Winning today's race while running tomorrow's

CEO Survey Report 2023

Luxembourg Findings

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Foreword

For the past 26 years, PwC has surveyed chief executives for our Global CEO Survey. Since then, the survey has become a key tool to gain insights on the main challenges of CEOs across the world, the areas of strategic significance, the opportunities for future growth, and ultimately, how the global economy will be shaped in the coming years. At PwC Luxembourg, given the Grand Duchy's position as a leading international financial centre in the heart of Europe, we take part in this survey on a biennial basis to obtain insights from Luxembourg CEOs in both the financial and non-financial sectors and get an idea on how domestic CEOs fare compared to their global peers, and where the country's economy is heading.

We would like to thank all 85 participants – up from 82 in the previous edition of the survey – for providing us with their insights and views. Globally, 4,410 CEOs from 105 countries and territories responded to the survey.

Executive Summary

In the 2021 edition of the survey, we remarked how CEOs in Luxembourg, in tandem with their counterparts across the world, exhibited a strong degree of optimism regarding domestic and global growth prospects. At the time of the polling underlying the 2021 report, namely late 2020, COVID-19 vaccines were just about to be rolled out across the world, and the optimism proved to be well-founded as 2021 was a year of spectacular economic rebound. Indeed, global GDP growth reached 6% (up from a negative 3% in 2020), and in Luxembourg, GDP growth stood at a robust 6.9% – above the EU (5.4%) and Euro area (5.2%) averages.[1]

Alas, the optimism of 2021 has been dashed as 2022 has been a year of extraordinary macroeconomic and geopolitical shocks, the likes of which have not been seen in decades. The Russian invasion of Ukraine brought war to Europe's doorsteps for the first time since the 1990s, causing major supply chain disruptions, a new wave of refugees, and a spike in oil and gas prices – in addition to untold human suffering. China's strict lockdown policies – which were only loosened in December, following the conclusion of our survey campaign – coupled with increasing trade-related tensions with the United States also contributed to global supply chain disruptions. Inflation, at mild levels in late 2021, shot up as a result, reaching new heights in Europe and compelling the European Central Bank (ECB) to raise interest rates for the first time since 2011.

Given such dramatic macroeconomic and geopolitical developments, it is unsurprising to see that Luxembourg CEOs are by and large uncertain and uneasy about the near future, with 78% expecting global economic growth to decline in the coming year, mirroring the views of their global counterparts.

Unsurprisingly, inflation and macroeconomic volatility are the key threats looming on Luxembourg CEOs' horizons, with 41% and 34% seeing inflation as a key threat in the next 12 months and 5 years respectively, the highest figures among all threat categories. Macroeconomic volatility came in a close second, with 36% and 32% seeing it as a key threat in the next 12 months and 5 years respectively. These findings are starkly different from the ones identified in the 2021 edition, when Luxembourg CEOs considered over-regulation and public health-related crises as the most significant threats they faced.

1. International Monetary Fund DataMapper

However, similar to the 2021 edition of the survey, cybersecurity remains one of the core preoccupations of Luxembourg CEOs, as 28% and 32% see cyber risks as a key threat in the next 12 months and 5 years respectively. There is a strong argument to be made that cybersecurity has thus become a persistent, high-priority concern for CEOs, especially here in Luxembourg, that is linked to the transformation of business models linked to digitalisation.

Climate change appears to have taken a backseat in terms of perceived threat level – at least in relative terms and in the short term. Whereas 33% of Luxembourg CEOs saw climate change and environmental damage as a key threat to growth prospects in the 2021 edition, only 11% currently consider that their businesses are extremely or highly exposed to threats in this regard over the next 12 months. The number rises to 20% when CEOs are asked to take a 5-year view. CEOs in the non-financial sector are more likely than their financial sector counterparts to have prepared plans to decarbonise their business models and to have adopted alternative energy sources.

Structural imbalances in the Luxembourgish economy, such as increasingly high housing costs and the mismatch between the needs of the labour market and the availability of talent, are weighing on the minds of Luxembourg CEOs. Notably, 93% of our respondents consider 'people issues' as a moderate (45%) or significant (48%) challenge facing their Luxembourg operation, second only to increased costs. Regulatory compliance and maintaining a productive dialogue with the regulator rank 3rd and 4th respectively on this same scale.

Despite these challenges, Luxembourg's economy is unlikely to face major upheaval in the medium-term, as nine out of ten CEOs believe their operations will continue to be in the Grand Duchy in 5-years' time. While the vast majority of Luxembourg CEOs are reducing their operating costs and diversifying their product and service offerings to mitigate the economic downturn, very few are considering relocating their workforce or physical assets. However, the picture becomes more uncertain over the long-term, as only 51% of Luxembourg CEOs (and 46% of CEOs in the financial services sector) believe their company will be economically viable for more than ten years.

To better cope with the changing business landscape and to be well-equipped for the challenges to come, Luxembourg CEOs are planning to invest in several areas of strategic relevance. Chief among them is upskilling the workforce and automating processes and systems. In addition, while the 2021 edition of our survey highlighted digitalisation as a key focus area, it is encouraging to see that Luxembourg CEOs continue to consider the deployment of advanced technology – such as cloud computing and Artificial Intelligence – as a strategic investment.

At the most recent World Economic Forum Annual Meeting in Davos, the word 'polycrisis'[2] came to the fore, illustrating how the challenges and risks businesses face today are not only of a new magnitude, but wholly intertwined and interdependent. From climate change-related pressures, technological disruptions, demographic shifts, and socio-economic inequalities to unsustainable debt levels, trade wars and rising costs of living, urgent solutions are needed. In this context, supporting the implementation of environmental, social and governance (ESG) principles becomes paramount to not only strengthen the Luxembourgish private sector's resilience, but also ensure the country's long-term prosperity.

The Grand Duchy benefits from a strong head start in the field of sustainable finance,[3] while companies across sectors need to engage productively with the subject to ensure long-term viability and growth. In addition, Luxembourg has a strong track record of being an early adopter and facilitator to structural changes in the financial sector. We were the first to adopt the UCITS regime as an 'export country,' facilitating private wealth and pension savings in the EU. The current sustainability transition should be even more transformational given its pervasiveness, allowing Luxembourg to further differentiate itself in this space.

Ultimately, this moment of uncertainty should not be a cause for despair. ESG presents a pivotal opportunity for CEOs in the financial and non-financial sectors to create value, attract investments and talented professionals, push the country's green transition, and ultimately contribute to Luxembourg's long-term socio-economic development. Simultaneously, today's investments in technological transformation, upskilling and cybersecurity pave the way for tomorrow's productivity gains and continued attractiveness of product offerings to customers.

2. For an overview of the "polycrisis" our world is facing, see World Economic Forum, "Global Risks Report 2023," January 11, 2023

3. For reference, see Luxembourg Sustainable Finance Initiative & PwC Luxembourg, "Sustainable Finance in Luxembourg: A quantitative and qualitative overview," December 13, 2022

Section 1

Amidst sequential shocks, a sober assessment

In 2021, a distinct sense of optimism was in the air, both in Luxembourg and across the world. Significant investments in biotechnology R&D in years prior paved the way for the rapid development of a novel type of vaccines which would allow the West to adapt relatively quickly to the new reality of "living with COVID-19." In parallel, policymakers worked at a record clip to take unprecedented support measures – fiscal and monetary alike – to dampen a pandemic-driven global economic slowdown characterised by supply chain disruptions and other unavoidable knock-on effects resulting from prolonged lockdowns and travel restrictions. After a moribund 2020 characterised by a negative 3.3% growth rate, global economic growth experienced a sharp rebound to 6% in 2021 as a result of the aforementioned support measures and a technology-enabled "return to normal."[4] The resulting optimism was heavily reflected in both the PwC Global and Luxembourg CEO surveys: in our 2021 edition, 79% of Luxembourg CEOs believed global economic growth would improve within the next 12 months, which mirrored global sentiment.

4. World Bank Open Data Portal

Two years later, the situation could not be more different. With the advent of war, West-China tensions and a significant reversal on globalisation trends, the economic and political environment for companies has changed structurally.

Instead of post-pandemic reinvigoration, a strong sense of uncertainty bordering on pessimism now prevails. 74% of global CEOs and 78% of Luxembourg CEOs now expect global growth to decline over the coming 12 months.

All in all, we are facing a complex picture. A few comparisons will follow to illustrate this.

For starters, Luxembourg CEOs are slightly more pessimistic than their global peers when it comes to expecting a global economic downturn (cf. Exhibit 1). The situation is similar when it comes to local growth – whereas 29% of CEOs across the world expect GDP to improve in their country, only 19% of Luxembourg CEOs expect to see the Grand Duchy's GDP improve (cf. Exhibit 2). On these same points, Luxembourg respondents are slightly *more optimistic* than their counterparts across Western Europe and in the U.S., and *significantly* more optimistic than their counterparts in the United Kingdom which is still coming to terms with a new post-Brexit political and economic reality.

Exhibit 1. Do you believe economic growth (GDP) will change, if at all, over the next 12 months in the global economy?

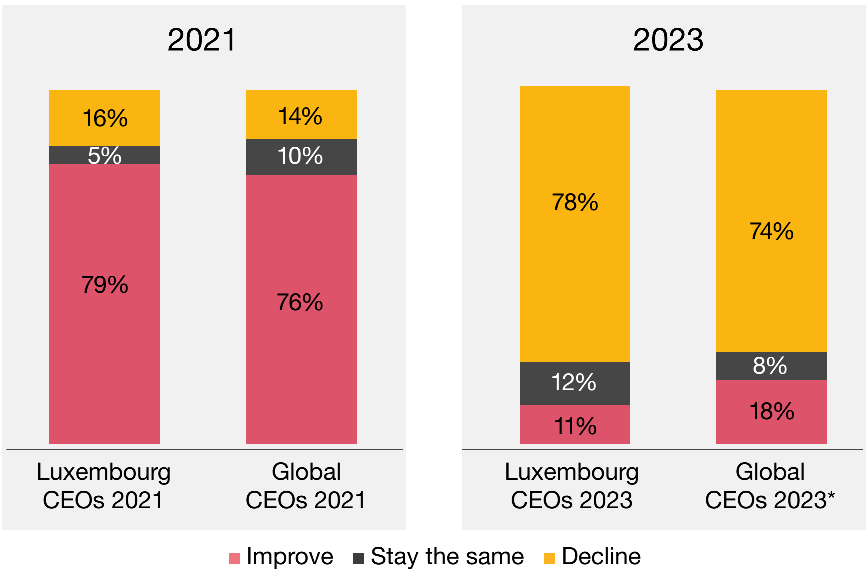
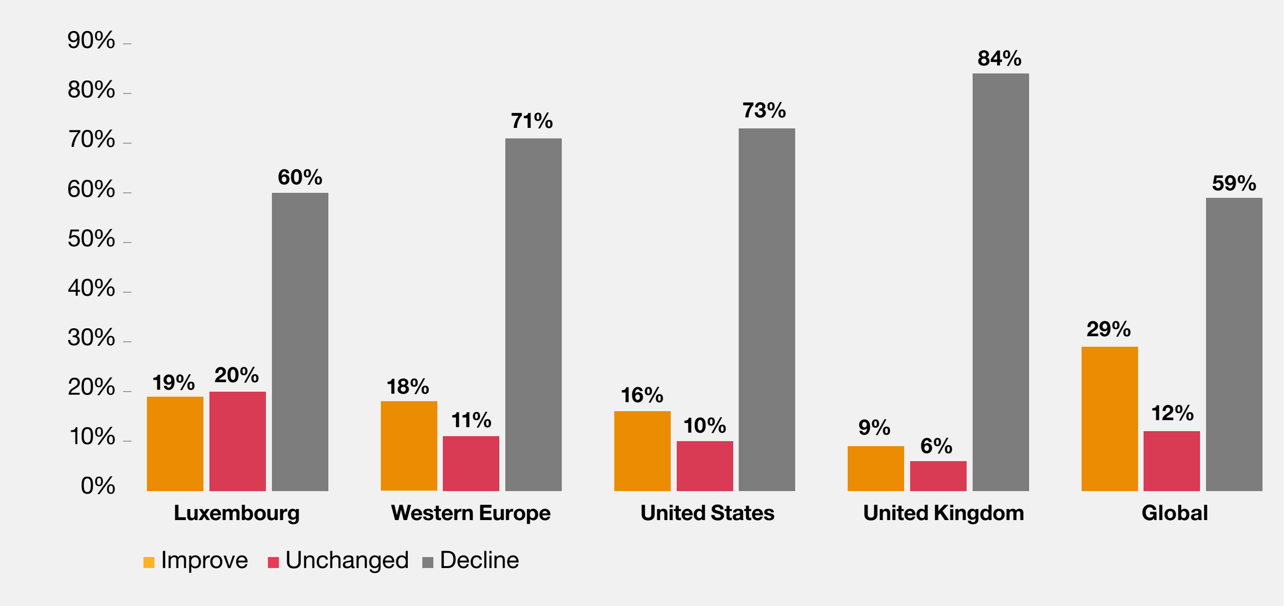


Exhibit 2. Expected local GDP evolution over 12 months (CEOs in Luxembourg, Western Europe, the United States, the United Kingdom, and globally)



At the same time, both our survey and 3rd party examination of Luxembourg's economy, such as the recently updated OECD economic survey[5] of the country, point to dark clouds looming on the horizon.

Near-term global and local pessimism comes as no surprise, as 2022 has been characterised by systemic macroeconomic and geopolitical shocks. Following the Russian invasion of Ukraine, inflation in Europe shot up dramatically as war- and COVID-19-related supply chain disruptions converged with a shock to global energy markets. The era of globalisation appears to be entering uncharted waters, with an apparent move towards 'localisation,'[6] while protectionist measures and tensions surrounding tariffs and trade have become more common in the last several years.

5. OECD, 'Luxembourg Economic Snapshot,' November 2022

6. Seymour, T. & Oldfield, R. (2021). 'Localisation is the new globalisation,' strategy+business, PwC, February 1, 2021

In the Euro area, YoY inflation reached 10% in November 2022 (a slight decline from the 10.6% observed the preceding month). Albeit that there are signs of an abatement – in Luxembourg, inflation is expected to decrease to 7.3% in November 2022 from 8.8% in October[7]– it is far too soon to declare victory not least due to the particularities of high-inflation cycles, such as their self-reinforcing dynamics, transmission of disaggregated sectoral price changes to other sectors and the risk of inflation becoming entrenched.[8] In an attempt to tame this vicious cycle, the ECB began raising interest rates in July 2022 – the first time it has done so since 2011, closing the door on a decade of growth fuelled by near-zero interest rates. The official stance of the ECB, as expressed by President Lagarde during a recent hearing at the European Parliament, is unambiguous: "We are committed to bringing inflation down to our medium-term target, and we are determined to take the necessary measures to do so. We expect to raise rates further to the levels needed to ensure that inflation returns to our 2% medium-term target in a timely manner."[9]

This new reality is not lost on our sample of CEOs, the majority of which hail from the financial services industry. As with their views regarding global GDP growth, Luxembourg CEOs are in fact more pessimistic than their global counterparts when it comes to revenue growth over the next three years, wherein **only 33% of Luxembourg CEOs show confidence** in this regard, compared to slightly more than half of CEOs globally.

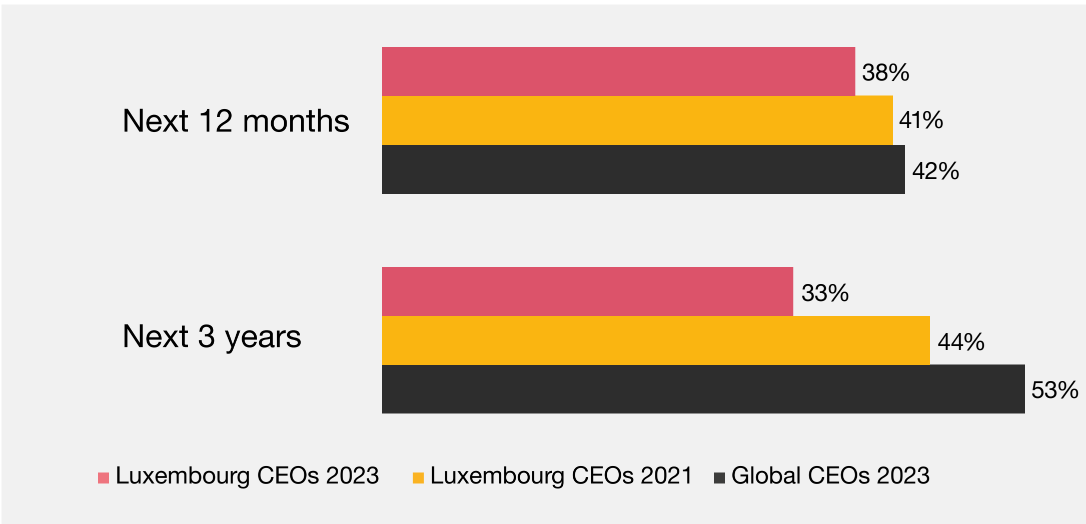
Our survey found that Luxembourg CEOs outside the financial services sector (non-FS) are more confident than their counterparts in the financial services sector (FS) in the short term. Indeed, 54% of non-FS CEOs are extremely or very confident in their prospects for revenue growth in the next 12 months, compared to just 34% of FS CEOs. However, in the medium term, the opposite is true: 34% of FS CEOs are extremely or very confident in their prospects for revenue growth over the next three years, compared to just 27% of non-FS CEOs (cf Exhibit 4).

7. Eurostat, November 2022
8. Bank of International Settlements, 'Annual Economic Report,' June 26, 2022
9. European Central Bank, 'Hearing of the Committee on Economic and Monetary Affairs of the European Parliament,' November 28, 2022

Our Take

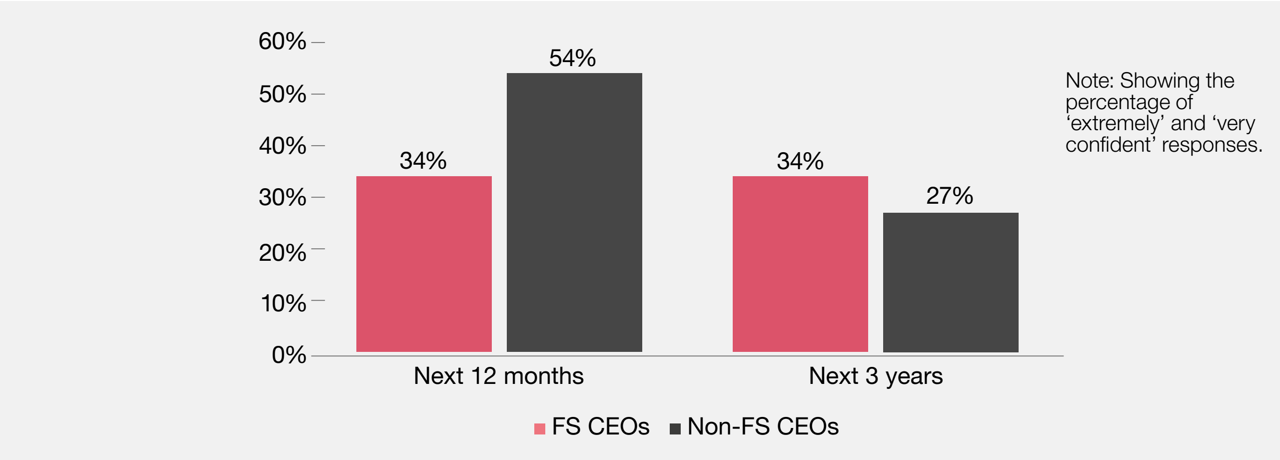
This finding is likely tied to an expectation by FS respondents that markets will continue to decline in reaction to ongoing monetary tightening, which directly affects the top line of asset managers for instance. This assumption is bolstered by the fact that CEOs in the asset and wealth management industry represent the largest part of our sample (34%). On the other hand, non-FS respondents may have taken an optimistic stance with regard to the easing of supply chain issues. Overall, our findings may simply correspond to a time-lag between monetary policy and their knock-on effects across industrial sectors.

Exhibit 3. How confident are you about your company's prospects for revenue growth over the next 12 months and next three years?



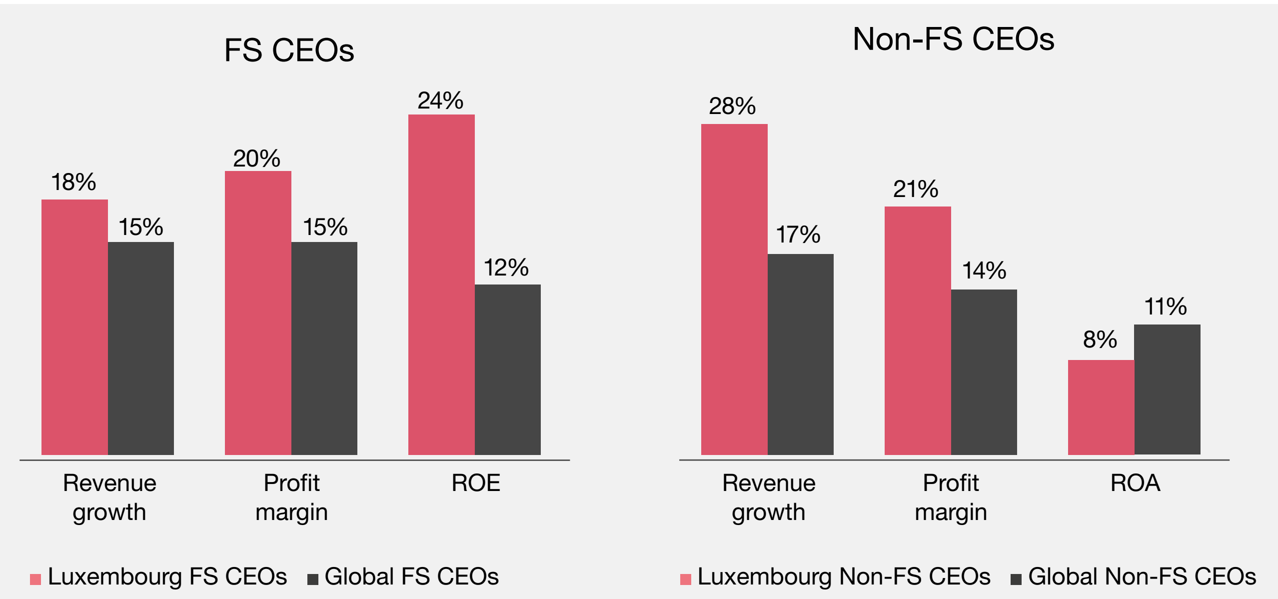
Note: Showing the percentage of 'extremely' and 'very confident' responses.

Exhibit 4. How confident are you about your company's prospects for revenue growth over the next 12 months and next three years? (FS and Non-FS CEOs in Luxembourg)



The more pronounced pessimism exhibited by Luxembourg CEOs with regard to their short- and medium-term outlook compared to the global sample may appear surprising, as in the last fiscal year, the former have generally reported higher revenue growth, profit margins and return-on-equity/assets (ROE/ROA). For instance, all participating Luxembourg FS CEOs reported higher figures in this regard than their global counterparts. As for Luxembourg non-FS CEOs, they reported robustly higher revenue growth and profit margins than their global counterparts, whereas their ROA was slightly less impressive.

Exhibit 5. What was your company's growth, profit margin and return on assets (ROA)/ return on equities (ROE) for the last fiscal year?



CEO sentiment is generally seen as a reliable indicator of future GDP growth, and the pessimism on display by global and Luxembourg CEOs aligns with the IMF's GDP growth expectations. Whereas global growth stood at 6% in 2021, the IMF expects it to decline to 3.2% and 2.7% in 2022 and 2023 respectively.[10] In Luxembourg, after experiencing a strong 6.9% growth in 2021, GDP is expected to grow by just 1.7% and 1.5% in 2022 and 2023 respectively as per STATEC,[11] followed by a bounce up to a modest 2.5% in 2024.[12]

Like their global counterparts, Luxembourg CEOs view inflation and macroeconomic volatility as the major threats they face, both over the next 12 months and over the next 5 years. This induces a shift compared to the findings of the 2021 survey, where over-regulation, cyber threats and public health-related crises were preeminent.

It is worth noting that the Grand Duchy remains resilient to extraneous shocks. As noted above, in 2021, Luxembourg achieved a strong rebound from the pandemic-driven slowdown of 2020, and was one of a select few EU member states to achieve a governmental budget surplus. The public debt-to-GDP ratio remains among the lowest in Europe,[13] affording public authorities with significant fiscal headroom to respond to future shocks, bolstered by consistently very high credit scores for the country's sovereign debt. However, as noted in the OECD's recent country review, a significant "implicit debt burden" is linked to expected future pension expenditures, which are forecast to rise to 18% of the country's GDP by 2070, absent reforms. For reference, this would significantly exceed the current and expected 2070 EU average of 12%.

The above is one among several macroeconomic imbalances which, if not addressed, could severely hamper growth in Luxembourg going forward.

10. International Monetary Fund. 2022. *World Economic Outlook: Countering the Cost-of-Living Crisis.* Washington, D.C. October. International Monetary Fund DataMapper

11. STATEC, 'Note de Conjoncture: La situation économique au Luxembourg – Evolution récente et perspectives,' December 2022

12. International Monetary Fund DataMapper

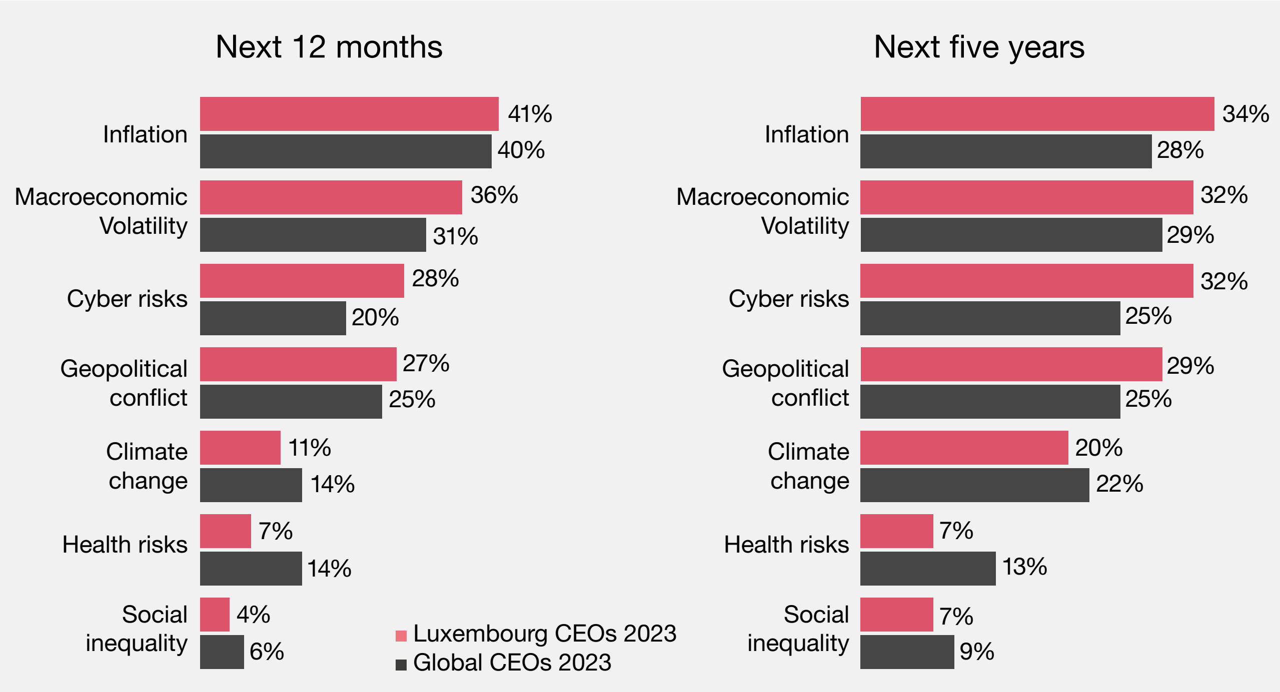
13. Eurostat, Q2 2022

Housing costs have been on a continuous increase for several years, and particularly after 2016.[14] This is not only affecting households' purchasing power – as ever-increasing portions of household budgets are going to service mortgages or pay rent – but also impacting Luxembourg's attractiveness as a destination for professionals at all levels. It is not uncommon to find business leaders from both the FS and non-FS highlighting the difficulties they face in attracting young professionals and senior executives who tend to be wary of high housing costs and would instead prefer working elsewhere in Europe. Luxembourg's reliance on a very significant cross-border workforce also entails risks, not least due to the lack of long-term visibility on bilateral fiscal and especially social security arrangements with regard to remote work. This is reflected in 3rd party evaluations: in the latest edition of IMD's World Talent Ranking for 2022, although Luxembourg continues to rank highly, it dropped from third to seventh place.[15] The Luxembourg Chamber of Commerce recently cautioned that the Luxembourg economy suffers from a mismatch between the needs of the labour market and the availability of talent.[16] As we shall see later, these interconnected issues of cost-of-living and the ability to attract and retain talent weigh particularly heavily on decision-makers in Luxembourg.

High levels of private debt represent another risk factor for the Luxembourg economy. In 2021, Luxembourg's gross debt-to-income ratio of households stood at 180.94%, the second highest in the entire Euro area, with the average ratio standing at 95.78%.[17] High levels of private debt can be a drag on economic growth, as the share of households' incomes and businesses' revenues that goes to service the debts grows while consumption of goods and services declines. Although the impact that private debt has on economic growth has not been a major policy issue in the last decade across the developed world, this could change in the near-term in tandem with the shift towards higher interest rates.

14. See Government of Luxembourg - Observatory for Competitiveness, "La Surveillance des déséquilibres macroéconomiques - Focus sur les performances du Luxembourg," September 2022
15. IMD World Talent Ranking 2022
16. Bannier, L. (2022). 'Le Luxembourg peine à rester attractif pour les talents,' Virgule, December 12, 2022
17. Eurostat, November 2022

Exhibit 6. How exposed do you believe your company will be to the following key threats in the next 12 months/in the next 5 years?

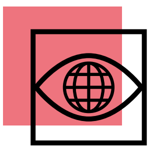


Note: Showing the percentage of 'extremely exposed' and 'highly exposed' responses.

As a whole, these imbalances may be weighing on the minds of Luxembourg CEOs in both the FS and non-FS, in turn negatively affecting their confidence in prospective revenue growth in the short- and medium-term.

The third major threat category Luxembourg CEOs see themselves exposed to are cybersecurity-related risks, with 28% of CEOs considering it a key threat in the near-term, making it a more pressing concern in the Grand-Duchy than globally. This points to a persistent pattern, as Luxembourg respondents ranked cyber threats above pandemic-related threats in the last edition of the survey when asked about their strategic risk management activities. The opposite was true for global respondents.

Our Take



This high level of sensitivity to cybersecurity risks across FS and non-FS respondents points to the advanced and ever-increasing degree of digitalisation across Luxembourg's economic fabric.

Future-proofing the country's financial centre & IT infrastructure is viewed as a strategic priority by the government, which among other initiatives supports an ongoing and recently expanded public-private partnership aimed at developing quantum key distribution technology and related infrastructure, which together could render sensitive FS communications – among other use cases – virtually impervious to attempts at interception.[18]

Geopolitical conflict ranks fourth in the list of Luxembourg CEOs' top threats. Over a quarter believe their companies to be exposed to geopolitical conflict in the next 12 months, while the number rises to 29% for the next 5 years. For the sake of comparison, in the 2021 survey, geopolitical uncertainty did not even figure in the top 10 threats Luxembourg CEOs faced.

Climate change appears to have taken a backseat to geopolitical conflict in terms of perceived threat level. Indeed, whereas 33% of Luxembourg CEOs ranked climate change and environmental degradation as a key threat to their companies' growth prospects in 2021, only 11% of respondents in 2023 view themselves as being extremely or highly exposed to climate change over the next 12 months. Within a 5-year timeframe, this number increases to 20%. Compared to their global counterparts, Luxembourg CEOs appear to view climate change and its associated risks mostly as a cost factor, rather than as a direct disruptor of their relevant supply chains.

When looking at which countries Luxembourg CEOs see as essential for their companies' growth prospects, we observe a noticeable shift from 2021. At the time, China came in seventh place among Luxembourg CEOs, and fourth among non-FS CEOs. Two years later, although China continues to rank very highly among global CEOs, the country has dropped to tenth place among Luxembourg CEOs, with only 2% of respondents considering it as the most important country for their revenue growth prospects over the next 12 months. However, it is worth noting that there are significant divergences between FS and non-FS CEOs in this regard. Whereas the latter continue to view China as the fourth most important country for their growth prospects, the country did not make the top 10 list among FS CEOs.

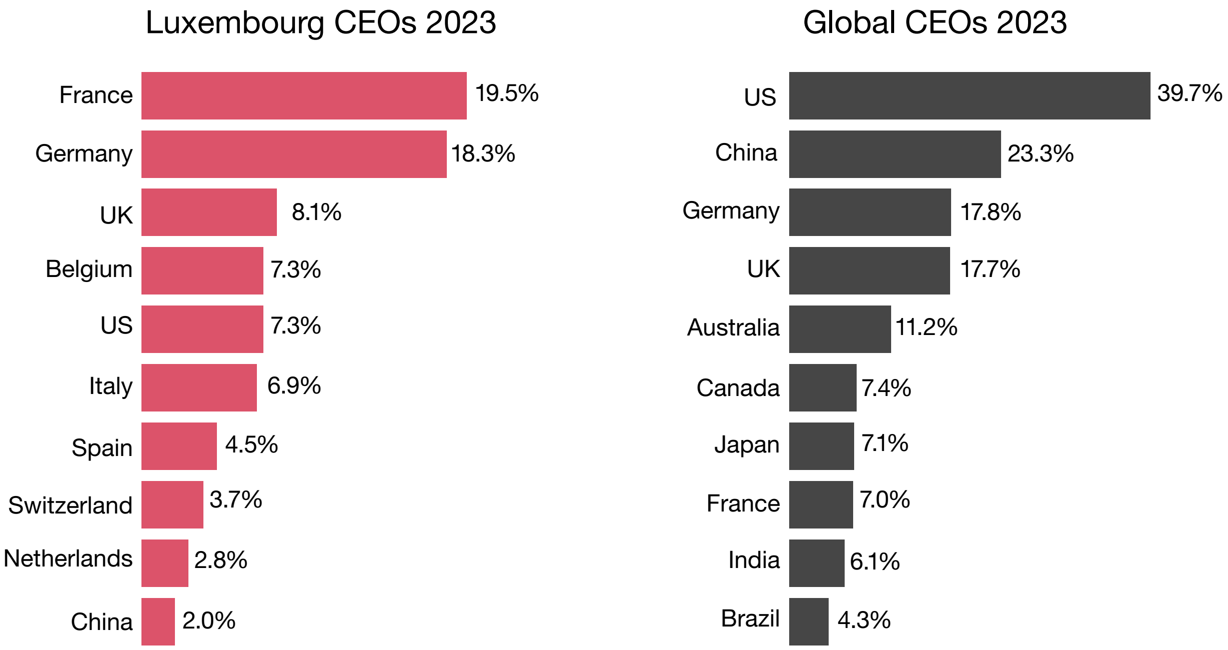
Our Take

The economic slowdown China is experiencing[19] due to strict lockdown policies and their ensuing supply chain disruptions, as well as a real estate sector beset by structural vulnerabilities may have dampened Luxembourg CEOs' views on the revenue potential deriving from one of the world's largest economies. Furthermore, we may speculate that the draconian financial sector sanctions imposed on Russia following its invasion of Ukraine could be acting as a clarion call for Luxembourg FS leaders against the backdrop of rising tensions between the West and China.

18. Labro, T., "Quantum key "made in Lux" to protect the financial centre," Delano, December 8, 2022

19. The IMF expects China's GDP growth to drop to 3.2% in 2022, down from 8.1% in 2021. This would represent China's second-lowest recorded GDP growth since 1977.

Exhibit 7. Which countries/territories do you consider most important for your company's prospects for revenue growth over the next 12 months? (excluding country/territory in which the CEO's company is based)



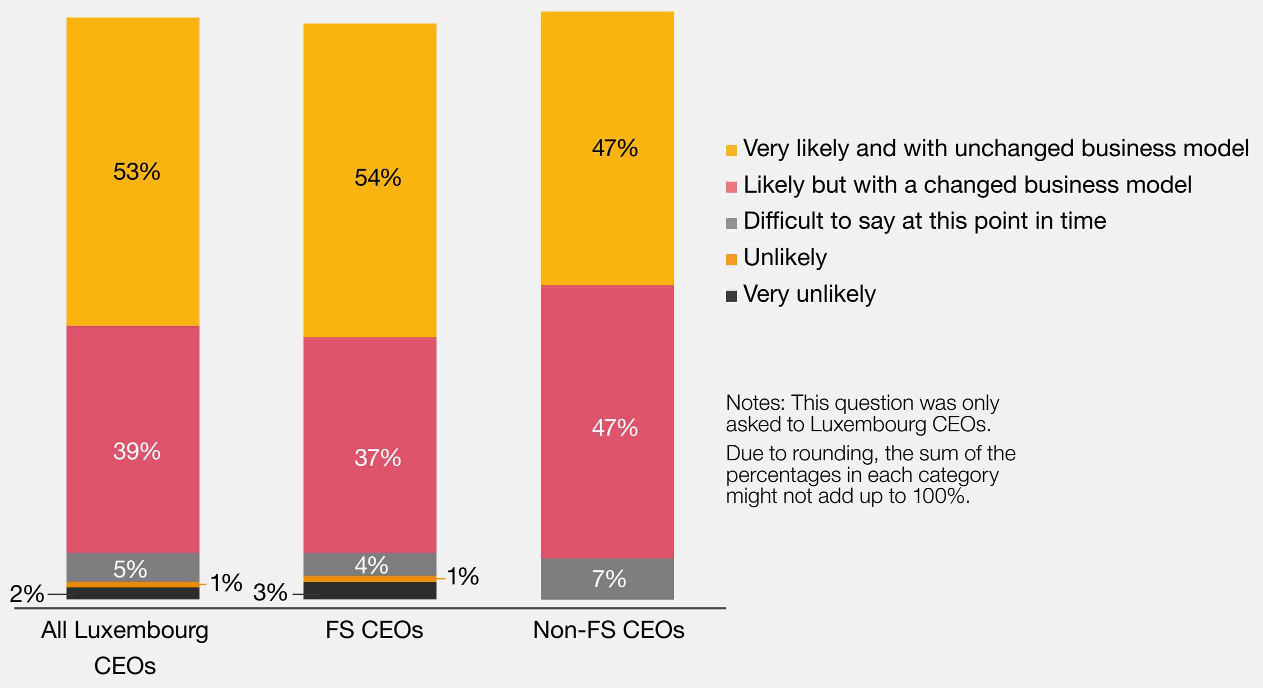
Note: Only showing the top 10 countries/territories

With this notable exception, the list of other countries Luxembourg CEOs see as essential for their companies' growth has not changed materially compared to 2021. France and Germany continue to occupy the top spots, although non-FS CEOs rank Belgium higher than Germany. FS CEOs tend to see the United States as a more important destination than their non-FS counterparts, which is understandable given Luxembourg's position as an international financial centre and the opportunities FS CEOs see in attracting business flows from US-based investors.

Our results support the notion that **Luxembourg's economy is unlikely to face significant upheaval in the medium-term**, as 9 out of 10 CEOs believe their operations will continue to be in the Grand Duchy in 5 years' time, with a little over half of them believing that they will remain without having to change their business models. This confidence can be viewed as a testament to Luxembourg's well-known strengths, such as political, economic, and social stability, its robust regulatory environment, and its strategic geographic location in the heart of Europe. All of the above have contributed to building confidence in the Grand Duchy among investors and business leaders.[20]

Regarding the CEOs who will remain in Luxembourg while changing their business model, we notice that non-FS CEOs are more likely than their FS counterparts to want to do so, which could reflect their desire to embark on digital transformations to enhance their internal operations, communications with customers, employees' skills and productivity, and to expand their offerings to new markets – areas in which FS CEOs have a lead, as our 2021 survey highlighted.

Exhibit 8. Please rate the probability that your operations will still be in Luxembourg in 5 years' time.



Notes: This question was only asked to Luxembourg CEOs.
Due to rounding, the sum of the percentages in each category might not add up to 100%.

20. See PwC (2022), "Luxembourg User Experience in Asset Management"

However, it is worth noting that **only 51% of Luxembourg CEOs believe that their company will be economically viable for more than ten years** if it continues running on the current path, compared to 59% of global CEOs. In this regard, we observe a significant divergence between Luxembourg CEOs on one hand, and CEOs from Ireland and the UK on the other, whereby 76% and 75% respectively believe that their business will be economically viable for more than ten years. This contrast is **even more alarming with regard to FS respondents**, with only 46% of LU respondents declaring that their operation will remain economically viable for more than 10 years, compared 71% in Ireland and 73% in the UK.
Consequently, non-FS CEOs in Luxembourg are more likely than FS CEOs to believe that their companies will remain economically viable in the long term: 67% of non-FS CEOs foresee their companies' economic viability for more than ten years, a solid 20 percentage points more than FS CEOs.

Our Take

One way to interpret this finding is that Luxembourg is successfully diversifying its economy and establishing long-term prospects for non-FS players. FS CEOs, on the other hand, may be questioning the future viability of the Luxembourg financial hub vis-à-vis other European financial centres – notably Dublin and London – for a number of reasons. Supplemental analysis conducted by our team shows that Luxembourg FS respondents are less sanguine on their growth prospects, perceive inflationary pressures as a more persistent key threat and expect higher resignation and retirement rates than their peers in the above financial centres.

Exhibit 9.a. If your company continues running on its current path, for how long do you think your business will be economically viable? (Luxembourg CEOs/Global CEOs)

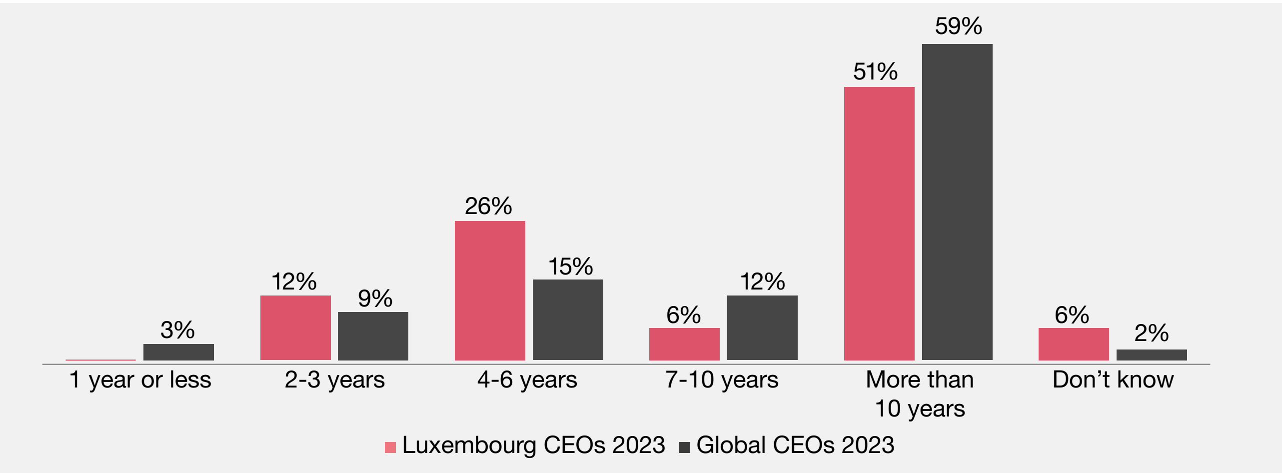
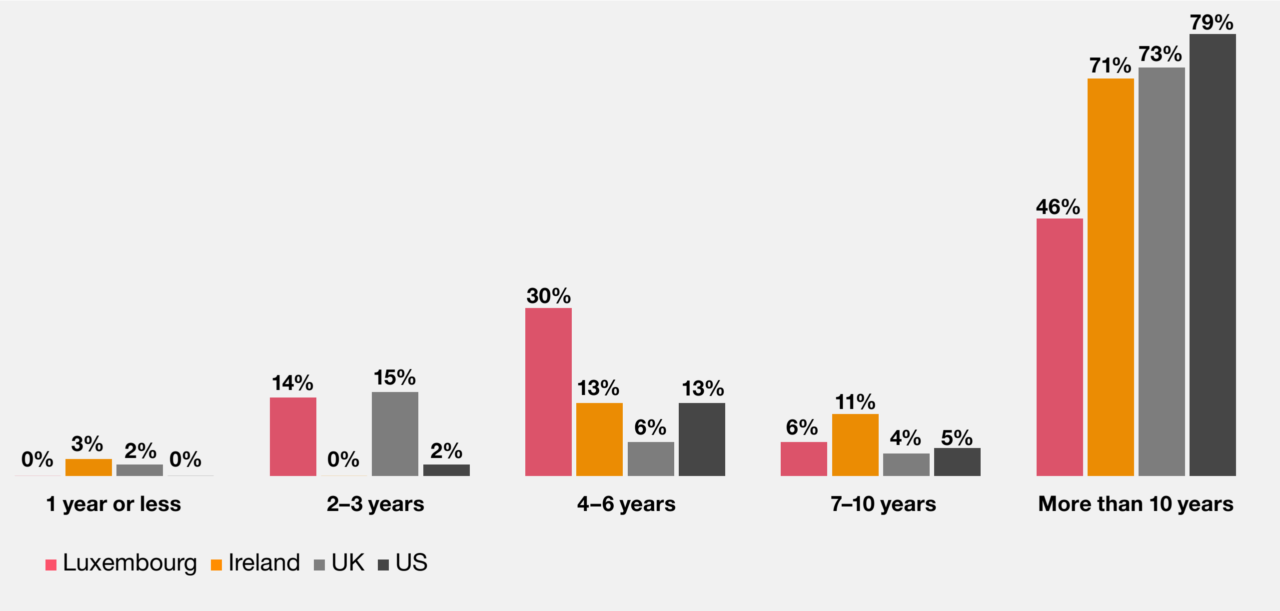


Exhibit 9.b. If your company continues running on its current path, for how long do you think your business will be economically viable? (FS respondents only, LU – IE – UK – US)

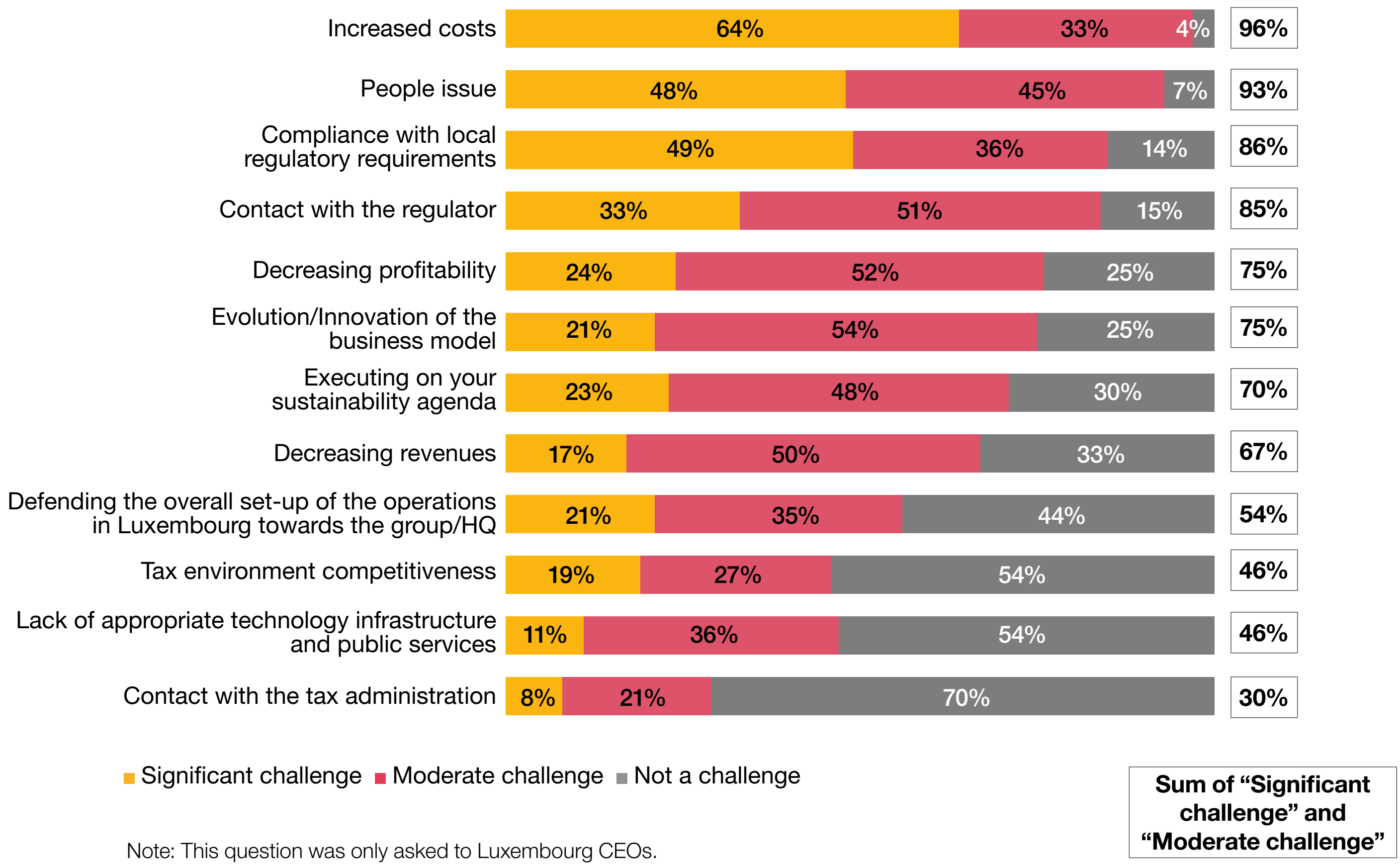


With inflation still red-hot across Europe, rising costs – including housing, energy, procured services and goods, salaries and the Luxembourg particularity of their indexation – were unsurprisingly ranked by Luxembourg CEOs as the top challenge they face. Of the 94% who consider rising costs to be a challenge, 64% ranked the extent of this challenge to be "significant." People-related issues – namely the challenges faced in recruiting and retaining employees – came in second, with 48% and 45% of Luxembourg CEOs considering it a significant and moderate challenge respectively. There is not much of a divergence between FS and non-FS CEOs when it comes to recruitment challenges, which points to transversal factors such as housing and transportation.

Luxembourg CEOs appear to be concerned with the burden of local regulatory requirements – 49% view this as a significant challenge, and another 36% view it as a moderate challenge. FS CEOs were more likely than their non-FS counterparts to see it as a significant challenge, which can be understood in light of an increasing ESG-related disclosure and compliance burden which adds onto an already high, and continually rising, cost of overall regulation. Furthermore, establishing contact with regulatory authorities was also seen as a challenge by Luxembourg CEOs, with 33% and 51% seeing it as a significant and moderate challenge respectively (cf. Exhibit 10). These figures should be a cause for concern among policymakers, as one of Luxembourg's historic value propositions – namely, that the Grand Duchy's small size allows businesses to have regular interactions with regulators – is now being called into question.

In the context of macroeconomic volatility, high inflation and rising interest rates, decreasing profitability and difficulties in evolving the business model were also seen as challenges by Luxembourg CEOs. However, non-FS CEOs were more likely than their FS counterparts to view decreasing profitability and changing their business models as significant challenges.

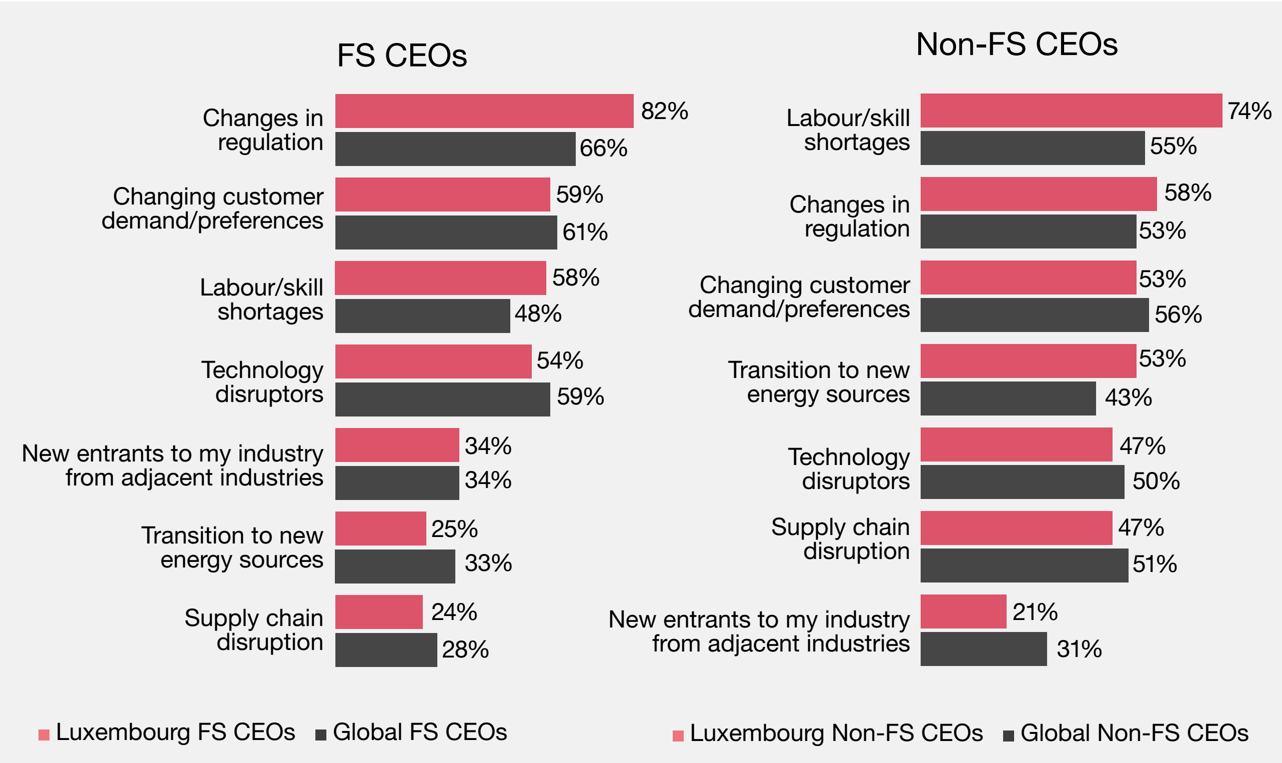
Exhibit 10. What are the challenges your organisation faces in its Luxembourg operation(s)?



Note: This question was only asked to Luxembourg CEOs.

As for the issues that CEOs believe will impact their profitability over the next decade, Luxembourg CEOs from the FS and non-FS seem to have different viewpoints. For instance, 82% of Luxembourg FS CEOs (vs. 66% of global FS CEOs) see regulatory changes as having a large or very large impact on their profitability, while these figures go down to 58% and 53% respectively among non-FS CEOs in Luxembourg and globally. We observe that Luxembourg CEOs in both the FS and non-FS are more likely than their global counterparts to be concerned with labour and skills shortages. For instance, **74% of non-FS CEOs and 58% of FS CEOs in Luxembourg believe their profitability will be impacted by labour and skills shortages** over the next decade, compared to 55% and 48% of global non-FS and FS CEOs respectively. The availability of adequate talent in Luxembourg is a recurring theme in this survey as in many other third-party reports.

Exhibit 11. To what extent do you believe the following will impact profitability in the industry over the next ten years?



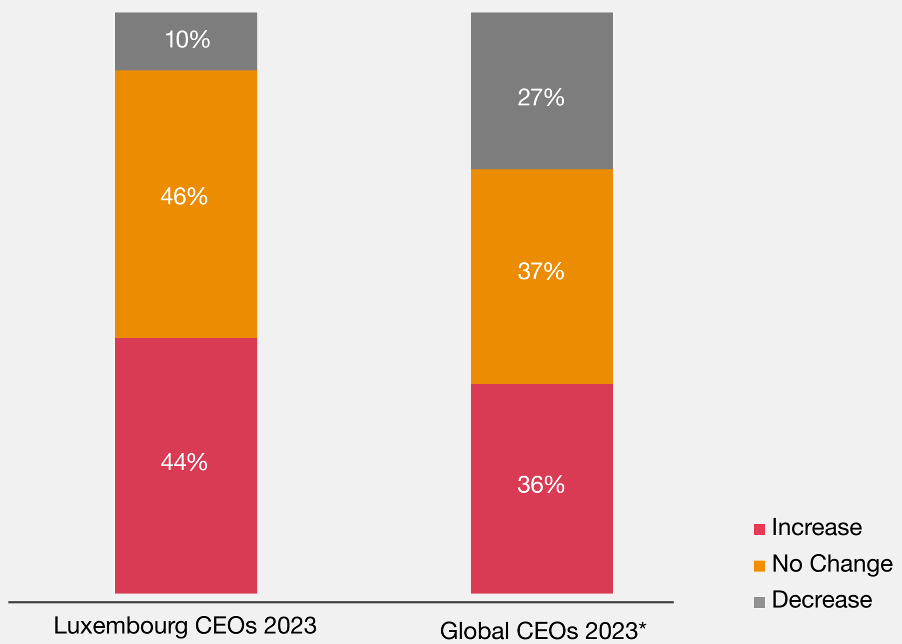
Note: Showing the percentage of ‘to a large extent’ and ‘to a very large extent’ responses.

Luxembourg CEOs are more likely than their global counterparts to anticipate employee resignations or retirement in the coming 12 months. Whereas 36% of global CEOs expect an increase in resignations and 27% expect a decrease, 44% of Luxembourg CEOs expect an increase, while only 10% expect the opposite. This ties in with 93% of Luxembourg CEOs regarding people-related issues (such as hiring and retaining employees) as a significant or moderate challenge (cf. Exhibit 12).

Our Take

While talent is an issue at the global level, LU CEOs view this as a much more pronounced threat, both in terms of attraction and retention. This supports our view that the most pressing short-term issue facing LU is the availability of talent with many converging factors driving this, including the high rate of population growth over recent years, housing, traffic congestion and the absence of incentives, including fiscal ones.

Exhibit 12. How do you believe employee resignation/retirement rates in your company will change in the next 12 months?



Note: *Recalculated based on all the answers except “Don’t know” for Global CEOs 2023

An opportunity to invest in resilience

It would be an understatement to describe the current geopolitical and economic environment as challenging. The global economy has not experienced such sharp, cascading shocks and fluctuations in decades, and the negative outlook projected by global and Luxembourg CEOs is illustrative of this reality.

However, the Grand Duchy has proven to be more than capable of turning moments of deep crises into transformative opportunities. In the late 1970s, the Luxembourgish steel industry – which employed a large part of the country's workforce and which accounted for a sizable portion of the country's GDP – faced calamity as a result of collapsing global steel prices.

A worst-case scenario was averted thanks to the establishment of the Tripartite Coordination Committee (TCC), providing at once a social safety net for steel workers at risk of being made redundant and incentivising the national steelmaking champion ARBED, now a part of globally leading ArcelorMittal group, to modernise its operations. Fast forward several decades and the Luxembourg economy has evolved into an advanced, heavily diversified knowledge economy open to Europe and the world, occupying top spots not only in terms of GDP per capita but also in terms of quality of life. The country constantly ranks highly in global indicators dealing with competitiveness, digitalisation, innovation and governance.[21]

21. See Government of Luxembourg (2022), "Portrait of the Luxembourg Economy: From the Iron and Steel Industry to Ecotechnologies – A Portrait of Luxembourg's Vibrant and Reliable Economy"

The Tripartite Coordination Committee, Luxembourg's Unique Social Model

In the late 1970s, as the Luxembourgish economy began to unravel due to the crisis in the global steel industry, the government established a 'Tripartite Coordination Committee' (TCC) whereby representatives from the government, employers and labour unions are called upon to convene in times of need in order to agree on a coordinated socio-economic response to the challenges of the day.

In September 2022, after several iterations of tripartite debate, the committee agreed on a €1.1 billion package to curb inflation, protect households' purchasing power and businesses from soaring energy prices, as well as to accelerate the Luxembourgish economy's digital transformation and green transition. The measures include a freeze on electricity prices, a temporary reduction of the VAT, and financial assistance to transition to renewable energy sources, among others.[22] However, there are concerns that the policy measures intending to mitigate inflation are not sufficiently targeted and may disincentivise households and businesses to reduce energy consumption.[23] Furthermore, as noted in the OECD's 2022 Economic Survey for Luxembourg, **"The wage indexation system risks adding to already high inflation in periods of unprecedented price shocks, potentially harming longer-term competitiveness."**

In today's context of "polycrisis", the country's socio-economic model borne out of the 1970s continues to pay dividends, while at the same time, decision-makers ought to evaluate sensible areas for further development in light of the particularities of today's macroeconomic and geopolitical circumstances.

Like the rest of the Euro area, Luxembourg is expected to face an economic slowdown in 2023. However, according to the latest economic report by STATEC, risks of a recession are significantly reduced thanks to the measures negotiated in the most recent TCC, which meaningfully support households' purchasing power while helping shield households and businesses alike from the deleterious consequences of unpredictable swings in energy prices.[24]

22. Government of Luxembourg, September 2022
23. See OECD (2022), *OECD Economic Surveys: Luxembourg 2022*, OECD Publishing, Paris
24. STATEC, "Note de conjoncture – La situation économique au Luxembourg. Evolution récente et perspectives," December 2022

Rather than offering a reason for complacency, the stabilising effect of the above policies should be viewed as an opportunity to drive much-needed change with a view on creating resilience to future shocks, reducing inefficiencies and addressing core concerns reflected in this survey, such as the expected amplification of people issues. The below paragraphs illustrate in greater detail how respondents to this survey expect to do so.

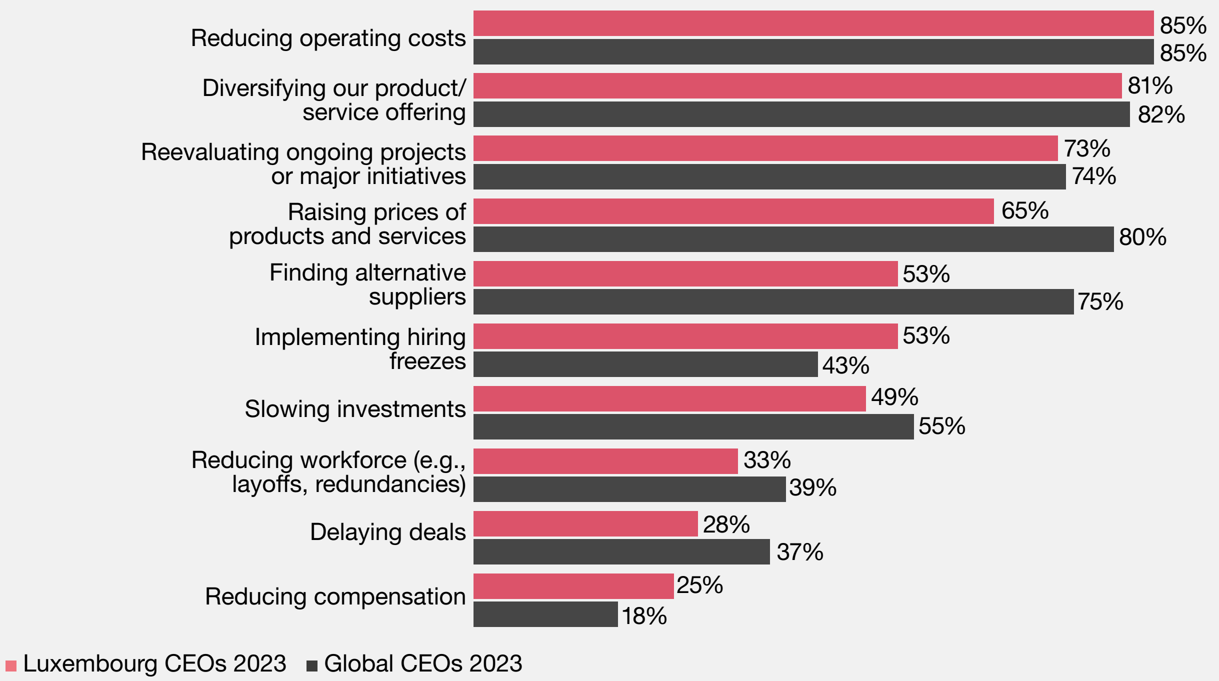
Our Take

Among the key threats faced, Luxembourg CEOs listed social inequality at the very bottom of the list. Indeed, only 4% believe they will be exposed to social inequality-related threats in the coming 12 months (compared to 6% at the global level). For the coming 5 years, the figure remains at a low 7%, while it goes up to 9% among global CEOs. The low risks associated with social inequality point to the Grand Duchy's longstanding political and social stability, buttressed by robust and efficient public services as well as the TCC. Although substantially different from the crisis of the late 1970s, the current context of 'polycrises' could be viewed as a similarly opportune moment to usher in a transformation of Luxembourg's socio-economic landscape and make it more resilient to upcoming challenges. The precondition for such transformation is a willingness from all stakeholders to make concessions on issues such as the wage indexation mechanism and pension system, the housing sector, skills shortages and the resulting need for re- and up-skilling large segments of the existing workforce or fiscal reform with a view on more comprehensively supporting the green transition.

In-line with their global counterparts, the vast majority of Luxembourg CEOs, FS and non-FS alike, are reducing their operating costs and diversifying their product and service offerings in a bid to mitigate the economic downturn. However, whereas 80% of global CEOs are considering raising the price of their products and services in the coming 12 months, this is the case for only 65% of Luxembourg CEOs. This could be influenced by the fact that the price stabilisation package agreed by the TCC in September will remain effective throughout 2023.

In addition, it is worth bearing in the mind that the Luxembourg sample is heavily slanted towards FS respondents who may not see a need to raise the price of their products in their services.

Exhibit 13. Which of the following options best describes any action your company may be considering to mitigate against potential economic challenges and volatility in the next 12 months?



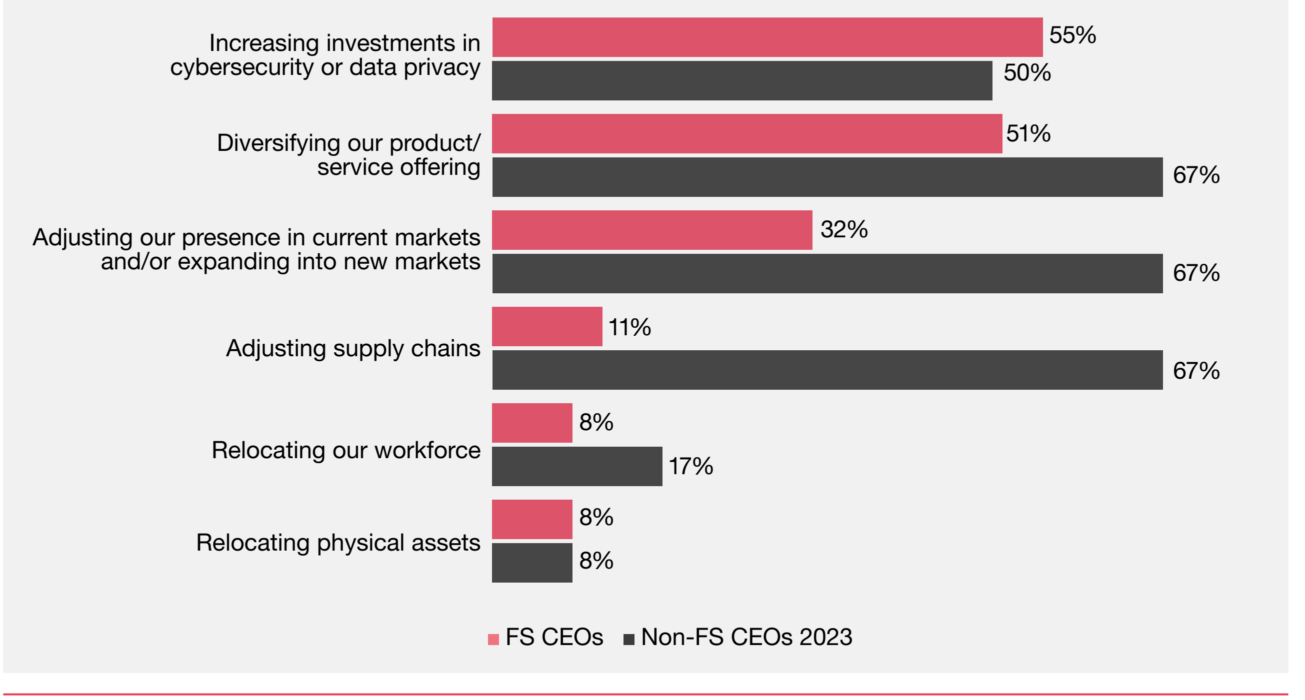
Note: Showing the percentage of the following two responses: 'We are already doing this/have done this' and 'We are considering this in the next 12 months.'

With geopolitical conflicts now seen as a major threat by Luxembourg CEOs, some notable divergences can be observed between FS and non-FS respondents, however common ground is established in the domain of cybersecurity or data privacy investments. It is particularly encouraging to see that 50% non-FS CEOs are now keenly invested in this area, as the 2021 survey revealed that they were far less likely than their FS counterparts to prioritise the topic.

It appears that overall, non-FS enterprises are more vulnerable to the knock-on effects of geopolitical conflict than their FS counterparts. The former are more likely to consider diversifying their products and services, expanding into new markets and most notably, adjusting their supply chains in the coming 12 months, as 67% of non-FS CEOs are considering doing so compared to just 11% of FS CEOs.

Lastly, very few CEOs across FS and non-FS are considering relocating their workforce or their physical assets to mitigate against their exposure to geopolitical conflicts, another testament to the attractiveness of Luxembourg as a politically stable hub for business and finance.

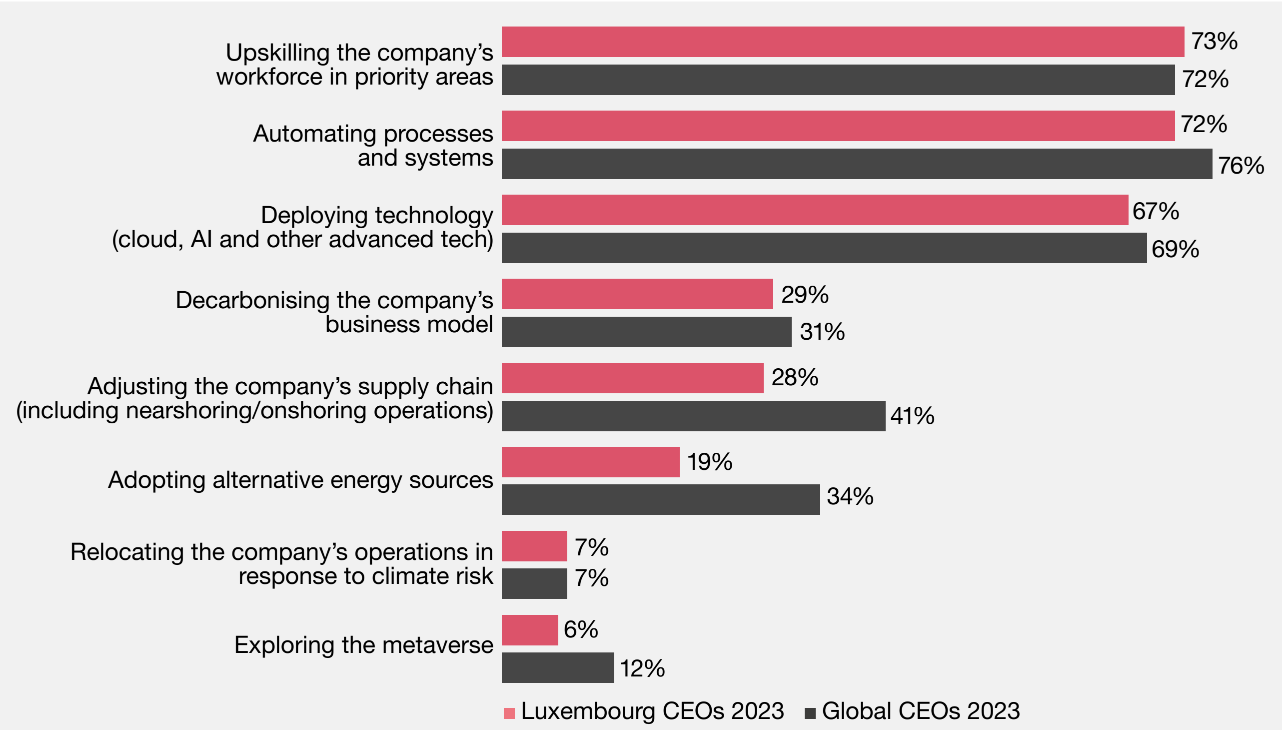
Exhibit 14. Which of the following actions, if any, is your company considering to mitigate against exposure to geopolitical conflict in the next 12 months?



Looking ahead, Luxembourg CEOs are largely aligned – with some notable divergences – with their global counterparts when it comes to planning investments in areas of strategic relevance beyond the near-term shocks we are currently facing. In the 2021 survey, we highlighted how upskilling the workforce was an urgent matter that CEOs should take into account, and 42% of Luxembourg CEOs at the time had identified this as a priority. Upskilling the workforce is crucial to ensure that enterprises are well-equipped to cope with any major unexpected disruption. However, upskilling is also necessary for companies to boost their market presence, enhance their product and service offerings, and to become more competitive both locally and globally. The 2021 survey found that 52% of respondents identified automation as a top investment priority – two years later, it is encouraging to see that 73% of Luxembourg CEOs are planning on investing in their workforce's upskilling in the next twelve months, and 72% are planning on automating their processes and systems.

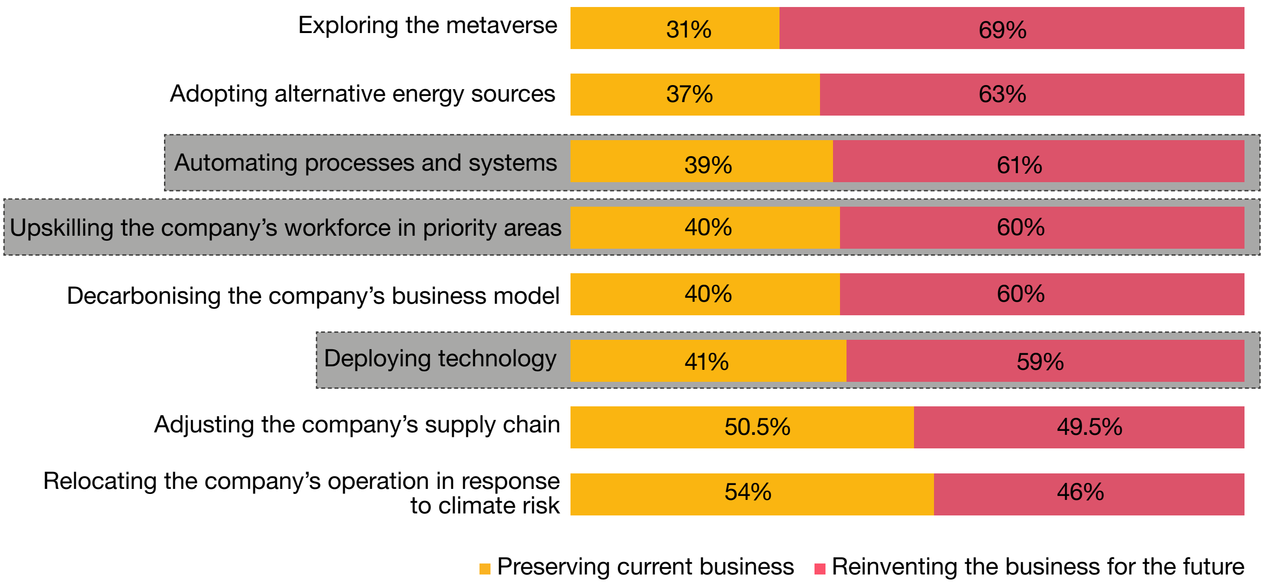
In tandem with automation and upskilling, digitalisation continues to be another key investment priority for Luxembourg CEOs, as 67% are planning on deploying advanced technology – such as cloud computing or Artificial Intelligence, to name a few – in the coming twelve months. As a whole, it is not surprising to see that the majority of Luxembourg CEOs will be investing in their companies' workforce, automation and digitisation, as the majority in both the FS and non-FS believe that labour and skills shortages, as well as disruptions brought about by technology, will have an impact on their profitability in the coming decade.

Exhibit 15. Which of the following investments, if any, is your company making in the next 12 months?



Like their global counterparts, Luxembourg CEOs are much more likely to invest with a view on reshaping their business than to make investments aimed at preserving the status quo. For example, among those who will invest in alternative energy sources, 63% are doing so with an eye to reinvent the future and this figure stands at 59% for those who plan to make investments in advanced technologies. This is equally true for the top 3 areas in which CEOs expect to invest in the coming 12 months, namely upskilling of the workforce, automation of processes and the deployment of technology.

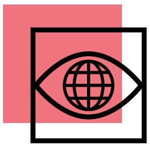
Exhibit 16. For each of the investment areas selected, please indicate on the sliding scale the percentage of investment allocated to preserving current business versus reinventing the business for the future.



The same desire for strategic engagement and transformation is evident with a view on how CEOs actually spend their time versus their ideal time allocation.

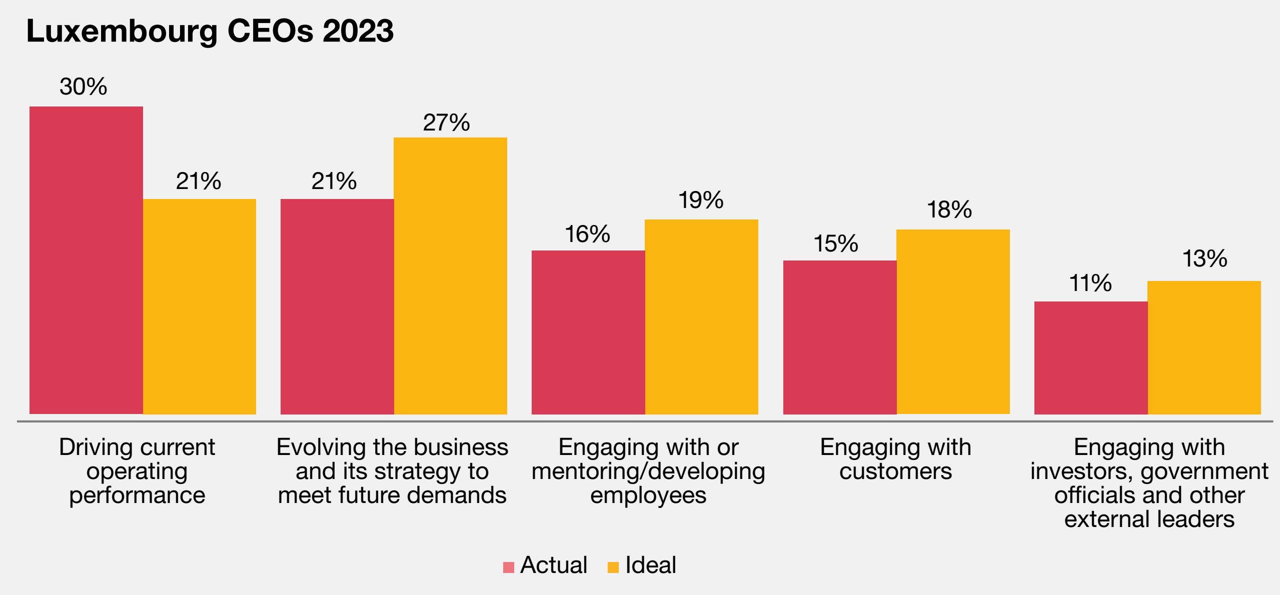
Luxembourg CEOs spend 30% of their time driving current operating performance, and 21% of the time evolving the business and its strategy to ensure that the firm is capable of meeting future demands. Luxembourg CEOs appear keen on spending less time driving current operations and more time to develop their business strategy, engage with or mentor their employees, as well as engage with their customers.

Our Take



The 'polycrises' businesses are confronted with and the increasingly complex regulatory environments, coupled with the fact that CEOs would prefer spending more time and energy on strategic rather than operational matters, seem to indicate that CEOs are overburdened and have to take on an increasingly wide array of tasks. This assumption is further bolstered by the fact that the agenda of 45% of FS CEOs evolved either entirely or mostly in an organic manner. Only 12% had an agenda that was entirely or mostly designed in an active manner.

Exhibit 17. During your work time, on average, what percentage of time do you spend on each of the following? Knowing what you know now, if you could start over with a blank calendar, how would you allocate your time as CEO?



Given the enormity of the challenges faced by businesses in the current era of macroeconomic volatility and uncertainty, collaboration with other stakeholders to create value and address societal issues has become all the more pressing.

When it comes to addressing societal issues, Luxembourg CEOs see the government as their partner of choice (19%), followed by established competitors and companies (12%), industry consortia and academic institutions (9% each). While global CEOs also see governments as their main partner to address societal issues (18%), industry consortia

(16%) and NGOs (14%) come next. Regarding the latter, only 8% of Luxembourg CEOs saw NGOs as a partner to address societal issues.

As for creating new sources of value, 24% of Luxembourg CEOs regard established companies or their competitors as the first choice, followed by industry consortia (20%), the government (19%) and entrepreneurs or start-ups (18%). Despite the relative infancy of the University of Luxembourg and the numerous research centres established in recent years, it is noteworthy that 14% of Luxembourg CEOs seek out academic institutions to create new sources of value – a testament to the soundness of the government's R&D policies.

Luxembourg, a hub for research, development and innovation

Since the early 2000s, Luxembourg's economy has once again been reinvented, as substantial public funds were invested into turning the country into a centre of excellence in research, development and innovation. The University of Luxembourg, founded in 2003 and headquartered in a past stronghold of the steel industry, has become a leading international research hub in multiple disciplines. Today, research carried out in Luxembourg in the fields of science, health, technology, sustainability and finance – to name a few – is gaining global recognition and plays a decisive role in the further development and diversification of the Grand Duchy's economy. The government's commitment to research and development has once again been reaffirmed in recent years. In December 2019, the landmark National Research and Innovation Strategy was approved, setting in place a general framework to develop Luxembourg's research ecosystem and ultimately pave the way towards a prosperous and sustainable knowledge economy by 2030.

The strategy focuses on four interdisciplinary priority areas: (1) Industrial and service transformation; (2) personalised healthcare; (3) sustainable and responsible development; and (4) education for the 21st century. Among the sectors and industries targeted are Artificial Intelligence, financial technology, data-driven applications in industry and services, biomedicine, digitally-enhanced education, and green and sustainable finance – to name a few.[25]

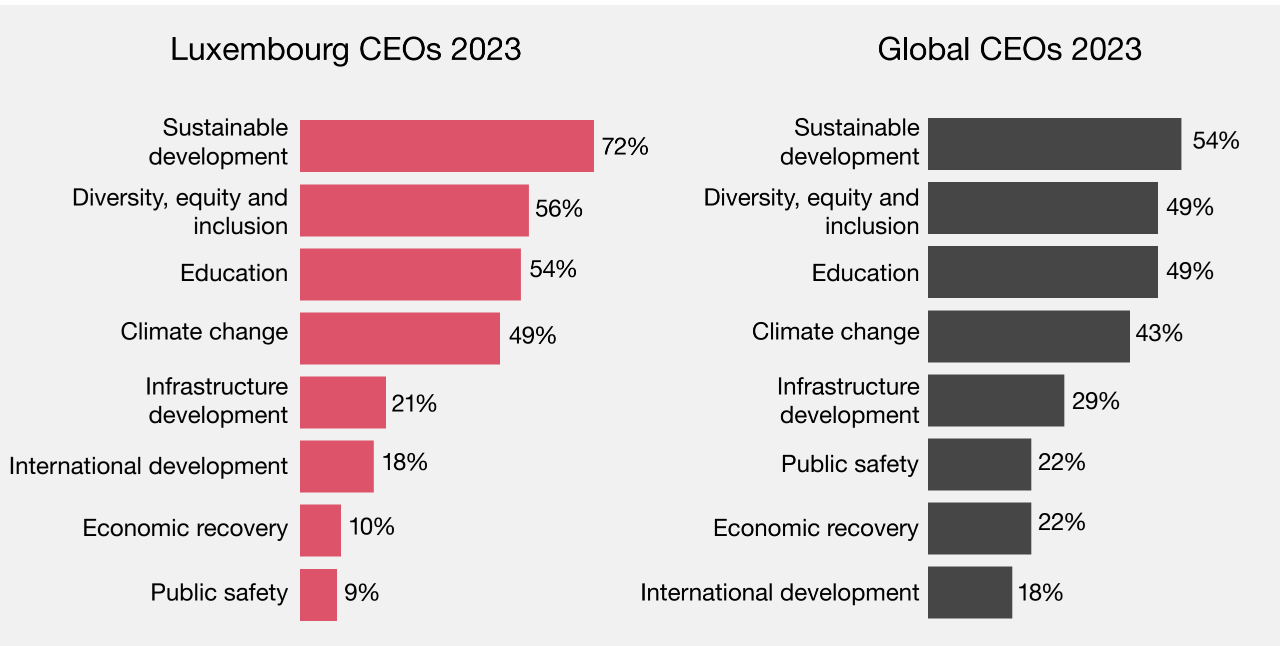
25. Government of Luxembourg, "National Research and Innovation Strategy"

Our Take

Regarding CEO collaboration with governments, NGOs or academic institutions, we see that the top four areas they are addressing, both in Luxembourg and globally, are (1) sustainable development, (2) diversity, equity and inclusion, (3) education and (4) climate change. When it comes to the first area, it is noteworthy that Luxembourg CEOs (72%) are far more likely than their global counterparts (54%) to collaborate with non-business stakeholders to make progress on sustainable development. Many discussion forums on a wide array of issues pertaining to the Luxembourgish economy are routinely organised by stakeholders in the public and private sectors, and a willingness for cross-sectoral collaboration appears to be in the air. The Luxembourgish government should act as a catalyst to such collaboration efforts.

Interestingly, we observe that Luxembourg FS CEOs (72%) are more likely than their counterparts in Ireland (57%) and in the UK (45%) to collaborate with non-business entities on sustainable development-related issues.

Exhibit 18. In which of the following areas is your company collaborating with non-business entities (governments, NGOs, academic institutions) to address societal issues?



For business transformation to materialise, corporate culture needs to encourage dialogue and collaboration all the while establishing critical mission focus. 88% of Luxembourg CEOs believe that their employees align with the company's values and direction often or usually, which is slightly above the global figure (85%). Over half of Luxembourg CEOs (57%) state that dissent and debate are usually or often encouraged within their organisation, whereas only 40% of CEOs in Luxembourg tolerate small-scale failures usually or often.

Although energy prices have surged and Europe has proven to be very vulnerable to exogenous energy-related shocks, global CEOs seem to be more intent on decarbonising their business models and adopting alternative energy sources than their Luxembourg peers. While 34% of global CEOs are planning to invest in alternative energy sources, less than one in five of Luxembourg CEOs intend on doing so. As for decarbonising their business models, 31% of global CEOs, compared to 29% of Luxembourg CEOs, are planning on doing so in the coming year.

Unsurprisingly, we notice a discrepancy between Luxembourg FS and non-FS CEOs in these two investment areas. When it comes to decarbonising their business models over the next 12 months, 40% of non-FS CEOs compared to 27% FS CEOs indicate having such investment plans. As for adopting alternative energy sources, the contrast was sharper, with 47% of non-FS CEOs compared to just 13% of FS CEOs having such goals.

At first glance, these figures appear discouraging, particularly given the fact that both the public and private sectors in Luxembourg have made significant strides in recent years to transition to renewable energy sources. But the fact that decarbonising business models and adopting alternative energy sources does not rank as a top priority in the near future for both Luxembourg and global CEOs is understandable. Companies are still reeling from the repercussions of the war in Ukraine and all its attendant macroeconomic and supply chain shocks. Decarbonisation plans require substantial investments and extensive time horizons. Their feasibility varies depending on the nature of a sector and the particularities of a given business.

Nonetheless, the fact that Luxembourg CEOs are lagging behind their global peers on decarbonising and transitioning to renewable energy sources should serve as a clarion call for governmental authorities to pass policies that could further support them in this regard, and ultimately contribute to the country's long-term green transition and energy resilience. Several major policies have already been enacted in this regard – for example, the landmark free public transportation policy in early 2020 over massive infrastructure investments and the policies agreed to in the latest TCC to support the green transition. Strengthening collaboration between public authorities and private sector participants is a necessity not only to help both sectors to decarbonise, but also to ensure that green transition policies become more targeted for greater impact – an issue highlighted by a recent OECD report[26]– while bringing Luxembourg into closer alignment with its ambitious climate goals.

Policies for a Sustainable Green Transition

To reach its ambitious climate goals, Luxembourg will need to undertake deep and systemic cross-sectoral changes, as per the recent OECD Economic Survey on the Grand Duchy. For instance, Luxembourg has long had relatively low fuel prices compared to its neighbours. This has not only led to a high car usage and dependence among the population, but has also encouraged many motorists from neighbouring countries to make use of fuel stations in Luxembourg with the sole purpose of realising savings based on the difference in prices.

To gradually pave the way for these changes, governmental policies should be devised and moulded in partnership with stakeholders in the FS and non-FS. Some measures may prove to be unpopular and difficult to implement, which is one of many reasons why such collaboration is of the utmost necessity. In addition, policies must be well communicated and explained to the general public and key stakeholders, particularly when it comes to additional revenues derived from environment-related taxes used to support the green transition.

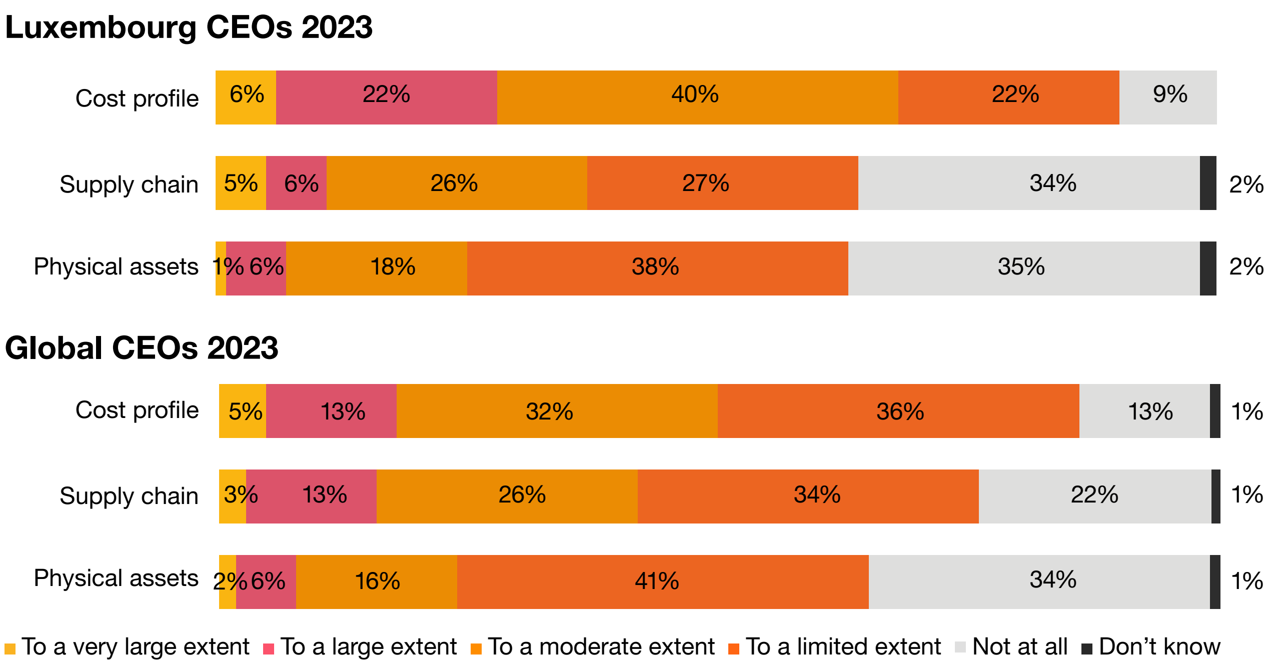
Our Take

Based on internal PwC research and numerous conversations with clients, we believe that Luxembourg's 'green transition' – an urgent priority in the 'polycrisis' context – should be supported by a consistent set of public policies which make a tangible difference to the top lines of businesses all the while driving measurable improvements and ensuring that transition risks are minimised.

26. See OECD (2022), OECD Economic Surveys: Luxembourg 2022, OECD Publishing, Paris

Like their global counterparts, Luxembourg CEOs are well aware of the risks climate change poses to their companies and to the country's economy as a whole but as we have seen in previous sections, the assessment of the threat level posed by climate change to locally prevalent business models, as well the urgency around mitigation measures, differs between the Luxembourg sample and the global one. In Luxembourg, CEOs mostly view climate change related risks as impacting their cost profile.

Exhibit 19. To what extent do you expect the following areas of your business to be impacted by climate risk in the next 12 months?



Climate change at the top of the global policy agenda

In the late 1960s, as major cities in Europe and North America became shrouded with smog, and as incidents of industrial pollution grabbed headlines, the environment became an important area policymakers had to contend with.

In 1972, the United Nations Environmental Programme was established, and the Club of Rome published a landmark study, **'Limits to Growth,'** highlighting how the planet's resources will not be able to sustain the current rates of economic and demographic growth. In the 1980s and early 1990s, the Montreal Protocol banned CFC gases, which effectively saved the Ozone layer, the UN conceptualised 'sustainable development,' and the UN Framework Convention on Climate Change came into force.

In the late 1990s, the private sector increasingly took the lead in encouraging companies to act responsibly. The Global Reporting Initiative (GRI), founded in 1997 with the goal of increasing corporate transparency on environmental and social issues, has provided companies with the tools to report on their environmental and social impacts. Since the GRI's founding, a wide array of international non-governmental organisations with similar and complementary objectives have been founded.

More recently, the Task Force on Climate-related Financial Disclosures (TCFD), a global initiative established in late 2015 and led by asset and wealth management stakeholders, has developed a set of recommendations on climate-related financial disclosures so that businesses, asset managers and investors alike can obtain consistent and reliable information and adequately mitigate risks. The International Sustainability Standards Board (ISSB), founded in November 2021 under the aegis of the International Financial Reporting Standards Foundation, has forged ahead with developing global standards on climate- and sustainability-related financial disclosures, expected to be released in 2023.

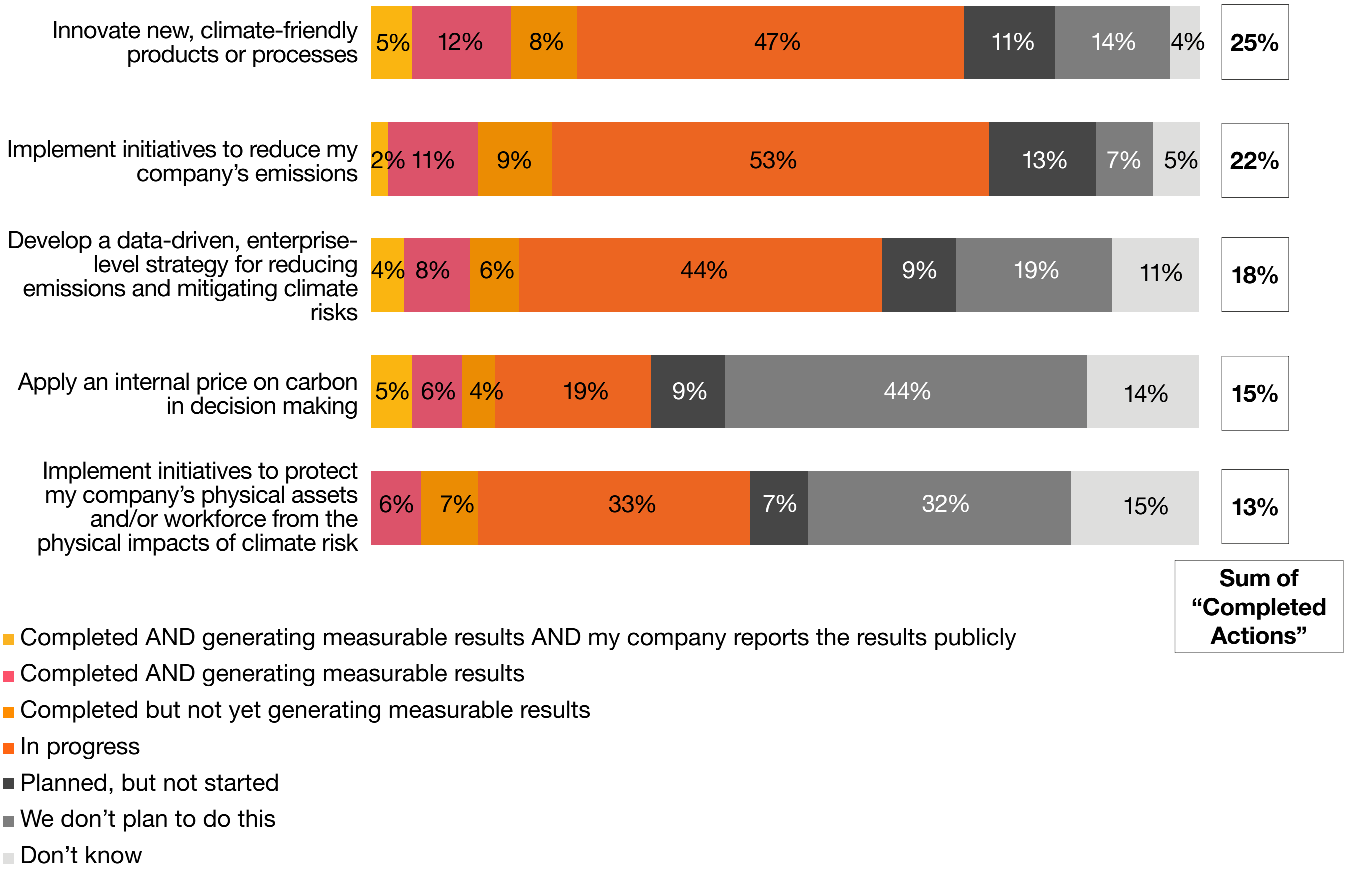
Like their global counterparts, Luxembourg CEOs are actively involved in the process of responding to climate change both by adapting their product & service offering as well as by adapting internal processes.

It is encouraging to see that 47% of our respondents are in the process of creating new climate-friendly products and processes, while 25% have already completed such developments. In addition, 53% of Luxembourg CEOs are in the process of implementing initiatives to reduce their companies' emissions, while 44% are currently developing a data-driven strategy at the enterprise-level to reduce emissions and mitigate climate change-related risks. Compared to their global peers, Luxembourg CEOs appear to have a head start. For instance, 36% of global CEOs are in the process of innovating new climate-friendly processes or products, while 25% have completed them. In addition, 39% of global CEOs are in the process of implementing carbon emissions-reduction initiatives.

However, it is not yet clear whether these actions are starting to generate a positive yield to Luxembourg CEOs. For instance, only 17% stated that their new climate-friendly products are generating measurable results, while only 13% stated that their emission reduction initiatives are generating measurable results. Among the CEOs who have developed a data-driven strategy to reduce emissions and mitigate climate risks, only 12% stated that this action is generating measurable results. Meanwhile, a negligible number of CEOs are reporting on the above publicly, although this will likely change in the near future once climate change-related disclosures become more common or even mandatory.

In light of significant disruptions to the European energy markets and the sustainability-related incentives offered by the public sector to enterprises, this area should be followed up upon in future editions of the survey. We expect to see upward trends across the board.

Exhibit 20. Below is a list of actions companies may undertake to prepare for the risk of climate change. Which statement best characterises your company's level of progress on these actions?



Over the last several years, PwC Luxembourg has carried out extensive research on the ESG momentum in the global asset and wealth management (AWM) industry,[27] and our latest report forecasts global ESG assets under management (AuM) to reach US$33.9 trillion by 2026 (base-case scenario), up from US$18.4 trillion in 2021. In Europe alone, ESG AuM is expected to reach US$19.6 trillion by 2026, up from US$12.8 trillion in 2021.[28]

Given Luxembourg's position as a leading international financial centre – and its pioneering role in promoting and facilitating sustainable finance – ESG represents a pivotal opportunity for the country's FS and non-FS stakeholders to create value, attract investments, push the country's green transition forward, and contribute to the Grand Duchy's long-term socio-economic development. This opportunity is amplified by the

27. For more information, visit https://www.pwc.lu/en/sustainable-finance/a-year-of-esg.html

28. PwC (2022) "Asset and wealth management revolution 2022: Exponential expectations for ESG"

proximity of decision-makers from the private and public sectors and by the country's openness to international business. Thus, there is an opportunity for Luxembourg to act as a test bed for the development of new products, processes and standards that are set to have an impact well beyond its borders.

In addition, given that Luxembourg CEOs are struggling to find and retain the talent needed – particularly talented young professionals, to whom environmental, social and governance principles matter a lot – the creation of additional expertise in the area of ESG & sustainability would act as a talent magnet.

Luxembourg, a hub for sustainable finance

As per Article 2 (17) of the EU Sustainable Finance Disclosure Regulation (SFDR), 'sustainable investments' are investments which contribute to an environmental objective (e.g., promoting renewable energy, conserving natural resources etc.) or a social objective (e.g., projects that tackle inequality, support disadvantaged groups etc.), carried out by following the principles of good governance. In other words, sustainable investing and ESG investing can be seen as synonymous.

Landmark global agreements – such as the United Nations 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change – as well as the 2018 EU Action Plan on Sustainable Finance have played a key role in mainstreaming sustainable finance. It is widely recognised that combating climate change cannot be effectively carried out without the private sector's involvement in sustainable finance.

In this regard, Luxembourg has been a trailblazer.

In July 2006, public and private stakeholders came together to establish the Luxembourg Finance Labelling Agency (LuxFLAG), an independent non-profit organisation with the objective of promoting responsible investing and sustainable finance. Since then, LuxFLAG has released a range of labels to help investors ensure that investment products on offer follow ESG principles.

In addition, the first climate awareness bond was issued by the European Investment Bank in 2007 on the Luxembourg Stock Exchange, and less than a decade later, the Luxembourg Green Exchange – the first stock exchange dedicated exclusively to sustainable finance – was established, whereby sustainability-linked bonds and other green securities are traded.

Most recently, the country elevated its sustainable finance ambitions to the next level via the creation of the Luxembourg Sustainable Finance Initiative (LSFI). a not-for-profit association that designs and implements the Sustainable Finance Strategy for the Luxembourg financial centre.

Our Take

Business leaders who implement the ‘S’ and ‘G’ principles in the workplace, and who materially document how their companies are reducing their own carbon footprints while contributing to the decarbonisation of the economy, are more likely to be viewed favourably by cosmopolitan young professionals than companies that make no such efforts. In light of the persistent people challenges faced by businesses in Luxembourg, “walking the talk” on ESG is not only materially relevant to markets and investors, it also provides business leaders with untapped potential for talent attraction & retention.

A message from John Parkhouse, PwC Luxembourg CEO

Thank you for taking the time to explore the 2023 edition of our Luxembourg CEO survey. We hope it provided you with insights on how business leaders are bracing for a world with increasingly interconnected macroeconomic, geopolitical and environmental challenges and threats, and how the Grand Duchy's economy will be shaped in the near future.

Despite a difficult year marred by a confluence of crises, Luxembourg has held strong. In September, the Tripartite Coordination Committee – a core pillar of the Grand Duchy's political and economic stability – formalised a landmark package to provide stability and meaningful support to households and businesses struggling with the cost-of-living crisis while supporting the green transition. Public finances remain on a very strong footing, characterised by one of the lowest debt-to-GDP ratios in Europe, while leading credit ratings agencies continue to confer the coveted Triple-A on Luxembourg.

Alas, even if Luxembourg is proving to be resilient, the same cannot be said for the rest of the world. It would be no exaggeration to say that the global economy is entering a new era. Gone are the days of ‘free trade’ and multilateral cooperation that characterised the post-Cold War era. The decade of ultra-low interest rates that materialised following the Global Financial Crisis is also no more.

Today, we appear to be entering an era of ‘polycrises,’ to borrow a term recently popularised by the World Economic Forum. Be it environmental crises triggered by ever-worsening climate change and extreme weather events, to societal crises driven by increased polarisation, socio-economic inequalities and involuntary migrations, our world is increasingly fragmented and fragile. Geopolitical and trade-related tensions between the major players in the world economy show hardly any signs of abatement, and the risks of war – as Ukraine has tragically demonstrated – are never too far off. The mood of techno-optimism that prevailed in the 1990s and early 2000s has been replaced by a more cautious and critical zeitgeist. As a flipside of ubiquitous digitalisation, major cyber incidents are becoming more common, pushing governments and the private sector to substantially invest in cybersecurity, while all stakeholders will continue to grapple with potentially disruptive technologies such as artificial intelligence.

Naturally, Luxembourg CEOs have not been immune to these transversal developments – unsurprisingly, just like their global counterparts, Luxembourg CEOs consider inflation and macroeconomic volatility to be the top threats they are facing, followed closely by cybersecurity-related challenges.

We believe that Luxembourg and its business leaders are provided with an opportunity to not only weather the storms of today but rather to seize the opportunity to invest, upskill and collaborate with a view to build the foundations for an ever more prosperous tomorrow.

As we highlighted in the previous edition of the survey, there is significant untapped potential for businesses to more fully align with ESG principles and to innovate products and services that put sustainability front and centre. Furthermore, more fully aligning their businesses with sustainability goals could conceivably help leaders ease some of the talent attraction and retention issues they are facing in Luxembourg.

Although our survey reveals that climate change and decarbonisation appear to be taking a back seat among Luxembourg CEOs' priorities – which needs to be understood against the backdrop of the more pressing "polycrises" described earlier – as with digitalisation, there can be little doubt as to the long-term trajectory we need to embark on, speedbumps notwithstanding.

It would be an understatement to say that the transformations outlined above are complex and challenging. From the buy-in required within organisations and across functions to drive meaningful change in terms of digitalisation and sustainability alignment, to the difficulty of financing meaningful investments against the context of ongoing monetary tightening and inflationary pressures, there is a need for collaboration across the private and public sectors, but also with NGOs and stakeholders at large. Luxembourg respondents indicate an above-average keenness on doing so in particular when it comes to sustainability-linked issues.

The proximity of decision-makers within the country, its multiculturalism and the inherently cross-border orientation of its businesses and a proven model for social dialogue leading to effective economic mitigating measures – which play a significant part in preventing social unrest and the resulting, disruptive protest movements we see unfold in many major economies – provide the Grand Duchy with a rather unique opportunity to implement the sort of collaborative efforts described above.

Now is the time to capitalise!

A note on the sample

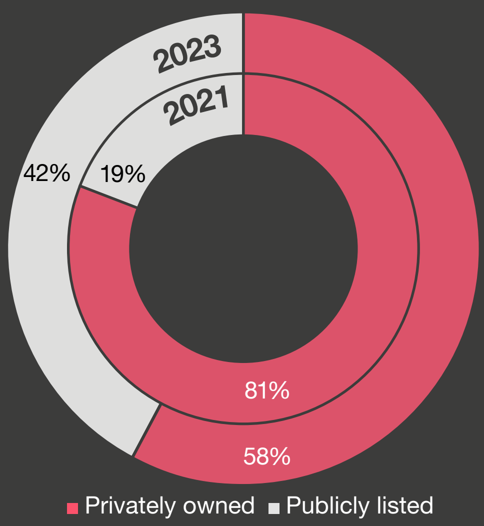
Our survey had a sample of 85 respondents, slightly higher than the 82 respondents for the 2021 report. Given that Luxembourg continues to be a leading financial hub in Europe and the world, it was unsurprising to see that the majority of respondents were CEOs in the financial services sector, with respondents from the asset and wealth management industry once again representing the largest category of respondents.

As with the 2021 report, the majority of respondents were CEOs of small-to-medium companies with less than 500 employees and less than USD 1 bn in revenues in the last fiscal year. However, publicly-listed companies represented a substantially larger share of the total respondents than in 2021, whereby 42% of respondents were CEOs from publicly-listed companies compared to 2021's 20% share.

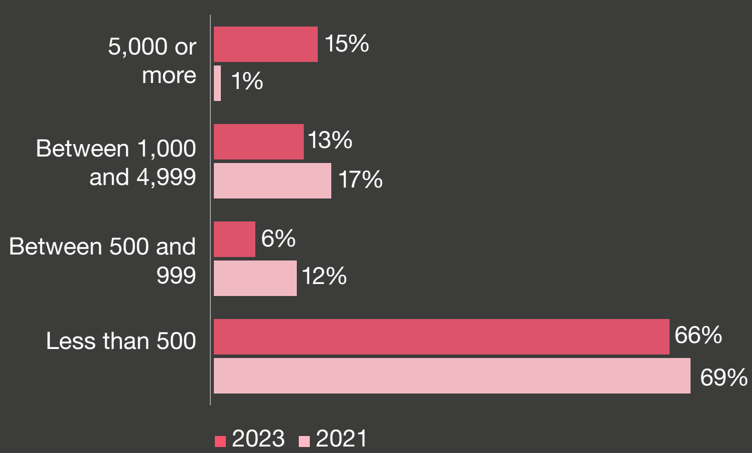
Respondents breakdown by industry

Industry	Number of respondents	%
Financial Services Sector (FS)	**70**	**82%**
Of which		
Asset and Wealth Management	29	34%
Banking and Capital Markets	17	20%
Insurance	10	12%
Other Financial Services	6	7%
Private Equity	4	5%
Real Estate	4	5%
Non-Financial Services Sector (Non-FS)	15	18%
TOTAL	**85**	**100%**

Ownership



Organisation's headcount



Sources: PwC 26th Annual Global CEO Survey, PwC Global AWM & ESG Market Research Centre

Note: Due to rounding, the sum of the percentages in each category might not add up to 100%

Glossary

ESG – Environmental, social and governance principles

FS – Financial services sector

LuxFLAG – Luxembourg Finance Labelling Agency

Non-FS – Sectors other than the financial services sector

SFDR – Sustainable Finance Disclosure Regulation

STATEC – *Institut national de la statistique et des études économiques du Grand-Duché de Luxembourg,* the Luxembourg government's statistical research department, under the authority of the Ministry of Economy

TCC – Tripartite Coordination Committee

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