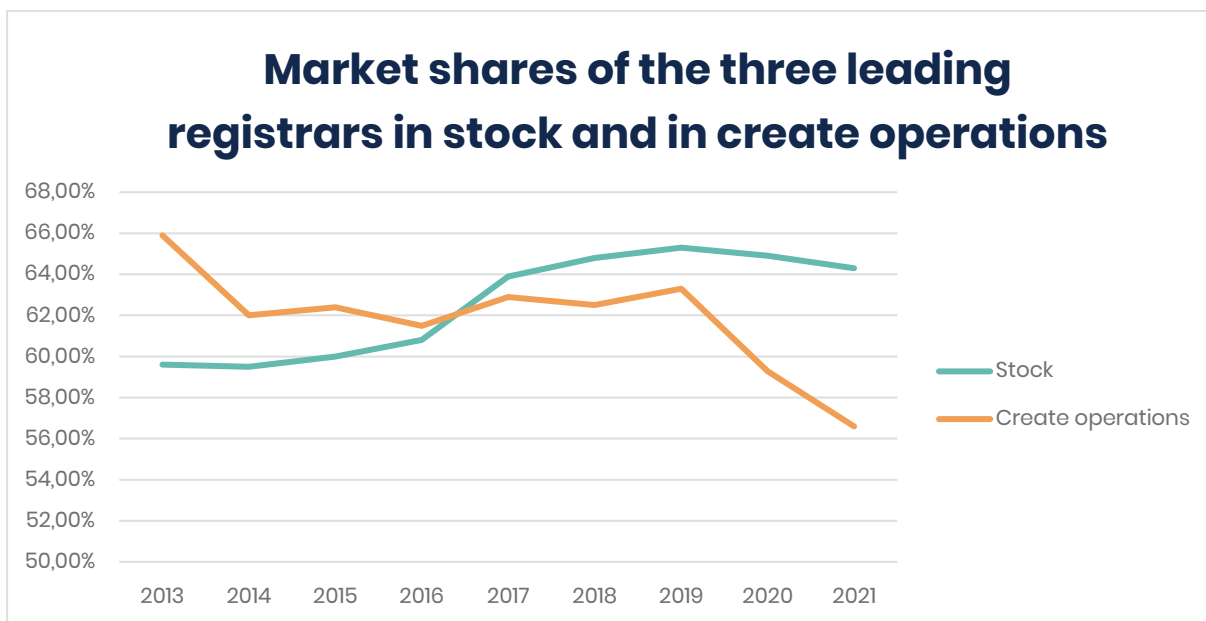


Figure 13: Market shares of the three leading registrars in stock and in create operations

The weight of these three players (which together account for nearly two thirds of the .FR domain) in .FR activity remains considerable in view of the number of registrars active in this TLD. But if their share of creations were to fall below 50%, it would send a strong signal announcing a profound change in the key success factors of the .FR domain names market in France.

7. Geographical distribution of .FR nationwide

Table 4 shows that the regions of France have benefited unequally from the effects of the acceleration of the digital transformation, in 2021 as in 2020.

Brittany, which headed the field in 2020 with growth of +9.8%, saw this pace slow in 2021 to +4.1%, as if most businesses interested in and capable of having an online presence had already established one in 2020. A comparable phenomenon can be seen in Normandy (+6.8% in 2021 as against +8.2% in 2020) and in New Aquitaine (+6.4% as against +8.0%).

The overseas *départements* were thus the most dynamic in 2021, with growth of 8.3%.

Although it is the undisputed leader in terms of market share (29%), the Île de France comes in last with growth of “just” 3.6%.

Breakdown of holders by region (in thousands)

Region	2021	Var. 2021	Mkt Share 2021
Grand-Est (Alsace Champagne-Ardennes Lorraine)	211	5.3%	5%
Nouvelle Aquitaine (Aquitaine Limousin Poitou-Charentes)	268	6.4%	7%
Auvergne Rhône-Alpes	462	6.1%	12%
Bourgogne-Franche-Comté	96	6.6%	2%
Brittany	133	4.1%	3%
Centre Val de Loire	90	6.5%	2%
Corsica	12	6.5%	0%
Ile de France	1,137	3.6%	29%
Occitanie (Languedoc-Roussillon Midi-Pyrénées)	301	6.8%	8%
Hauts de France (Nord-Pas-de-Calais Picardie)	194	5.5%	5%
Normandy	108	6.8%	3%
Pays de la Loire	177	5.9%	5%
Provence-Alpes-Côte d'Azur	294	5.9%	8%
Overseas Territories	38	8.3%	1%

Table 4: Distribution of the .FR TLD by holder region

These data show that the catch-up dynamics seen in previous years were boosted by the COVID-19 context and persisted throughout 2021, albeit in somewhat attenuated form. The

constraints currently encountered are perhaps more serious than those at the beginning of 2020.

Whereas at that time it was largely a matter of perception of opportunity, the current obstacles may have more to do with company managers embracing the Internet and the associated technologies. Despite the proliferation in 2020/2021 of offers to publish websites in highly simplified forms, the question of return on investment often remains, this investment generally being reckoned not so much in money as in time and learning³.

But part of the growth of the .FR TLD was obtained thanks to holders located abroad.

³ See Afnic Observatory on the online presence of VSEs

<https://www.afnic.fr/en/observatory-and-resources/observatory/online-presence-of-vses/>

8. Foreign holders

The .FR TLD was opened to the rest of the EU in 2011, with a limited impact on growth momentum. The percentage of .FR domain names registered by foreigners has nonetheless increased continuously ever since, rising from 4.9% in 2013 to 8.6% in 2017.

This proportion was first seen to decline in 2018 (-0.2 pp), but the trend has since resumed its upward path and continued in 2021, reaching 9.2%. The growth in the number of names registered by foreigners was thus greater than that of the .FR TLD as a whole: +11.4% compared with +5.8%.

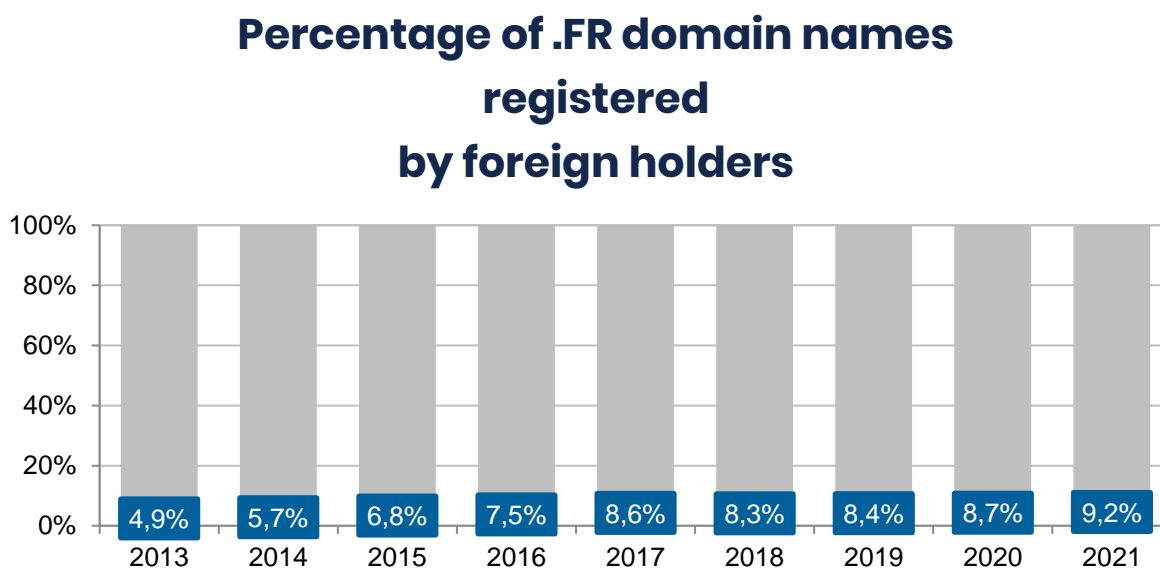
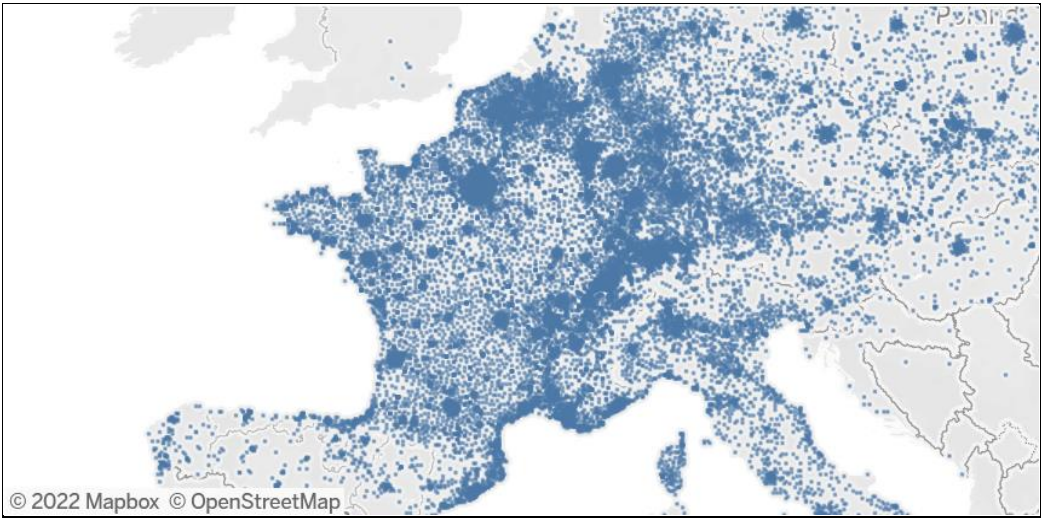


Figure 14: Percentage of .FR domain names registered by foreign holders

Foreign holders are still mainly located in Germany (75,000 .FR names compared with 71,000 in 2020), the Netherlands (70,000 compared with 52,000) and Belgium (42,000 compared with 40,000). The strong growth in the Netherlands could be a consequence of domaining activities by this country's players, through specialist registrars.

A special case in 2021 was the UK, which saw its stock of .FR names go from 34,000 to 26,000 as a result of Brexit. Although Afnic has not deleted .FR names filed by holders located in the UK, creations dried up (1,625 as against 6,070 in 2020) and deletions exploded (10,246 as against 3,964). Holders located in the UK have not been able to register names since 1 January 2021, so holders of names filed since that date risk having them deleted if they do not conform to the .FR TLD eligibility conditions.



Map 1: Map showing locations of holders of .FR names

Despite the exit of .UK, creations by holders located in other EU countries grew further in 2021, up from 73,000 (excluding UK) to 85,000.

The creation rate for names registered by holders located abroad remained higher than that of the .FR TLD as a whole (22% compared with 20%) while the retention rate was slightly lower (83.6% compared with 84.6%). These data are indicative of domaining activities by certain holders located abroad.

9. DNSSEC

The proportion of DNSSEC-signed .FR domain names increased from 3.8% in 2013 to 13% in 2017, tripling in volume from 103,000 to 424,000 names. The situation then deteriorated in percentage terms between 2017 and 2020, before improving appreciably in 2021 (+5.4 pp). This was due to an active policy on the part of certain major registrars, who saw their share of signed names increase significantly in 2021: OVH + 205,208 names or +38%; Key Systems +13,021 names or +43%; Infomaniak +9,359 names or +27%; Gandi +2,415 names or +30%; Hosting Concepts +1,454 names or +22%.

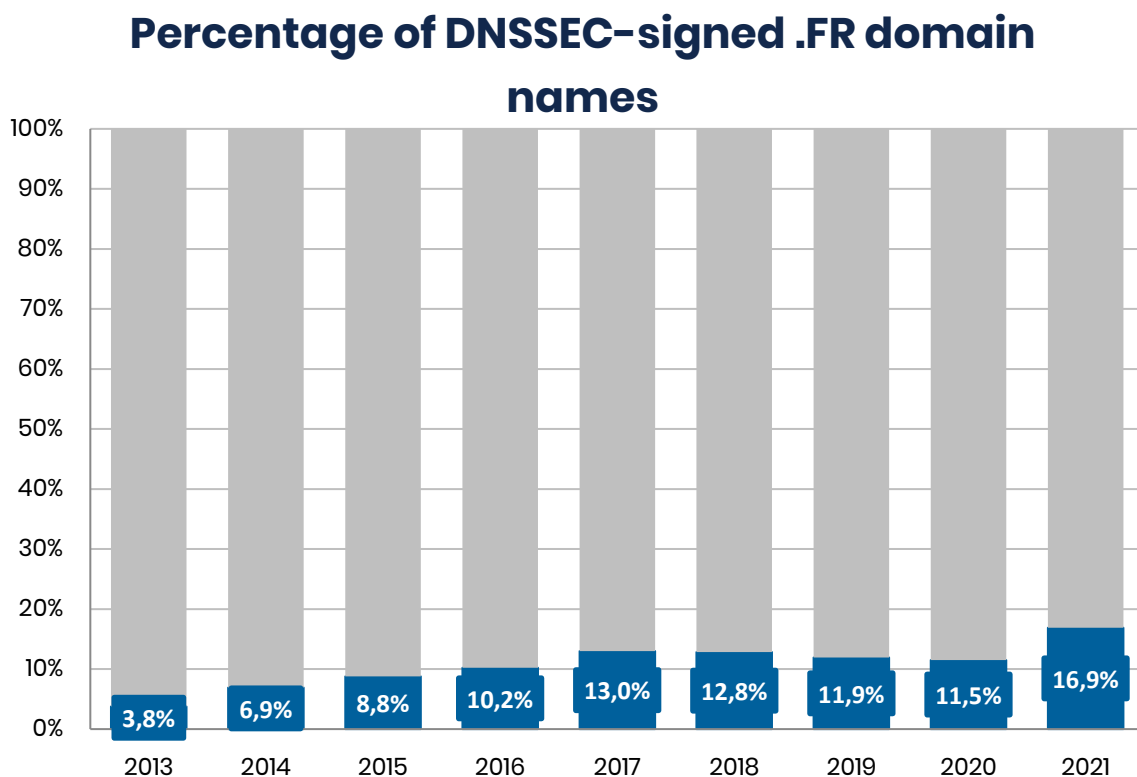


Figure 15: Percentage of DNSSEC-signed .FR domain names

This development is very encouraging and could mark the beginning of a new period in the history of DNSSEC under the .FR TLD. The rate is still rather modest compared with those of other EU TLDs.

The appearance of a new type of attack dubbed SAD, which poisons the DNS cache by making it accept false responses which it then distributes to its clients, added further weight

and currency to DNSSEC, which is the only reliable solution to these attacks. The development observed in 2021 can no doubt be attributed to this.

10. Internationalized domain names under .FR

Unchanged since 2019, the proportion of .FR names in the IDN format, i.e. containing special characters (accents, etc.), remains low at 0.7%.

This stability in percentage terms has to be seen in the context of the increase in the total number of names in stock: the number of IDNs under .FR grew by 7.4% in 2021 to 28,568.

These figures are anecdotal at the level of the .FR TLD, no doubt including a large number of defensive names (brands containing accented characters) and some speculative names (common names containing accented characters). The lack of convincing use explains low percentage and the sometimes virtuous, sometimes vicious circle that closely links the flows of domain names and the use made of them.

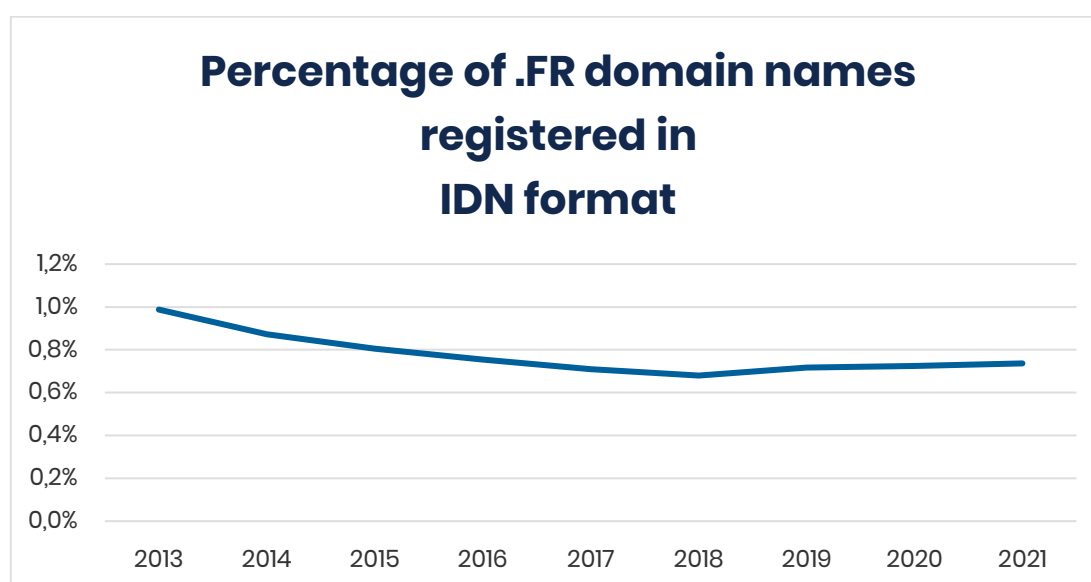


Figure 16: Percentage of .FR domain names registered in IDN format

11. Multi-year registrations

The registration and renewal of .FR domain names for periods of over 1 year (and up to 10 years) has been possible since 30 March 2015. Yet although this possibility has existed for nearly seven years, the proportion of .FR domain names registered or renewed for periods greater than one year remains marginal. It was still below 7% in 2021.

Percentage of .FR domain names registered for more than one year

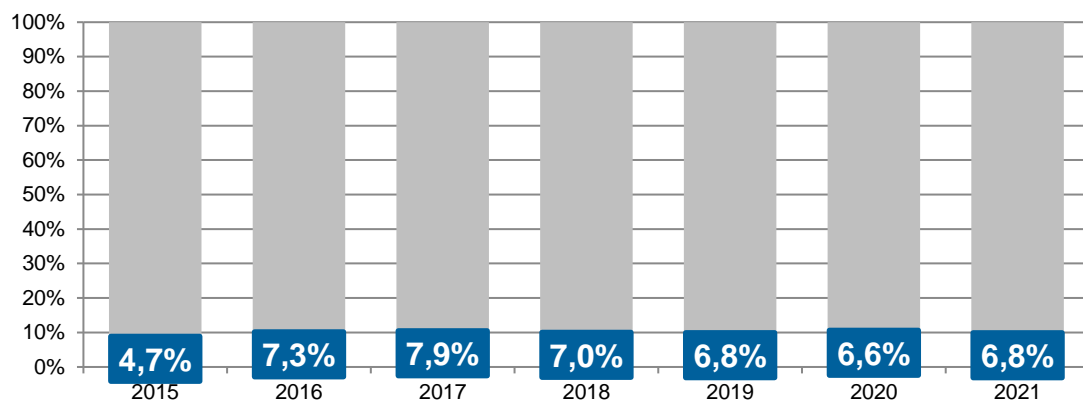


Figure 17: Percentage of .FR domain names registered for more than one year

At 1 January 2022, 263,722 .FR domain names had been registered for two years or more, an increase of 20,961 names in absolute terms or 6.8%, and of 0.2 pp as a percentage of the total number of .FR names. The declines observed in the years 2018, 2019 and 2020 could be explained by the fact that several large registrars implemented automatic renewal systems. The increase in 2021 may be linked to the dynamic of challengers gaining market share without having put these kinds of systems in place.

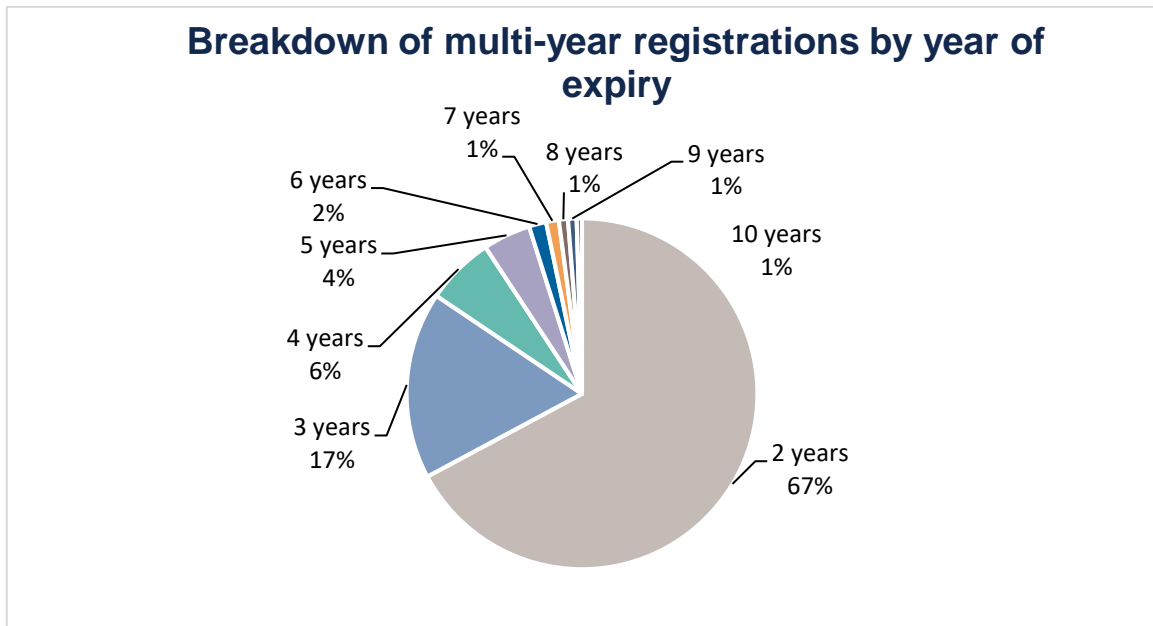


Figure 18: Breakdown of multi-year registrations by year of expiry

The maturity structure (from 2 to 10 years) shows that the bulk of the multi-year registrations expire in 2 or 3 years (84%), with the other maturities declining. This structure is stable over time.

12. The .FR and business creation

.FR create operations are carried out by:

- businesses that have existed for some time, in the context of their activity;
- newly created businesses;
- project promoters registering their domain names personally in the absence of a legal structure;
- private individuals with needs of a professional or private nature leading them to register a .FR name.

One cannot therefore expect a situation in which .FR create operations are entirely due to newly created businesses, the more so as new or future entrepreneurs do not register only .FR names.

Nevertheless, we thought it interesting to compare trends in .FR create operations and in business start-ups, on the basis of data provided by the French National Institute of Statistics and Economic Studies (INSEE).

Figure 19 hereunder shows that there is most assuredly a link between the dynamics of the .FR TLD and the creation of businesses, particularly the creation of individual enterprises or sole proprietorships rather than of businesses with the legal form of a company. This link is particularly visible in the period 2013–2017, when the annual figures were fairly stable, and in 2019–2020 when both kinds of creation increased. The .FR domain seems to have benefited somewhat less from business start-ups in 2021 than in 2020, perhaps due to a reaction from the .COM TLD which improved its positioning compared to 2020, but this is merely a hypothesis and needs to be verified.

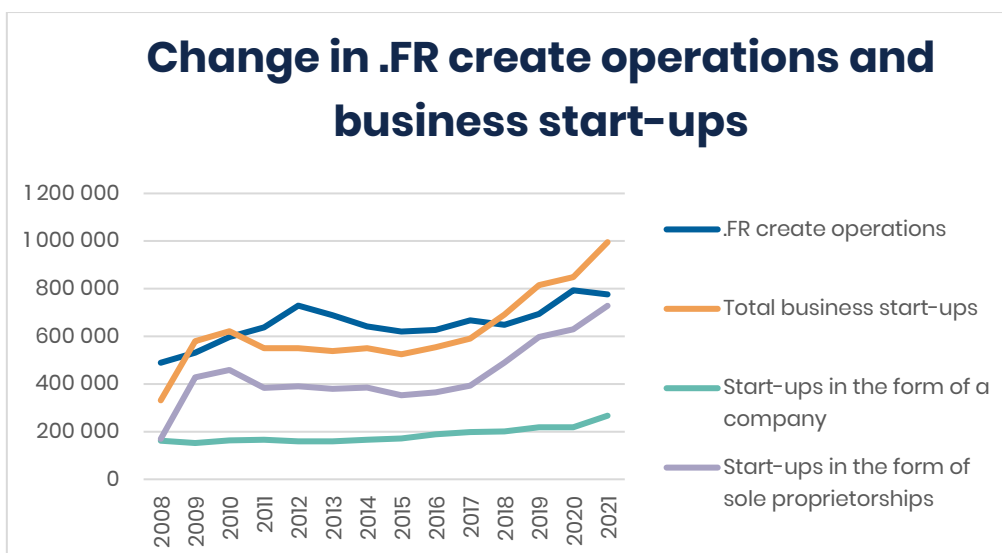


Figure 19: .Change in FR create operations and business start-ups

This link can be measured by calculating the linear correlation coefficient over a number of years (Figure 20).

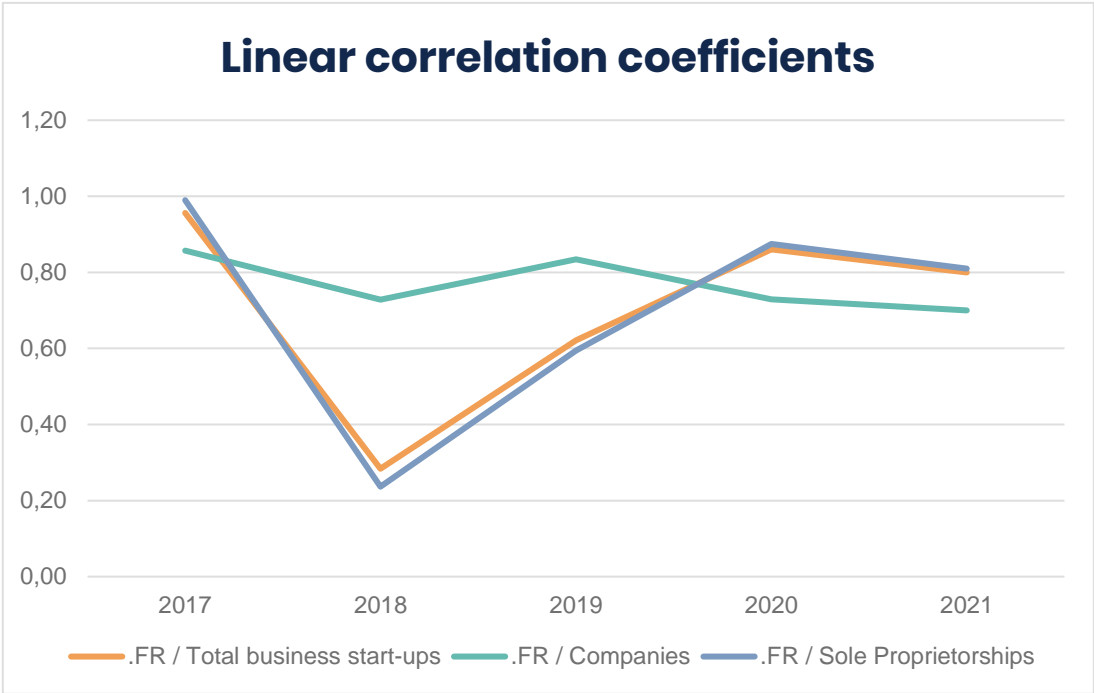


Figure 20: Linear correlation coefficient, .FR create operations and business start-ups, 2017-2021

The coefficient was above 0.9 in 2017 and above 0.8 in 2020 and 2021, standing at 0.3 in 2018 and 0.6 in 2019. In view of the large number of parameters involved, it is difficult to offer any definitive explanations for these variations. The trend observed in 2020-2021 suggests, however, that newly created businesses tended more automatically than in previous years to adopt a .FR name for their digital presence.

The trend in business failures also warrants study since it constitutes a factor that may influence the level of .FR delete operations.

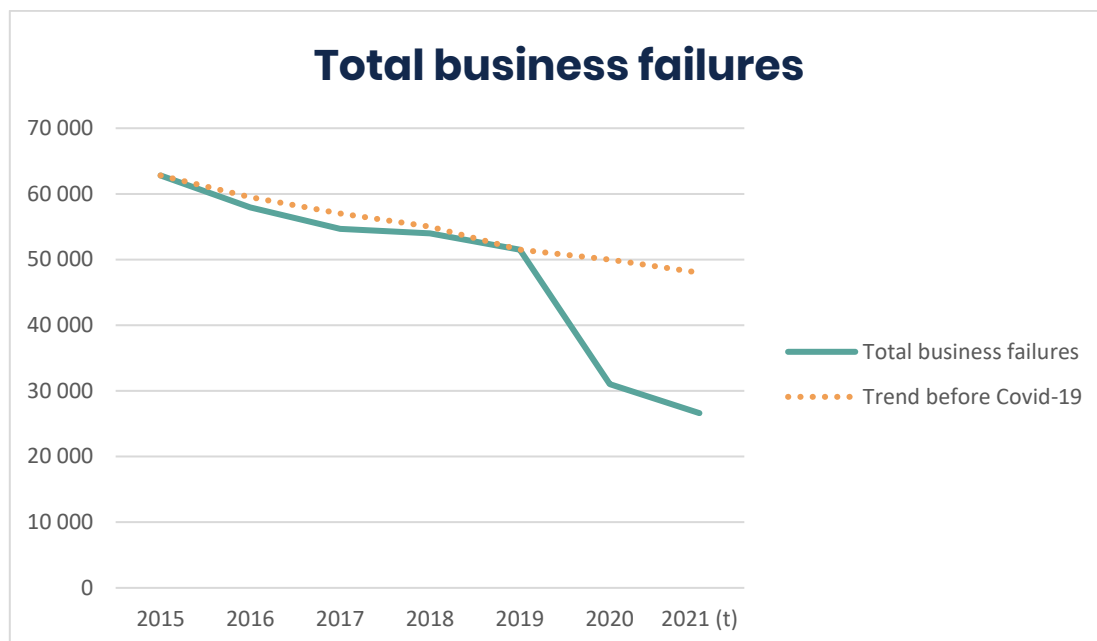


Figure 21: Total business failures

Source: INSEE (National Statistics Institute). Last updated 14 January 2022, data to November 2021.

The figure for 2021 is a projection based on the historical weights of each month between 2015 and 2020.

The visible dip in 2020 is probably attributable to the government aid which protected businesses from failure linked to the health crisis while at the same time allowing some that would normally have gone bankrupt to survive.

The volume of businesses concerned can be estimated at around 20,000 in 2020 as in 2021. It could be therefore that a layer has formed of fragile businesses likely to collapse in 2022/2023 once government aid is discontinued. The impact of this possible delayed wave of failures on the .FR TLD would be limited, since not all these businesses have domain names and the market share of the .FR TLD is only 38.75%. However, a drastic increase of 10,000 in the number of delete operations would represent a fall of about 0.3 pp in the retention rate.

13.2022 outlook for the .FR

The activity of the .FR TLD in 2022 will depend largely on two factors:

- **on the one hand, the persistent dynamic, albeit slowing at a more or less pronounced rate, of the digital transformation, which will play a decisive role for create operations;**
- **on the other hand, the economic context, which may work in favour of this digital transformation while at the same time leading to business failures and a slowdown in investments and new projects.**

As we envisaged in the 2020 Observatory, the exceptional level of creations in 2020 could not be reproduced in 2021. However, the level remained well in excess of that of the last “normal” year of reference, namely 2019.

Slowdown is the most likely scenario, since more and more businesses interested in developing an online presence have already taken the leap, and the slowdown of the economy may weigh on new registrations. Even so, the level should remain above that of 2019.

The retention rate, which is higher than ever, looks precarious. On the one hand, the layer of fragile businesses continues to grow, exposing the .FR TLD to higher, albeit limited, levels of deletions once government aid is discontinued. On the other hand, the creations of 2020/2021 took place in an exceptional context which could bias and even invalidate forecasts.

If creations were to decline by 3% in 2022 to around 750,000, deletions would be likely to increase too, bringing the retention rate to around 84% (loss of 0.6 pp).

The growth of the .FR TLD is therefore likely to be moderate compared with 2021, at around 3%.

The global digital context raises far-reaching questions for all players in the domain names market, questions to which there are so far no definitive answers.

Will the shock of 2020 turn out to be permanent in the sense of giving rise to even stronger expansion of Internet use linked to the digital transformation of businesses and also of lifestyles?

Or on the contrary will the gradual return to normal re-absorb the advances made during the pandemic? In several respects, certain limits have been brushed up against.

Making the growth dynamic a permanent feature will be one of the main challenges for the coming months. Afnic’s continued efforts towards VSEs and SMEs form part of the possible responses, as does “Réussir avec le web” (“Succeed on the web”) and the “Je passe au numérique” (“I’m going digital”) initiative.

More than ever, Afnic is a key player in the development of the Internet in France and a privileged partner for public authorities and private structures alike, first and foremost VSEs and SMEs.