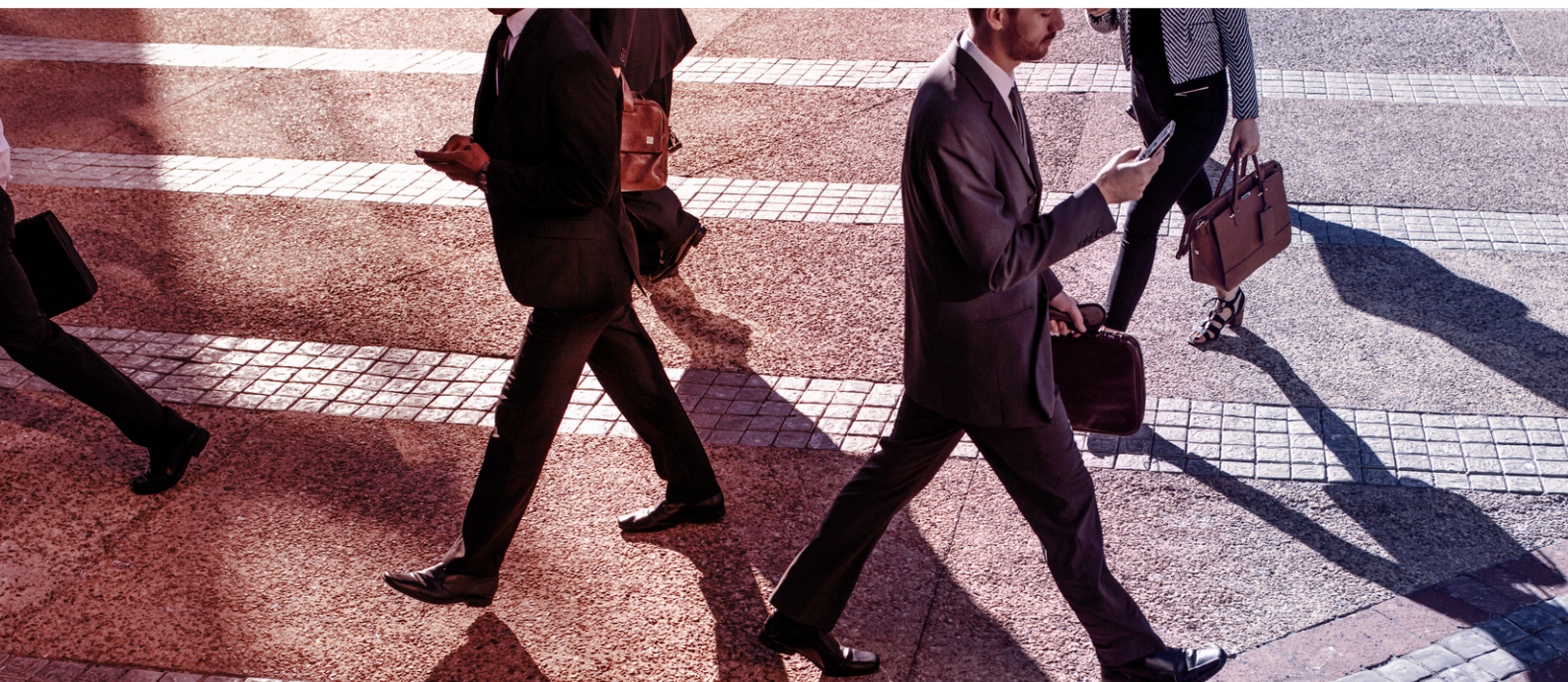




Does cross-border work pay?

Gains abroad, costs upon return, and the fiscal balance

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This policy brief is based on the forthcoming paper Albanese and Marguerit (2026), Does cross-border work pay? Earnings abroad and the costs of coming back.

Nearly half of Luxembourg's employees, about 233,000, live across its borders. Using social-security records from Belgium and Luxembourg, this brief traces the careers of Belgian cross-border workers before, during and after employment in Luxembourg. While abroad, they earn about 40% more per day worked than they would at home. Upon return, they face a temporary employment penalty, which persists longer after spells exceeding three years. Back in Belgium, less-skilled workers also earn about 8% less than if they had stayed. Nevertheless, cross-border work generates an average net income gain of about €92,000 over seven years and reduces Belgium's unemployment-benefit spending by keeping otherwise unemployed people in work. Quantifying these income and fiscal effects is particularly important before a new EU regulation shifts responsibility for unemployment benefits from the country of residence to the country of employment.

Cross-border work: what is at stake for both countries

Luxembourg has the largest cross-border workforce in the EU relative to its size: about 233,000 workers at the end of 2025, 47% of all employees (STATEC, 2026). Cross-border workers pay income tax and social contributions in Luxembourg. When they lose their job, however, it is their country of residence that pays their unemployment benefits, calculated on their last Luxembourg salary. Luxembourg refunds the first three months to the residence country. This arrangement has long been a source of debate, and on 28 September 2026 the EU adopted a new regulation requiring that the country where the person last worked pays the benefits, provided the person worked there for at least 22 uninterrupted weeks (Council of the European Union, 2026).¹

This brief addresses three questions:

1. On average, how much more do cross-border workers earn in Luxembourg than they would have in their country of residence?
2. What happens to their jobs and wages when they return to the labour market of their country of residence?
3. Beyond the workers themselves, what is the average effect of a cross-border job on the fiscal returns of the two countries in terms of unemployment benefits, income taxes and social security contributions?

Following cross-border workers from departure to return

We follow 83,361 people born between 1972 and 1990 who lived in the Belgian Province of Luxembourg or in nearby municipalities of the Province of Liège, tracing

their careers from 2003 to 2017 in the anonymised records of the Belgian Crossroads Bank for Social Security (BCSS). One in five of them worked in Luxembourg at some point. Belgian records cover careers in Belgium, but not in Luxembourg. The records of the Luxembourg social-security administration (IGSS), which cover every cross-border worker living in Belgium, are the mirror image: they record the career in Luxembourg but nothing of what workers did before they arrived or after they left. As the two countries' records cannot be matched person by person, we combine them by estimating, from the Luxembourg records, the average wage of cross-border workers by gender, age, nationality, province of residence and length of career in Luxembourg, and assigning it to the workers with the same profile in the Belgian records.

Simply comparing cross-border workers with people who do not leave the Belgian labour market would be misleading, because the two groups differ. Before starting in Luxembourg, only 36% of future cross-border workers were employed, compared with 58% of Belgian residents who never cross the border. We therefore compare people who start working in Luxembourg at different dates, looking at how their careers change over time. The path of later commuters is used to identify the career path of earlier starters had they stayed in Belgium.² The analysis covers 16,418 people who started working in Luxembourg between 2006 and 2017.³ Each of them was observed in Belgium more than two years before starting in Luxembourg. Of these, 8,658 stopped cross-border work before the end of the observation period. Three years after starting work in Luxembourg, 60% are still employed there, and close to 40% have worked in Luxembourg without interruption for ten years.

¹ The regulation enters into force on the first day of the month after its publication in the Official Journal; the new rules on unemployment benefits apply two years later. For Luxembourg, the current rules continue to apply until five years after entry into force, which Luxembourg may extend to seven (Article 91 of the amended Regulation 883/2004).

² Technically, we use the imputation difference-in-differences method of Borusyak et al. (2024). A second method, double machine learning (Bodory et al., 2022), which compares people with similar work histories and personal, household and local characteristics, gives similar results.

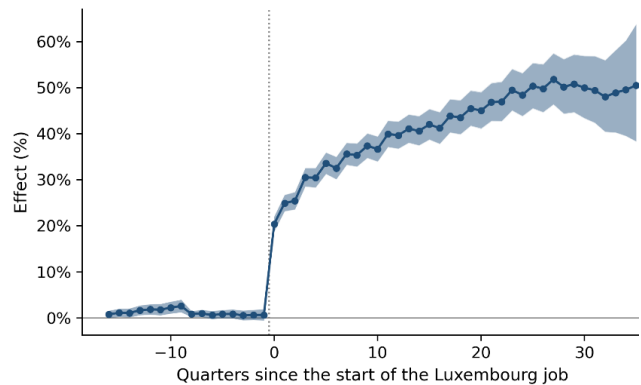
³ Belgium has the smallest of the three cross-border inflows. In 2024, 15,233 cross-border workers aged 20 or over and born outside Luxembourg took up a job in Luxembourg for the first time: 9,952 living in France, 2,712 in Germany and 2,569 in Belgium (LISER's LUXTALENT report for the Ministry of the Economy, Guastalli et al., 2026).

Working in Luxembourg pays about 40% more

Compared with what they would have earned in Belgium, cross-border workers earn about 25% more per day worked in their first full quarter in Luxembourg. This premium rises to about 50% after seven years and averages about 40% over the whole period (Figure 1). Including the extra days and hours worked in Luxembourg, their total earnings rise by about €5,200 per quarter on average (2012 prices). These amounts are before income tax and social contributions. Wage gains from working abroad are usually documented for migrants who move across countries with a large development gap, where pay doubles or triples. Here, a substantial premium of about 40% arises between two neighbouring high-income countries, without workers having to change residence.

Figure 1 – Wage gains from working in Luxembourg

On average, cross-border workers earn about 40% more per day than they would have at home, and the premium grows the longer they work in Luxembourg.



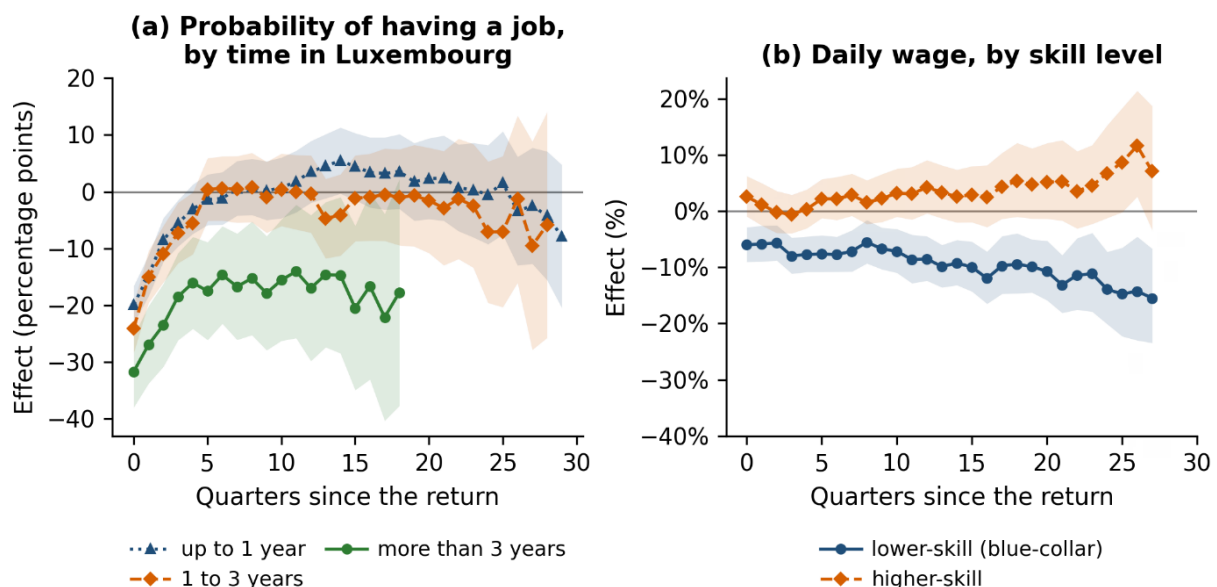
Note: Daily wage of cross-border workers relative to their estimated daily wage had they stayed in Belgium, by quarter since starting the Luxembourg job (in %, dotted line). The darker band is the statistical margin of error (95% confidence interval); the lighter band adds the uncertainty from estimating the Luxembourg wage.

Coming back: a hard landing, especially after long spells in Luxembourg

Coming back is where the costs appear. In the quarter of their return, workers are 23 percentage points less likely to have a job than they would have been had they never worked in Luxembourg. For most, this is temporary:

Figure 2 – Employment and wages after the return

After more than three years in Luxembourg, the average employment gap persists at about 15 percentage points; less-skilled workers earn about 8% less per day, a gap that widens over time.



Note: Effect on cross-border workers returning to Belgium relative to what the same workers would have earned had they never worked in Luxembourg, by quarter since the return: panel (a) the probability of having a job (in percentage points) by how long the cross-border job lasted; panel (b) the daily wage (in %) by skill level. Less-skilled: blue-collar job before leaving. Shaded areas show the margin of error (95% confidence intervals).

the gap halves within six months and disappears after about a year. In the first year back in Belgium, returning workers on unemployment benefits also receive about 11% more per day, because their benefits are calculated on the Luxembourg salary. The gain is smaller than the wage premium because Belgian benefits are capped, and the ceiling binds for many returning workers.

The longer the cross-border job lasted, the harder the return (Figure 2a). After up to three years in Luxembourg, the employment gap closes within eighteen months. After more than three years, it remains at about 15 percentage points for five years, and half of this gap reflects people leaving the labour force altogether rather than registering as unemployed. The savings built up in Luxembourg, together with benefits based on the Luxembourg salary, can allow returning workers to take more time before accepting a new job. We find no sign that this extra time leads to better jobs.

Regardless of how long the cross-border job lasted, experience in Luxembourg does not lead to higher wages back in Belgium. Higher-skilled workers lose nothing. Less-skilled workers, those in blue-collar jobs before leaving for Luxembourg, earn about 8% less per day over the first five years back in Belgium than they would have had they never worked there, and the gap widens over time (Figure 2b). A loss that grows rather than fades suggests that the skills these workers had built up in Belgium eroded during the years spent in Luxembourg, or no longer match what employers at home look for. The Luxembourg premium therefore comes with the job: it is earned while the job lasts, but it is not carried home.

Unemployment benefits: a saving for the residence country

The EU's newly adopted reform seeks a fairer distribution of unemployment-benefit costs between countries of residence and employment, better reflecting where social contributions are paid. Yet this raises a different question: under the pre-reform rules, does cross-border work increase or reduce unemployment-benefit spending in the country of residence?

Figure 3 – Cumulative change in the unemployment benefits Belgium pays, per cross-border worker

Starting a cross-border job reduces the unemployment benefits Belgium pays by about €1,600 per worker after three years and about €3,700 after seven years.



Note: Cumulative effect of starting a cross-border job on the Belgian unemployment benefits paid to the worker, relative to the same individual had they stayed in Belgium, from the first quarter in Luxembourg, whether still working there or back in Belgium (euros, 2012 prices). The shaded area is the margin of error (95% confidence interval, conservative).

On the one hand, when a cross-border worker returns, Belgium pays more in unemployment benefits than it would have had the person stayed in the Belgian labour market. Over the first three years after the return, and averaged over all returning workers, Belgium pays about €6,350 per returning worker. Of this, about €4,300 would have been paid anyway, while Luxembourg refunds about €1,350, leaving Belgium an extra cost of about €700.⁴

On the other hand, many of those who become cross-border workers would have spent time unemployed had they stayed in Belgium, and the cross-border job keeps them employed instead. Once this is taken into account, starting a cross-border job saves Belgium about €3,700 in unemployment benefits per worker over seven years. Figure 3 shows how these savings build up over the seven years.

⁴ Over the study period, Belgian unemployment benefits had no time limit; claims admitted from 1 March 2026 are limited to at most two years, except from age 55 after a long career, and on 10 September 2026 the Constitutional Court partially annulled the transition rules for existing claimants.

Fiscal effects of cross-border work

Cross-border work therefore reduces Belgium's unemployment-benefit spending on balance. But this is only part of the fiscal picture. Belgium also forgoes income tax and social contributions when its residents work in Luxembourg, while Luxembourg collects these revenues, pays family allowances and refunds part of the unemployment benefits. What is the balance for each country once income tax, social contributions, unemployment benefits and family allowances are all counted?

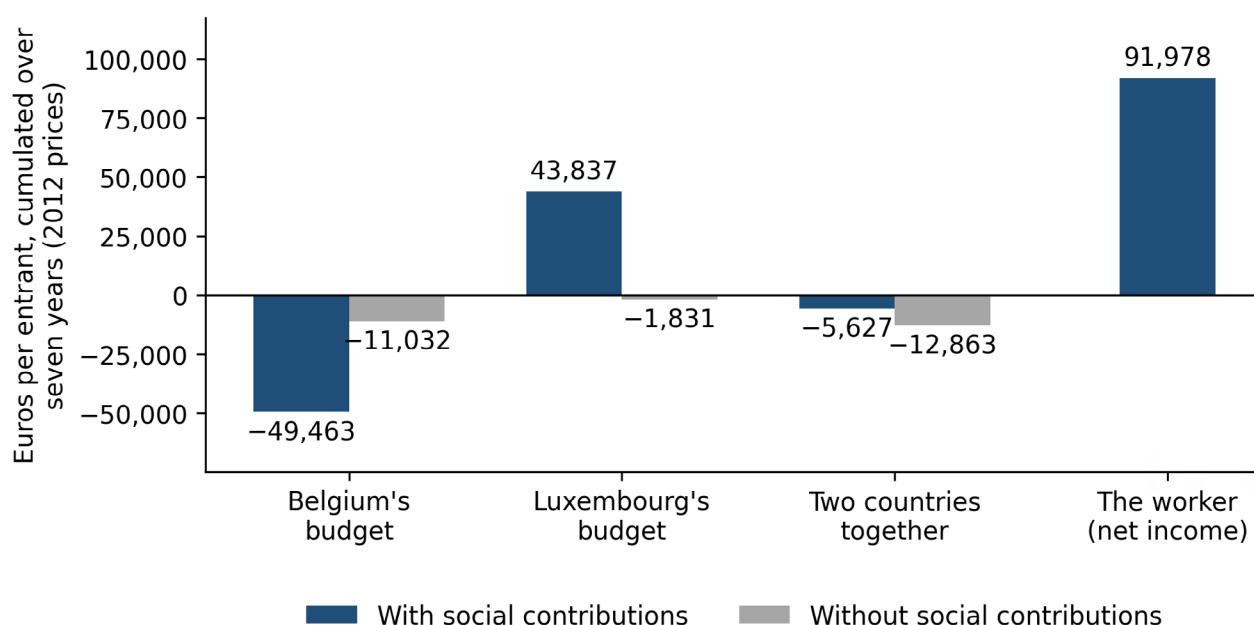
We follow each new cross-border worker for seven years from the start of the job, irrespective of how long it lasts and of what follows if the Luxembourg job ends. For each worker, we calculate the income tax and social contributions each country collects on the worker's salary, minus the unemployment benefits, social assistance and family allowances it pays, including the transfers between the two countries (the refund of up to three months of unemployment benefits and

the lump sum Luxembourg pays Belgium for its border communes), and compare it with the fiscal contribution that would have arisen had the person stayed in Belgium. This account covers only the flows tied to the worker's own labour income. It leaves out the worker's output, company taxes and VAT, and the pensions and health care that the contributions will later finance, mostly at Luxembourg's expense. All figures are averages per worker (Figure 4).

The worker is the clear winner: total net income rises by about €92,000 on average over the seven years, counting the higher pay, the lower income taxes and the family allowances. Belgium forgoes about €49,500 per worker, mostly income tax and social contributions now paid in Luxembourg. Luxembourg gains about €44,000. Combined, the two public budgets therefore register a net fiscal loss of about €5,600 per worker. Excluding social contributions, which help finance future entitlements not captured here, Belgium loses about €11,000 per worker and Luxembourg makes a small loss too.

Figure 4 – Who gains and who pays seven years after starting cross-border work, per worker

The worker gains approximately €92,000; Belgium forgoes about €49,500 in fiscal revenues, and Luxembourg gains about €44,000. The two countries lose together.



Note: Per worker, over the seven years after starting cross-border work, in 2012 prices in euros. For each country, it includes income tax and social contributions collected on the worker's salary minus benefits and allowances paid, including payments between the two countries. Excluded: future pension claims, health care costs, VAT, company taxes and the value of the worker's output.

In aggregate, the two countries lose fiscal revenue because Luxembourg taxes the same salary at a lower rate than Belgium and pays higher family allowances. Over the seven years, the worker's gross earnings are about 80% higher than they would have been in Belgium, due to a higher wage and more time in employment. Yet the share paid in income tax falls from about 20% to about 7% of the gross wage, and the two treasuries together collect about €6,500 less in income tax. Luxembourg's income tax is low for new entrants,⁵ and during the study period, married couples whose main income is the Luxembourg salary were taxed as if it were split between the two spouses, which lowers the rate further. Luxembourg also pays additional family allowances, close to the income tax it collects.

Every year between 2006 and 2017, about 3,900 Belgian residents aged 23 to 55 took up a job in Luxembourg for the first time, according to the Luxembourg social-security register. For each such yearly cohort, our estimates imply a cost of about €177 million for Belgium, and a gain of about €156 million for Luxembourg over seven years.⁶

Implications for policy

Cross-border work does not burden the residence country's unemployment insurance

The public debate has focused on who pays the unemployment benefits of cross-border workers. Albanese and Marguerit (2026) show that, on balance, cross-border work saves the residence country's unemployment insurance money: over seven years, it reduces Belgium's spending on unemployment benefits by about €3,700 per worker, because it keeps in work people who would otherwise have been unemployed. Even the cost of a return is small, about €700 per returning worker once Luxembourg's partial refund of unemployment benefits is factored in. The joint public budgets lose about €5,600 per worker because Luxembourg

taxes these salaries more lightly and pays higher family allowances: Belgium's budget loses about €49,500 per worker, mostly income tax and contributions, while Luxembourg's budget gains about €44,000. The real winner is therefore the worker, whose net income rises by about €92,000 over seven years.

The reform opens new inequalities

Under the reform, a cross-border worker who loses a Luxembourg job after at least 22 uninterrupted weeks will be paid by Luxembourg and register with the Luxembourg employment service (ADEM). Like residents, they will receive the Luxembourg benefit, which tends to be more generous than those of the neighbouring countries in the first months: 80% of the previous salary against 65% in Belgium, at least 57% in France and 60% of net pay in Germany, up to a ceiling of about €6,900 a month in the first six months, against less than €3,000 in Belgium (and around €3,000 in Germany). Albanese and Marguerit (2026) show that the higher initial benefit will come when support matters most, as the employment penalty of returning workers is largest in the first months. The eligibility threshold of 22 weeks of uninterrupted work, however, leaves out recent hires and workers on short or interrupted contracts, who will usually keep the less generous benefits of the country of residence.

Luxembourg benefits are shorter, lasting at most twelve months against up to two years in Belgium and eighteen months in France, with extensions for older or long-career workers everywhere.⁷ A cross-border jobseeker can, however, move the job search to the home-country employment service (Forem or VDAB in Belgium, France Travail in France, the Bundesagentur für Arbeit in Germany) and keep the Luxembourg benefit for up to six months. When the Luxembourg benefit ends, a jobseeker who moved the search home and was insured there before can draw that country's benefit for the rest of its entitlement, calculated on the last salary earned at home. Cross-border jobseekers

⁵ Recent entrants sit in the lower half of the Luxembourg wage distribution, where the tax schedule is flattest, as Luxembourg exempted the first €11,265 of annual taxable income (2013 schedule) and its rates rise gradually above that. In the Luxembourg data, Belgian residents in the first two years of a Luxembourg job earned about €35,000 in 2016 against about €65,000 for Belgian residents employed in Luxembourg since before 2004, similar to Luxembourg residents with the same seniority.

⁶ First entries observed in the register, which starts in 2004. The estimates come from people born between 1972 and 1990 and are applied to all entrants aged 23 to 55. The cohort totals are about a tenth lower than 3,900 times the per-worker figures because each worker is counted only while living in Belgium, and over seven years some leave, mostly by emigrating.

⁷ In Germany the standard maximum is also twelve months, rising with age to 24 months from age 58.

may therefore be covered for longer than Luxembourg residents. This matters most for workers likely to stay unemployed for a long period, such as older workers with long careers, whom Belgium can cover without time limit from age 55.

Reintegration needs the employment services to work together

The reform leaves open how to help returning workers back into work. Belgium, which voted for the regulation, and Luxembourg, which voted against it, both found its rules on activation and control insufficient. Under the regulation, ADEM will follow the job search of those registered with it. The home-country service will follow those who export the benefit, apply its own checks and report monthly to ADEM. In practice, much remains to be settled, and neither service covers both labour markets, while jobseekers search across the whole Greater Region. The reform calls for closer coordination between the employment services, sharing their vacancies and training. Albanese and Marguerit (2026) show who needs support most: workers returning after more than three years in Luxembourg, who are about 15 percentage points less likely to be in work five years later, and less-skilled workers, whose wage loss grows over time. Support should therefore prioritise these two groups and start as soon as these workers return.

Evaluating the reform requires linking data across the border

Within five to seven years, ADEM will pay the benefits of cross-border workers who lose their job, yet the data needed to evaluate the effects of this and other labour market reforms are far from adequate. Luxembourg's social security register follows cross-border workers only while they hold a Luxembourg job, so it cannot show what happens once they lose or leave it. The registers of the neighbouring countries have the opposite gap: they follow residents before and after the Luxembourg job, but record little or nothing of the job itself. Although French and German residents make up about three quarters of Luxembourg's cross-border workers, this brief covers only Belgian residents because, among the neighbouring countries, only the Belgian social security data for research flag cross-border work. French and German data lose sight of residents once they start working in Luxembourg.

The reform makes this data gap particularly costly. Whether the more generous benefit lengthens unemployment of cross-border workers, and whether support reaches those who need it, can only be answered by linking Luxembourg research data with those of the neighbouring countries. Luxembourg has called for an automated exchange of data on whether jobseekers who export their benefit find work or earn income, and has announced closer cooperation with its neighbours. Setting up these links now would give both sides the evidence to prepare the transition.

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