

## Projections at the horizon of 2015

### EMPLOYMENT-TRAINING PROSPECTS AT THE HORIZON OF 2015: Latest Results New Approach

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The employment-training prospective studies carried out by the Bureau d'information et de prévisions économiques – BIPE (Office for Information and Economic Forecasting) use certain macroeconomic scenarios to draw up forecasts on the demand for youth recruitment for all levels of qualification. The last study specifies the volume of this recruitment according to professional fields. Various sectors are expected to increase noticeably: construction-public works, civil service-legal professions, personal services, teaching, business and healthcare. The required level of training will be higher than that currently seen in those leaving the education system. The number of students leaving the education system will remain higher than recruitment needs, allowing leeway for training-employment policies. However, there may be tensions mainly on the high levels of training in some regions and socio-professional branches.

The *Direction de l'évaluation, de la prospective et de la performance* (DEPP) carries out regular employment-training prospective studies. To do so, it turns to the BIPE, which has a long experience in this sector and first carried out a study in 1985. At that time, the prospective studies on employment-training were set aside by both the *Commissariat général au Plan* and INSEE. The situation is now completely different as prospective studies on employment are regularly carried out by the Directorate for Research, Studies, and Statistics - DARES (Ministry of Employment, Social Cohesion, and Housing) and the *Centre d'analyse stratégique* (which replaced the *Commissariat général au Plan*) through the activities of the *Prospective des métiers et des qualifications* (Employment and qualification prospects) group. This is the twelfth DEPP-BIPE study to have been carried out.

#### **General Framework of the Depp-Bipe Study: The Macroeconomic Scenario**

Unlike the former studies carried out, this one is based on one macroeconomic trend. It is mainly innovative because it uses an approach based on professional fields rather than social categories as it previously did.<sup>1</sup>

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#### NOTES

<sup>1</sup> For further information on the methodology used by the BIPE, see *Prospective emploi-formation 2015: une nouvelle approche*, Les Dossiers, n° 175, MEN-DEPP, July 2006.

Compared with the trend scenario used in 2004, the main change relates to retirement age, more specifically called “final job-leaving age”<sup>2</sup>. Following the example of other prospective studies, the average final job-leaving age has increased by one year. By 2015, it will be slightly over 59.

The other economic hypotheses are considerably the same, notably with regard to the annual average growth rate of the GDP estimated at 2%.

### ***A changing global economy***

During the 1990s, the dynamism of America’s economy drove world growth thanks to an exceptional capacity to attract world savings (notably from Asia) to itself. The rapid growth of investments, notably in information and communication technologies, has been accompanied by a fast dissemination of the benefits derived from these technologies throughout the economy, leading to overinvestment which has been corrected over the past few years. The 2005-2015 growth scenario speculates a continued dissemination of the benefits derived from new information and communication technologies (impacting on sectorial contribution to growth) and a maintained relative dynamism of the world economy.

However, all the potential risks involved with growth are not eliminated. The structural imbalances in the American economy, notably its balance sheet deficit, remain strong and will weigh on average growth in the future. As a result, in the 2005-2015 period, America’s economy will not regain the dynamism of the 1990s.

Europe nevertheless benefits from the positive consequences of world growth. Driven notably by exports, the demand facing European and French companies pushes them to further increase their investments. Furthermore, the lack of questioning of the social model, added to a household savings rate which remains high for the Anglo Saxon world, make it possible to support a growth of consumption in EU-15 countries (excluding the United Kingdom) greater than 2% per year.

For the 2002-2015 period, the following macroeconomic hypotheses were put forward:

- an average GDP growth rate of 2%, which relates to the “potential” of France’s economy, and which can be broken down into a 1.5% productivity gain per salary earner and a 0.5% growth in salaried work;
- a growth in productivity that is considerably equal to that of the 1990-2002 period;
- a total volume of hours worked which increases by 0.5% like salaried work, in the measure that time worked per employee remains stable.

**Table 1- Growth, employment, work time and productivity (%)**

	1980-1990	1990-2002	2002-2015
GDP	2.5	1.9	2.0
Hourly productivity	2.6	1.6	1.5
Total volume of hours worked	-0.1	0.3	0.5
Work time per salary earner	-0.7	-0.8	0
Salaried work	0.6	1.1	0.5
Productivity per salary earner	1.9	0.8	1.5

Sources: 1980-2002 INSEE national accounts. 2015 projections BIPE

<sup>2</sup> In the Employment survey carried out by INSEE, the final job-leaving period is explored under its various forms and not as the moment one is entitled to retirement benefits.

## Employment Prospects

### *Medium term stability of the active population*

With regard to the evolution of the active population during the 2002-2015 period, several points should be underlined:

- contrary to what is often announced, in 2015, the active population will be markedly higher (over one million) than that of 2002 and will amount to 27.2 million persons. It will be close to the active population between 2005 and 2010;
- the high rise in the population of 55-64 year olds from 5.9 million in 2002 (mostly made up of persons born during the low birth years during the war) to 8.0 million in 2015. The following hypothesis was put forward: a rise in their rate of participation in the active population, as a continuation of what has been observed over the past few years. These two factors largely explain the previous phenomenon;
- the participation rate of young people under 25 is expected to remain stable at 30 %. Thus, we speculate on a stable length of schooling, in line with the observed trend.

**Table 2- Evolution of the total population and the active population 2002-2015**

	2002			2015		
	Population (in millions)	Active population (in millions)	Participation rate (in %)	Population (in millions)	Active population (in millions)	Participation rate (in %)
<b>15-24</b>	7.6	2.3	30.2	7.5	2.2	30
<b>25-54</b>	24.8	21.4	86.4	24.5	21.4	87.1
<b>55-64</b>	5.9	2.5	41.7	8	3.5	43.7
<b>65 and over</b>	9.6	0.1	1.3	12.6	0.1	1
<b>Total 15 and over</b>	47.9	26.3	54.9	52.6	27.2	51.7
<b>15-64</b>	38.3	26.2	68.6	40	27.1	68

Source: BIPE Projections based on active population projections by INSEE

Based on the evolution of employment and unemployment, the following hypotheses were presented:

- the activity rate, which slowly decreases between 2002 and 2015, following a slight rise between 1990 and 2002, will be accompanied by a slight rise in the employment rate throughout the period (from 60.4% to 63.0%), which is still far from the European strategy target set in Lisbon (70%);
- the unemployment rate falls throughout the period, reaching 7.4%.

**Table 3 - Active population. employment and unemployment**

<b>In millions</b>	<b>1990</b>	<b>2002</b>	<b>2015</b>
<b>Population 15-64 year olds</b>	36.9	38.3	40.1
<b>Active population</b>	24.6	26.3	27.2
<b>Employed active population</b>	22.3	23.9	25.2
<b>Unemployed</b>	2.3	2.3	2
<b>In %</b>			
<b>Activity rate (1)</b>	66.5	68.6	68
<b>Employment rate (2)</b>	60.4	62.5	63
<b>Unemployment rate (3)</b>	9.2	8.9	7.4

(1) Activity rate = Population of 15-64 year olds

(2) Employment rate = Employed active population / Population of 15-64 year olds

(3) Unemployment rate = Unemployed / Active population

Sources: INSEE – exploitation of Employment surveys. 2015 projections BIPE

### ***Contrasted evolution in employment according to the sector of activity***

Employment projections per sector of activity over the 2002-2015 period, give results that are in line with the trends observed over the 1990-2002 period, excluding the construction sector, which goes against the trends seen from 1990-2002.

This is demonstrated by the following evolutions:

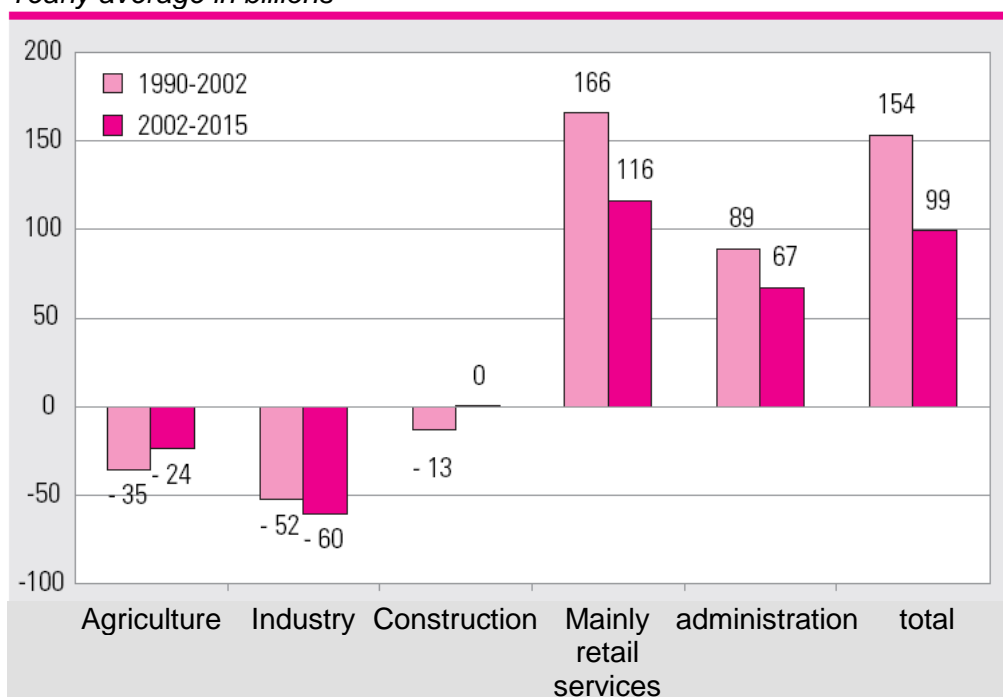
- reductions in employment in the agricultural sector (lower than the 1990-2002 period) and in industry (higher than the 1990-2002 period);
- a very slight rise in employment in the construction sector (reduction over the 1990-2002 period);
- rises in employment in the service sector, lower than the 1990-2002 period, mainly in retail services and administration (healthcare, education, etc.).

In all, there was an annual increase of almost 100,000 jobs per year instead of 150,000 over the 1990-2002 period.

Thus, the hypotheses put forward imply a lower rise in the total number of jobs.

**Graph 1 – Variation in employment for each sector of activity**

Yearly average in billions



Source: BIPE

### *Different evolutions of employment in the various professional fields*

At the horizon of 2015:

- professional fields such as “agriculture, marine, fishing, forestry” and “light industries (textile, leather, wood, graphics)” are expected to pursue their strong decline;
- professional fields such as “mechanics, metal work”, “processing industries” and “management, administration” are expected to lose jobs after creating a significant number of posts over the 1993-2002 period;
- professional fields such as “electricity, electronics”, “banking and insurance”, “maintenance” and “construction, public works” are expected to either continue losing jobs or continue creating few jobs;
- between 2002 and 2015, professional fields such as “communication, information, entertainment” and “studies and research” are expected to create a yearly average of as many jobs as the 1993-2002 period;
- the hospitality and food management professional field is expected to see a rise in its workforce of 7,000 per year during the 2002-2015 period, following stagnation between 1993 and 2002;
- professional fields such as “industrial engineers and executives”, “civil service and legal professions”, “teaching, training” and “tourism and transport” are expected to see a positive change in job creation. This change is expected to be high for three professional fields “civil service and legal professions”, “teaching, training” and “tourism and transport”.

Four professional fields are expected drive most of the job creations between 2002 and 2015: “personal services” (family jobs, security, etc.), “healthcare, social work, culture and sports”, “business” and “IT”, by order of importance. Personal services are expected to create four times as many jobs as IT.

**Table 4- Evolution in workforce by professional field**

	Workforce thousands			(in Average annual variation)			
	1993	2002	2015	In thousands		In %	
	1993	2002	2015	1993-2002	2002-2015	1993-2002	2002-2015
Agriculture, marine, fishing, forestry	1,284	1,055	791	-25	-20	-2.2%	-2.2%
Construction, public works	1,597	1,595	1,627	0	2	0.0%	0.2%
Electricity, electronics	306	279	247	-3	-2	-1.0%	-0.9%
Mechanics, metal work	1,187	1,276	1,150	10	-10	0.8%	-0.8%
Processing industries	901	1,113	1,025	24	-7	2.4%	-0.6%
Light industries (wood, graphics)	591	468	337	-14	-10	-2.6%	-2.5%
Maintenance	608	619	628	1	1	0.2%	0.1%
Industrial engineers and executives	103	154	202	6	4	4.6%	2.1%
Tourism and transport	1,546	1,807	1,886	29	6	1.8%	0.3%
Craft industry	123	104	101	-2	0	-1.9%	-0.2%
Management, administration	2,359	2,685	2,643	36	-3	1.4%	-0.1%
IT	289	448	592	18	11	5.0%	2.2%
Studies and research	192	267	351	8	7	3.7%	2.1%
Civil service and legal professions	1,508	1,603	1,661	11	4	0.7%	0.3%
Banking and insurance	614	580	568	-4	-1	-0.6%	-0.2%
Business	2,128	2,308	2,566	20	20	0.9%	0.8%
Food and hospitality management	979	979	1,071	0	7	0.0%	0.7%
Personal services (family jobs, security...)	2,493	2,983	3,578	54	46	2.0%	1.4%
Communication, information, entertainment	297	364	451	7	7	2.3%	1.7%
Healthcare, social work, culture and sports	1,573	1,934	2,325	40	30	2.3%	1.4%
Teaching, training	1,143	1,284	1,391	16	8	1.3%	0.6%
<b>Total</b>	<b>21,821</b>	<b>23,905</b>	<b>25,191</b>	<b>232</b>	<b>100</b>	<b>1.0%</b>	<b>0.4%</b>

Source: 1993, 2002 INSEE, Employment survey and 2015 BIPE

These results are quite close to those obtained by DARES and the Commissariat general au Plan<sup>3</sup>.

However, it essential to point out that there differences in three sectors: “tourism and transport, management-administration” (the DARES-CGP estimation is higher than that of the BIPE) and “administrative and legal professions” (where the opposite holds true). On the whole, the BIPE’s predictions in total number of jobs are 1.3% below that of DARES and CGP.

NOTE

<sup>3</sup> See « Les métiers en 2015: l’impact du départ des générations du babyboom », *Premières synthèses*, n° 50.1, Dares Commissariat général au Plan, December 2005.

**Many cases of final departure from the workplace linked to the retirement of baby boomers**

Retirement or more specifically, final departure from the workplace, is one of the most significant factors that determine future recruitment.

During the 1990 - 2002 period, 4.3 million employed active persons retired. Between 2002 and 2015, 6.6 million retirements are expected to occur using the hypothesis of an average retirement age of 59 in 2015.

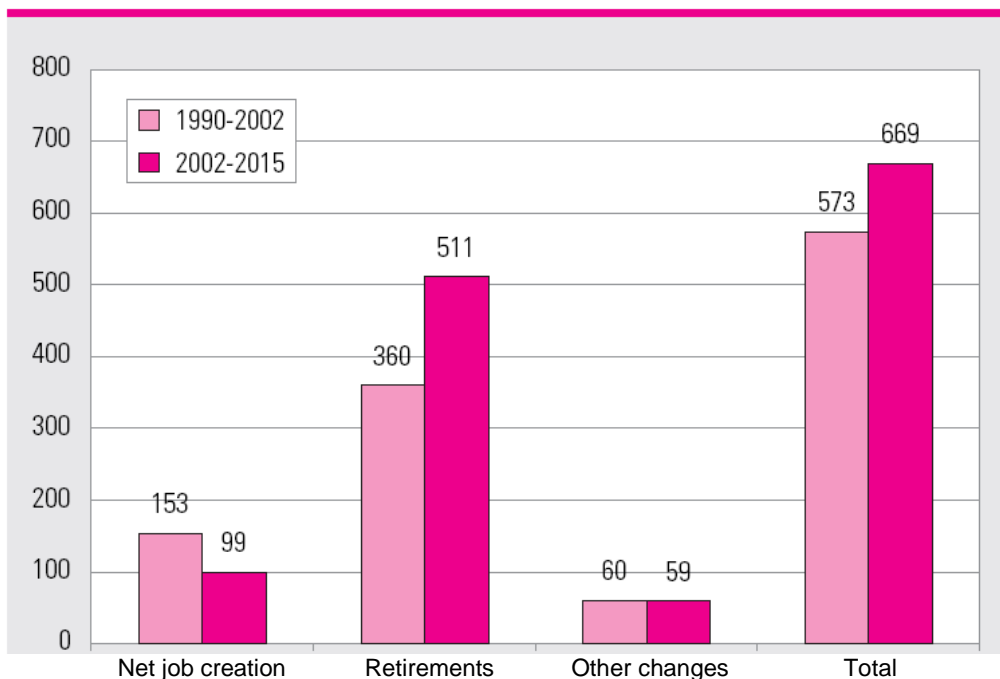
Over the 1990 to 2002 period, an average of 360,000 employed active persons retired each year. Based on our hypothesis using an average retirement age, 511,000 persons are expected to retire between 2002 and 2015, i.e. a starting average percentage of 1.6% (1990-2002) and 2.1% (2002-2015) respectively, of the employed active population. This means that 150,000 additional persons will be leaving their jobs each year. This estimation is slightly lower than that of DARES (546 000 departures per year).

Overall, workforce renewal based on retirements accounted for over 63% of net external recruitment needs, estimated at an average of 573,000 per year between 1990 and 2002. This proportion is expected to climb to 76% during the 2002-2015 period. These results are very close to those obtained by DARES (80%).

**Total recruitment needs markedly higher than those of the 1990-2002 period**

Net external recruitment needs, shown in *graph 2*, as an annual average and in thousands, correspond to the sum of net job creations, retirements and other changes. Considering the significant number of retirements and despite a fall in net job creations, the annual total of recruitment needs will increase by almost one hundred thousand jobs over the 2002-2015 period.

**Graph 2 – External recruitment needs for each factor**



Source: BIPE

## Recruitment Needs for Young People

Recruitment needs for young people depend on competition in the labour market between the unemployed and women returning to work. This competition mainly affects the least qualified people. Several hypotheses have been put forward relative to competition between young people, the unemployed and women returning to work on the one hand, and young people and employed persons (for recruitment of intermediate professions and executives) on the other hand. This reference hypothesis has been used to perform detailed calculations.

### *594,000 young people leaving the education system will be recruited*

Based on the reference hypothesis, recruitment needs for young people leaving the education system will be around 549,000. This represents a total external recruitment of 669,000 persons from which should be subtracted recruitment of unemployed persons (25,000) and women returning to work (50,000). Over the 1990-2002 period, a total of 42,000 returned to work and the unemployment balance was negative (ie. -41,000). The reference hypothesis, consistent with the decline of unemployment and a rise in the active population, therefore shows a considerable rise in competition for young people, the unemployed and those returning to work.

However, it is essential to point out a “high” hypothesis in recruitment of young people which comes from employers’ preference for hiring young people in times of lowered unemployment. This situation already occurred between 1998 and 2000 when a total of 620,000 young persons were recruited.

Knowledge of both the factors that determine recruitment needs (stock variation linked to the rise in GDP, retirement and other movements), on the one hand, and the factors that meet these needs (unemployment balance, women returning to work, persons leaving the education system) on the other hand, makes it possible to use the balance of these groups of factors to determine net recruitment needs for each professional field.

*Previous studies highlighted that results based on level of qualification are closely dependent on hypotheses of job promotion. In this study based on professional fields, it was not possible to take this notion into account, but mobility between the different professional fields was calculated. This falls under the category of “other movements” which also includes death.*

Table 5 illustrates these balances for each professional field over the 2005-2015 period.

**Table 5- Recruiting in each professional field over the 2002-2015 period**

Professional field	Factors affecting net			Net recruitment needs	Factors meeting net recruitment needs		
	Stock Variation	Retirement	Other movements		Unemployment balance	Balance women going back to work	Departure from education system
Agriculture, marine, fishing, forestry	-20	33	12	25	1	2	23
Construction, public works	2	30	22	54	-3	0	56
Mechanics, metal work	-10	25	13	28	-3	1	30
Processing industries	-7	28	-5	16	-1	1	16
Tourisme et transports	6	31	-1	36	3	3	31
Management, administration	-3	54	-15	36	-7	1	41
IT	11	2	-3	10	0	0	11
Studies and Research	7	6	1	14	0	0	13
Civil service, legal professions	4	52	-5	51	13	1	36
Banking and insurance	-1	12	3	14	0	0	14
Business	20	41	11	72	-6	-1	78
Food and hospitality management	7	18	15	40	-4	2	42
Personal services (family jobs, security)	46	71	8	125	31	39	54
Communication, information, entertainment	7	5	-2	10	0	0	11
Healthcare, social work, culture and sports	30	31	7	68	2	1	65
Teaching and training	8	42	-5	46	1	0	44
Others	-7	28	3	24	-4	0	29
<b>Total</b>	<b>100</b>	<b>509</b>	<b>59</b>	<b>669</b>	<b>23</b>	<b>50</b>	<b>594</b>

Source : BIPE



### ***Professional fields in which youth recruitment will be the highest***

It is possible to identify the professional fields which will call upon an increasing number young people who have left the education system, by using the 1990-2002 period as a basis for comparison:

- construction, public works (21,000 more recruitments per year over the 2002-2015 period than the 1990-2002 period),
- civil service, legal professions (+ 14,000)
- personal services (+ 13, 000)
- teaching (+ 8,000),
- business (+ 7,000)
- healthcare, social work, culture, sports (+ 4,000).

The IT sector will hire a slightly lower number of young people who have left the education system than it did over the 1990-2002 period.

Lastly, management-administration will recruit a substantially lower number of persons (-18,000) than it did over the 1990-2002 period. In this sector, DARES-CGP estimates are different from those of the BIPE.

This approach enables a first analysis of the sectors requiring deeper analysis to determine if the initial and further training offered will meet the rising number of jobs to be filled. Using this approach will avoid issues linked to the intensity of the training/profession ratio which is known to be weak, since in this case it is enough to speculate that from 2002-2015 it will remain the same as in the 1990-2002 period. The significant increases which can be seen represent changes as compared with the 1990-2002 period.

It is therefore necessary to carry out a more in-depth study of the sectors, using all the available expert resources.

### ***Major differences in balance factors for the various professional fields.***

In both the 1999-2002 and the 2002-2015 periods, personal services will have the highest number of jobs to be filled. Although a major part of these needs are, and will be met by unemployed persons or women returning to work, recruitment needs for young people will, however, remain high.

In the healthcare, social work, culture and sports sectors, recruitment needs will also be high, but in this case, they will have to be met by those who leaving the education system. The situation will be similar in sectors that will hire many persons: business, construction - public works, teaching-training, food and hospitality management and management-administration.

### **High Recruitment Diversity In Professional Fields Based On Level Of Qualification**

First of all, it is essential to explain the hypotheses put forward to present this breakdown of recruitment needs for each level. These hypotheses are mainly based on analysis of recent trends.

### ***Structure of needs for each level of qualification***

There is a clear rise in requirements based on the level of qualification when young people are being employed, and this applies to every level of qualification. This evolution is high for all the different categories of employees.

### ***The offer effect is often presented as a determining factor...***

Up until recently, the main line in recruitment policy was “as long as the labour market has higher qualifications than those matching the profile sought, why not recruit better qualified candidates?”

However, in recent years, companies seem to be slightly departing from such practices after seeing experiencing their pernicious effects: demotivation, difficult career management, etc.

### ***... but greater requirements at every level of employment cannot be underestimated***

Requirements in terms of know-how, communication skills and ability to assume responsibilities are highly demanded in most job categories.

All the prospective studies carried out (often alongside professionals) on the different jobs, as well as on qualification and training requirements, all show same point and stress the importance of these evolutions. These evolutions were probably most marked in administrative jobs. In fact, the development of IT and office automation triggered a higher demand for new skills without the concerned jobs requiring any higher qualifications.

### ***This trend is expected to continue, but to a moderate extent.***

*Table 6* can be obtained by applying these hypotheses to each professional field.

A thorough analysis of all the professional fields reveals a high incidence of divisions for each level of study:

- - exclusively higher education qualifications for: studies-research and teaching-training;
- - *baccalauréat* level and beyond for banking-insurance, IT, civil service and legal professions, management-administration, communication-information-entertainment;
- - all levels of study in: processing industries, tourism-transport, business, healthcare-social work, culture and sport. This is also true for the following sectors which are characterized for their high volume of recruited persons with qualifications below the *baccalauréat* level: construction-public works, agriculture-marine-fishing-forestry, mechanics-metal work, food and hospitality management Hiring of persons below the *baccalauréat* level accounts for almost half (48%) of the recruitment in the personal services sector;
- - it is essential to point out that a rise in levels of qualifications may impact on the level and volume of recruitment of apprentices, since entry into apprenticeships is in this case considered as entry into the workplace. The fall in level IV means that apprenticeship recruitments will be the only recruitment at this level in several professional fields, particularly those related to the construction and industrial sectors. They could even lead to a fall in the recruitment of apprentices. This point deserves to be examined more deeply alongside experts in the professional branches concerned.

**Table 6- Recruitment for each professional field based on level of qualification for the 2002-2015 period (in %)**

Professional field	Isced and 6	5A	Isced level 5B	Isced level and 3B	3A	Isced level 3C	Isced level 2	Total
Agriculture, marine, fishing, forestry	6		10	33		28	23	100
Construction, public works	6		17	20		24	33	100
Mechanics, metal work	3		20	26		24	27	100
Process industries	8		25	36		15	16	100
Tourism and transport	9		16	38		17	20	100
Management , administration	30		33	35		1	1	100
IT	74		17	8		1	0	100
Studies and research	92		7	1		0	0	100
Civil service and legal professions	50		22	26		1	1	100
Banking and insurance	43		31	24		1	1	100
Business	18		24	39		8	12	100
Food and hospitality management	7		7	26		25	35	100
Personal services (family employment, security...)	8		11	33		25	23	100
Communication, information, entertainment	62		22	13		1	2	100
Health, social work, culture and sport	34		37	20		5	4	100
Teaching, training	96		3	1		0	0	100
Others	20		26	27		12	15	100
<b>Total</b>	<b>26</b>		<b>20</b>	<b>27</b>		<b>13</b>	<b>14</b>	<b>100</b>

Source: BIPE

Note: link between the French classification by level and ISCED

levels I and II (French classification) = ISCED levels 5A and 6; level III = ISCED level 5B; level IV=ISCED levels 3A and 3B; level V= ISCED level 3C; level VI=ISCED Level 2

***Projections for those leaving the education system still exceed recruitment needs***

The number of students leaving the education system in 2010 will be higher than the figures of 1995 and 2003.

Additional studies carried out by the DEPP show that there will be little evolution in the number of departures from 2010 to 2015 (*see table 7*).

Another element to be taken into account is the evolution of the population aged 16 to 25.

This population will slightly decrease between 2005 and 2015 (*see table 8*).

This reduction is expected to affect the number of persons leaving the education system. Supposing that the fall in the number of departures will be proportionate to that of the population of 16-25 year olds,

there would be an average of around 740,000 persons leaving over the 2002-2015 period and this figure would be around 730,000 in 2015.

The difference between the number of persons leaving the education system and recruitment needs will slightly fall but from 2002 to 2015 it will not differ greatly from the number seen between 1990 and 2002 (see *table 9*).

One must first of all take into account the number of persons entering into jobs after leaving the education system. Indeed, all the persons leaving the education system do not “enter into jobs”. According to data emerging from CEREQ *Génération* surveys, nine months after they leaving the education system, around 93% of young persons are in a job.

An estimated 690,000 young persons on average are therefore expected to enter the labour market every year.

**Table 7- Evolution in the population leaving the education system (in thousands)**

	1990	1995	2000	2003	2005	2010
<b>Total number of persons leaving the education system</b>	642	723	760	721	760	744

Source: DEPP (Education & formations n°64 and l'état de l'École n°15 - 2005)

**Table 8- Evolution in the population of 16-25 year olds**

	1990	1995	2000	2005	2010	2015	2020
<b>Pop. of 16-25 yr olds</b>	8,667,956	8,066,749	7,658,698	7,860,379	7,727,671	7,558,800	7,722,196

Source: Insee. Nouvelles projections démographiques. July 2006.

**Table 9- Comparison between those leaving the education system and recruitment needs for young people**

	1990-2002	2002-2015
Number of persons leaving the education system /yr	720,000	740,000
Recruitment needs for young people / yr	572,000	594,000
Surplus of young people over needs	148,000	146,000

Source: DEPP – BIPE

**Table 10- Evolution in recruitment needs for young people leaving the education system at each level of qualification**

	1990-2002	2002-2015	
Isced level 3 needs	338,000	320,000	-18,000 (-5%)
Isced level 5B needs	109,000	120,000	+11,000 (+10%)
Isced level 5A and 6 needs	125,000	154,000	+29,000 (+23%)
<b>Total</b>	<b>572,000</b>	<b>594,000</b>	<b>+22,000 (+4%)</b>

Source : BIPE

This figure is far greater than the 594,000 young people leaving the education system who will be recruited. It is also far greater than the 620,000 young people corresponding to the high hypothesis (*see table 10*).

It is therefore evident that, as it was during the 1990-2002 period, recruitment of young people leaving the school system will be substantially lower than the total number of persons leaving the school system.

Thus, despite the high number of retirements, assuming a GNP trend growth of 2%, there will be no deficit (in the volume) of persons leaving the school system. The situation of those leaving the school system will remain fairly difficult. Overall, the volume of those leaving the school system will be “sufficient” to feed the labour market, but will not prevent sectorial, local and qualification level-related tensions. It is essential to bring to mind that in the former study, which explored the hypothesis of a 3% GNP growth, conclusions were made on tensions on the volume of those leaving the education system, and more particularly for higher education qualifications. However, if the high hypothesis of recruitment of young people proves true (recruitment of 620,000 young people), there would be great tensions in higher levels and particularly on level III, which already had little room for manoeuvre.

#### ***A growing need for school leavers with higher education qualifications***

It is estimated at 46%, as compared with 39% during the previous period (the 1990s)- not a major change. It is essential to compare this proportion with that of school leavers with higher education qualifications<sup>4</sup>.

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NOTE:

<sup>4</sup> From a methodological viewpoint, it is necessary to point out that the proportion of school leavers with higher education qualifications in the total number of persons leaving the education system is different from the proportion of a generation that has a higher education qualification. A 50% target has been set for the last indicator in both the Annex to the

However, it must be noted that in these calculations, apprentices are only considered as active persons. The rise of their level through apprenticeship is therefore not taken into account. This leads to underestimation of the needs for all the different levels of qualification at the end of initial training, which is particularly significant (around 4 percentage points) for level V (Isced 3C).

In addition, the specific need for **levels L, M and D** (I and II, Isced 5A and 6) is truly new, increasing from 22% to 26% of recruitment of young people. Strong tensions may also occur in level III, especially with a scenario of preference for youth recruitment. It is also essential to bring to mind that a rise in the level of training has an effect on the economy's overall growth. One can therefore expect to see a stronger growth of this proportion which is more in line with the 50% target set for 2010.

As has already been indicated, construction and public works, civil service and legal professions as well as personal services are fields which will see the highest rise in recruitment of young persons.

With regard to levels of training, the most remarkable progression can be seen in the construction and public works sector, with four times as many level III recruitments.

The civil service and legal professions will also experience very strong growth in recruitment of young school leavers with tertiary level qualifications, with a significant rise in graduates from long higher education studies, the figure of which will more than double. Short higher education courses will also see a major increase in this field.

A strong rise in the proportion of graduates from long higher education courses can be noted in the fields of teaching and training.

One can therefore deduce that there will surely be significant competition between the civil service and the private sector for graduates from long higher education studies.

With regard to level III, it is essential to note its strong growth in business, personal services and the professional fields of "hotels-café-restaurants", which is probably linked to the development of an intermediary hierarchy and/ or hiring of students in short-term employment.

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Framework Law of April 2005 and in the higher education programme of the *Loi organique relative aux lois de finances* - LOLF (law on budget laws). However, as an average over several years, when there are little demographic variations, both indicators are quite close. This explains why it is possible to confuse them without causing significant bias.

### *Likely tensions on higher education qualification levels*

Based on the reference scenario, overall, there will be no shortage of young people seeing that the number of persons leaving the education system (even when the current activity rate is applied to them) will exceed the recruitment needs. However, this surplus of young people on the labour market does not imply that there will be no tensions or recruitment difficulties in certain sectors, geographic areas or at certain levels of qualification (see table 11).

**Table 11- Comparison between “persons leaving the education system and average recruitment needs for young people” and the resulting unemployment rate**

Level of qualification	Average recruitments 2002-2015 (in thousands)	Average estimated persons leaving 2002-2015	Entry into jobs	Unemployment rate 2015 (rate at 9 months)	Unemployment rate 2004
Isced levels 5A and 6	154	186	180	15%	21%
Isced level 5B	119	126	122	3%	14%
Isced level 3A and 3B	160	175	161	1%	27%
Isced level 3C	77	129	121	37%	26%
Isced level 2	83	124	107	22%	40%
<b>Total</b>	<b>594</b>	<b>740</b>	<b>692</b>	<b>14%</b>	<b>25%</b>

Source: DEPP, BIPE, CEREQ

Supposing that around 740,000 persons will be leaving the education system during the 2002-2015 period (730,000 in 2015), the average figure of school leavers between 2002 and 2004 may be used to calculate the theoretical unemployment rate by taking into account an activity rate equal to that of 2002 and which differs based on the level of qualification.

A comparison between the projections for persons leaving the education system and recruitment needs indicates that those leaving short higher education studies will be in a situation of nearly full employment and those finishing long studies will face a much lower unemployment rate than that of 2004. For level IV (Isced 3A and 3b), the predictable tension could be reduced by an increase in the activity rate which is low at this level, but this result calls for a greater access to the *baccalauréat*. For level III (Isced level 5B), the tension can only be solved by increasing access to this level.

This situation will undoubtedly give rise to tensions in certain sectors or certain regions. The situation is quite similar to that seen between 1998 and 2000, which had precisely caused some tension.

Thus, the fall in unemployment could also be derived from the rise in recruitment needs and the slight reduction in the number of persons leaving the school system.

However, as the *Centre d'analyse stratégique* has pointed out, the number of persons leaving the system should be articulated with recruitment needs, otherwise a “dark” scenario may arise, causing high recruitment needs and unemployment among young people.

These results would be even vaster if companies favoured the employment of young people. If 620,000 persons were employed each year, youth unemployment would fall to 10%. There would then be

strong tensions on levels III and IV (Isced levels 5B, 3A and 3B). This would probably generate a rise in the activity rate at this level, which is currently much lower than that of upper levels and level V (Isced level 3C). This also shows the importance of promoting greater access to the *baccalauréat*, which will help achieve the 50% target.

Since the activity rate at level III is already very high, the only solution would be to increase access to this level. This brings out the issue covered in this report, notably the importance of helping to reduce failure during students' first years in the tertiary education system.

This type of analysis is largely confirmed in field observations. These field observatories frequently reveal that henceforth, their employment needs (including jobs for workers and qualified employees), will require the minimum of a *baccalauréat* or a *bac + 2* (*baccalauréat* + 2 years of study).

Results of the latest studies carried out by the *Centre d'analyses stratégiques* and the DARES within the framework of the "*Prospective des métiers et qualifications*" group also go along that same line. They even forecast stronger tension on levels of higher education studies.

It is important to highlight the high needs at level III. It is yet to be seen how to position persons leaving *BTS*, *DUT* (to a lesser extent) and *licence professionnelle* studies within this context and within the LMD system.

While this evolution is taking place, holders of a CAP-BEP level qualification and those who have no qualifications would continue experiencing an unfavourable situation. For level VI leavers, who include those who enter into apprenticeships, we have already underlined the high risk of this level of recruitment disappearing (outside of recruitment of apprentices).

The "*Prospective des métiers et qualifications*" studies cited above estimate that the average youth unemployment rate for 2015 will be 56 %, a very alarming percentage. Those who do not find a job will therefore be in an extremely difficult situation.



We can now indicate the fields which will recruit the most young people leaving the education system: business, healthcare-social work, construction-public works, personal services, teaching-training, food and hospitality management, management-administration. Some fields have a need for all levels of qualification while others focus on a few levels of qualification:

- high levels: studies-research, teaching-training, IT, banking-insurance, civil service-legal professions;
- levels below the *baccalauréat* level: construction-public works, mechanics-metal work, personal services, food and hospitality management.

**The results derived from this study provide a framework for strategic thinking for further work which should be carried out in order to provide more specific information in terms of information and guidance, without neglecting results from studies carried out on the link between training and professions<sup>5</sup>. They may also be used as a reference for work with other methodologies at a regional or a professional-branch level.**

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NOTE<sup>5</sup>

See *Liens formations-métiers : regards croisés*, les Dossiers, n° 159, MEN-DEP, October 2004



**With 46% of students leaving the higher education system qualified between 2010 and 2015, we will witness tensions on qualified higher education leavers. These tensions will be even stronger given the hypothesis of companies favouring youth employment.**

With 50% of students leaving the higher education system qualified, these tensions would be considerably reduced.

This challenge must be taken up since the current level is 40%. However, France's good demographic health provides room for manoeuvre since raising levels of qualifications is enough to meet recruitment needs.

Lastly, it is essential to note that raising levels of qualifications is a major factor in medium-term economic development. This element was not taken into account in the methodology used herein.