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What policy to reduce labour market segmentation?

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The ideas presented in this document reflect the personal opinion of their authors and do not necessarily express the position of the Banque de France or the Treasury Department.

** This article is dedicated to Nicolas Ferrari, who died in 2014, this research being completed.*

The French labour market is segmented between those with stable jobs and those alternating temporary contracts and periods of unemployment. This Rue de la Banque *looks at the different policies aimed at reducing this duality. It shows that contributions that decrease in line with seniority or a tax on contract terminations reduce the share of short-term contracts in the economy, but at the cost of a more rigid labour market and lower productivity. An over-contribution on temporary jobs, financing a premium for hiring on permanent contracts, also reduces the segmentation of the labour market; however, it does not have these adverse effects on labour market flexibility and productivity. Introducing a premium to reduce segmentation is therefore more desirable than a tax in order to preserve the flexibility of the labour market.*

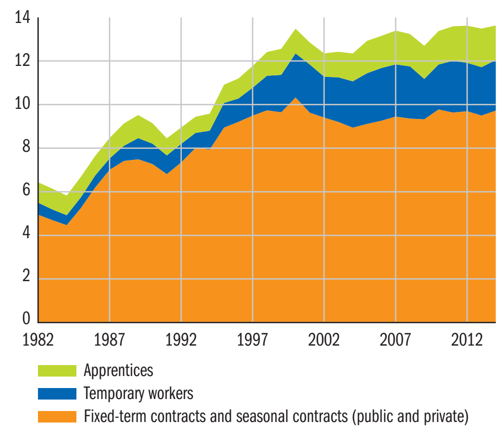
The segmentation of the French labour market

The French labour market, like those of Southern European countries, is segmented between those with stable jobs and those alternating temporary contracts and periods of unemployment. Chart 1 shows the sharp increase in the share of short-term jobs in salaried employment in the 1990s. Since the 2000s, the share of fixed-term contracts and temporary jobs has stabilised around 12%.

Chart 2 shows that, despite the stabilisation of the share of temporary contracts in salaried employment, the number of workers hired on temporary contracts has been steadily rising, in particular following the crises of 2009 and 2011, which reflects an increase in labour turnover and a shortening of fixed-term contracts. In a context where the dismissal of an employee on an open-ended contract is often a long, risky and costly process, companies have found in temporary contracts a means of increasing the flexibility of their workforce in the face of economic uncertainties.

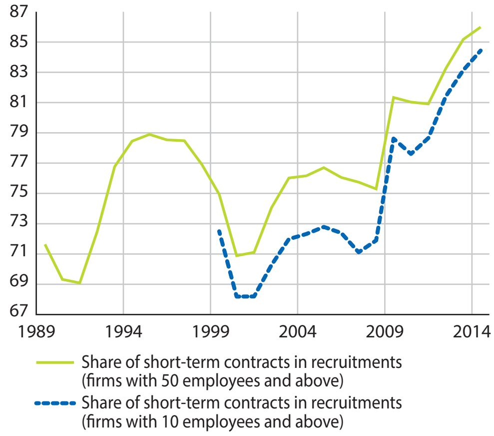
This growing recourse to fixed-term contracts and temporary work has had a positive impact on the fluidity of the labour market, by raising the flow of job creations and destructions.

C1 Share of short-term jobs in salaried employment
(%)



Source: Insee, Labour force survey.

C2 Share of workers hired on fixed-term contracts
(%)



Source: Dares, Reporting of workforce movements. Authors' backward projections before 1999.

However, this greater flexibility of employment, concentrated only on temporary jobs, has not led to a significant reduction in unemployment. It has contributed to enhancing the protection of those on open-ended contracts to the detriment of the integration into stable employment of those who alternate short-term jobs and unemployment. In addition, it weighs on the level of human capital, with less training and less accumulation of human capital specific to companies, and hence on the level of labour productivity.

This *Rue de la Banque* looks at the financial incentives for reducing this segmentation by drawing on Berson and Ferrari (2015).

The economic literature shows the existence of a relationship between the protection of permanent jobs and the duality of the labour market

The economic literature has shown that the more frequent recourse to fixed-term contracts could be linked to the labour market institutions and, in particular, to employment protection gaps between temporary contracts and stable jobs. Two major theoretical articles look at the case of France. Blanchard and Landier (2002) demonstrate the negative effect of fixed-term contracts on the functioning of the labour market: an increase in labour turnover and a rise in unemployment. Cahuc and Postel-Vinay (2002) show that the combination of strong employment protection on open-ended contracts and the introduction of temporary contracts is inefficient, in other words it lowers the macroeconomic balance. However, workers on fixed-term contracts can expect to obtain a permanent contract in the future, which explains the persistence of the phenomenon.

Empirically, the impact of the protection of permanent jobs and the use of short-term jobs has been studied in particular by Bassanini and Garnero (2013) and Bentolila *et al.* (2012), who highlight this correlation.

In the light of these analyses, proposals have been put forward to bring the protection of temporary contracts in line with that of stable jobs or even to eliminate this distinction by introducing a single contract.[1] However, these reforms pose legal difficulties and raise questions of political and social acceptability in times of crisis. An alternative route is to put in place financial incentives to encourage employers to focus on stable employment.

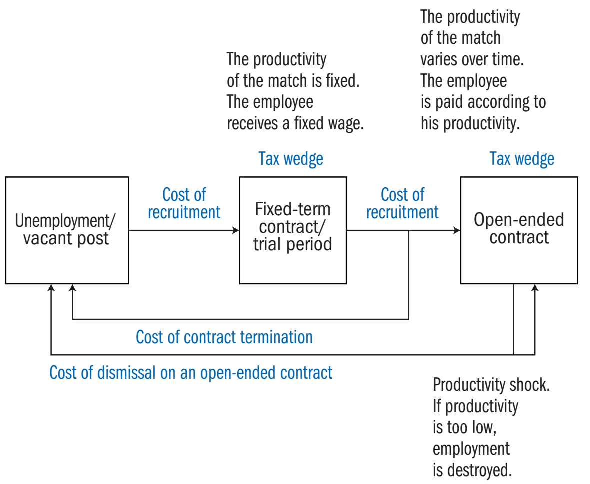
An employer-employee matching model to study the French labour market

We have developed a matching model between employers and employees à la Pissarides (2000). Making the termination of open-ended contracts depend on productivity shocks enables us to study the impact of taxes on contract terminations. Due to the existence of the minimum wage, real wages cannot be considered as perfectly flexible, especially for the temporary jobs of low-skilled workers. In order to take this aspect into account, the labour market is broken down into two sub-populations of workers according to the level of qualification. Skilled workers always negotiate their wages, while low-skilled workers are paid the minimum wage on fixed-term contracts and negotiate their wages once they have been hired on permanent contracts.

There is a succession of three different states on the labour market (see Chart 3): the individual is unemployed and the firm has a vacant job to fill; the individual has been hired on a fixed-term contract or for a trial period; the individual has been hired on a permanent contract. Each transition is costly (recruitment, contract termination) and social contributions are deducted from wages to finance an unemployment insurance.

1 *See in particular the report by Cahuc and Kramarz (2004).*

C3 Diagram of the model



This model is estimated and calibrated on the French data for wage levels, flows from one state to another, levels of contributions, costs of transitions and unemployment benefits. Based on the literature, we have established the relative powers of negotiation and the supply of labour. Productivity is calibrated to correspond to the French labour market as modeled.

Financial incentives can guide firms in their choice of contract

Three proposals have been put forward to reduce segmentation. Firstly, introducing an unemployment insurance contribution that decreases with seniority would encourage employers to hire on permanent contracts. The over-contribution during the first months or first years of employment can be considered, in a schematic way, as a tax on recruitment, spread out over time. Secondly, drawing on the US system of experience rating, Blanchard and Tirole (2003) proposed introducing a tax on dismissals in order to partly finance unemployment benefits. Such a tax would have the virtue of internalising the social cost of unemployment in the employer's dismissal decision. These first two proposals would increase the cost of flows on the labour market, which would encourage employers to increase the length of employment. In order to remain neutral ex ante for public finances during the simulations, these measures are offset by an equivalent decrease in the tax wedge.[2]

Finally, a third policy is inspired by the 2012 labour market reform in Italy. Temporary contracts are subject to an over-contribution which is designed to discourage this type of recruitment. When employers extend this contract by hiring on a permanent contract, all or part of this over-contribution is reimbursed. This measure was abolished in 2014 due to reimbursement difficulties.

Unlike the previous two cases, the incentive does not operate solely through a penalisation of the flows in the labour market but also through an incentive to hire on a permanent contract. This system is therefore less likely to rigidify the functioning of the labour market than the previous two proposals. Based on these proposals, we simulate three tax alternatives amounting to 0.1% of GDP, using the model presented: (i) a tax on recruitment; (ii) a tax on stable and temporary job terminations allowing a reduction in the tax wedge;[2] (iii) an over-contribution on temporary jobs which finances a recruitment premium on stable jobs.

Social security contributions to unemployment insurance that decrease over time

By financially penalising hiring on fixed-term contracts, the reform reduces the flexibility of the labour market: the average duration of unemployment and that of open-ended contracts increase. Since hiring is more costly, employers are encouraged to reduce labour turnover and hence to keep their employees in employment. The rate of employment on permanent contracts increases, that on fixed-term contracts decreases and the share of short-term contracts converted into permanent contracts increases slightly. This phenomenon is much more significant for unskilled workers than for skilled workers because, in the former case, with workers being paid the minimum wage, the cost of the tax is borne entirely by the employer, whereas in the latter case, it is also borne by the employees through a reduction in the negotiated wage.

By reducing employment inflows and outflows, the matching is of lower quality and the productivity of work on open-ended contracts declines. The effect on total

2 *The tax wedge is the difference between the total cost of a worker for the company and the wage received by the employee, i.e. the difference between the super gross wage and the net wage.*

productivity is mitigated by the increase in the proportion of open-ended contracts, which are more productive than fixed-term contracts. In total, value added decreases. Wage moderation is mainly concentrated among unskilled workers on an open-ended contract. Conversely, the wage of skilled workers on open-ended contracts is unchanged because the decline in productivity is then sufficiently low to be offset in the wage negotiation by the reduction in social security contributions.

Taxation of work contract terminations

The effects of this reform are close to those of the previous reform. This is mainly due to the fact that a tax on the contract termination is expected by the employer at the time of hiring.

By encouraging employers to preserve jobs, the reform increases the average duration of open-ended contracts. The incentive to preserve employment is a direct one because of the contract termination tax, whereas previously it operated through the expectation of higher employee replacement costs: in line with intuition, the effect on the average duration of open-ended contracts is greater than for the previous reform. The reform also discourages hiring, via the expectation of higher termination costs: the average duration of unemployment increases but less than in the previous reform. Again, this is consistent with intuition since the incentive here is less direct. The reform increases the employment rate on permanent contracts and reduces that on fixed-term contracts. By increasing the duration of open-ended contracts more significantly than in the previous reform, the negative effect on productivity is slightly stronger with an equivalent impact on value added.

Beyond the selected calibration on the French economy, some general comparative results can be highlighted. Thus, for both skilled and unskilled workers, the introduction of a tax on terminations is more favourable than that of gradually decreasing contributions in terms of the welfare of new entrants. The same holds true for the average duration of unemployment. On the other hand, gradually decreasing contributions are more favourable than the tax on terminations in terms of the rate of conversion of fixed-term contracts into permanent contracts for skilled workers. Both policies have a similar effect in terms of unemployment rates.

Increase in social security contributions on fixed-term contracts and subsidies for hiring on permanent contracts

Contrary to the previous two reforms, the Italian reform encourages employers to recruit on an open-ended contract and does not therefore affect the flexibility of the labour market. It increases more markedly the share of fixed-term contracts converted into permanent contracts. Recruitments on fixed-term contracts are slightly lower. This reflects the ambiguous effect of higher inflows and outflows of open-ended contracts on the one hand and a higher tax wedge on fixed-term contracts on the other. However, the decrease in inflows into fixed-term contracts is significantly lower than in previous reforms. These comparative elements of labour market flexibility are reflected in the average durations of unemployment and open-ended contracts: the average duration of unemployment increases less than in the previous two reforms; and that of open-ended contracts declines while it increased previously.

The share of temporary employment in salaried employment decreases only slightly, whereas it declined more markedly in the previous two reforms. Admittedly, the increase in contributions on short-term contracts increases the share of open-ended contracts in employment. However, this effect is offset by the decrease in entry costs into open-ended contracts, which increases the share of short-term contracts in employment via the trial periods. This result, which is at first sight somewhat paradoxical, is explained by the fact that the fall in costs increases the discounted value of unemployment, which increases the number of exits of open-ended contracts; this effect clearly outweighs that linked to the larger proportion of fixed-term contracts converted into open-ended contracts thanks to lower recruitment costs on open-ended contracts. Conversely, the steady decline in payroll taxes had little effect on the share of temporary employment in salaried employment for the two reforms presented above.

Benefiting from the stronger flexibility in the labour market, the reform increases productivity. This allows a rise in wages on open-ended contracts, while the wages of skilled workers on fixed-term contracts decline due to the rise in the tax wedge and despite the expectation of the subsidy for hiring on open-ended contracts in the negotiation of wages on fixed-term contracts.

Conclusion

In line with intuition, introducing a tax on contract terminations or a contribution that decreases over time reduces the segmentation of the labour market, which is defined as the proportion of temporary jobs (fixed-term contracts, temporary work, trial periods, etc.) in total salaried employment or as the share of temporary jobs converted into permanent jobs. However, the lesser segmentation is achieved at the cost of less flexibility in the labour market, with negative consequences for labour productivity, wages and economic activity.

In addition, a tax on contract terminations is more favourable than degressive contributions in terms of the welfare of new entrants to the labour market and the average duration of unemployment. In the light of numerical simulations, the former is more beneficial in terms of employment but, on the other hand, it weighs more heavily on labour productivity.

On the other hand, an over-contribution on temporary jobs that finances a premium for the employer if it subsequently transforms the recruitment into permanent employment preserves the flexibility of the labour market. It makes it possible to reduce the segmentation of the labour market in the sense that it greatly increases the transition between short-term jobs and permanent jobs. However, it does little to reduce the proportion of temporary jobs in total employment. But the effect on productivity and economic activity is positive.

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