

How to anticipate skills and training needs by 2020 : a regional point of view



Cedefop, 18/02/2011



**OBSERVATOIRE RÉGIONAL
DE LA FORMATION ET DE L'EMPLOI**



Région Centre



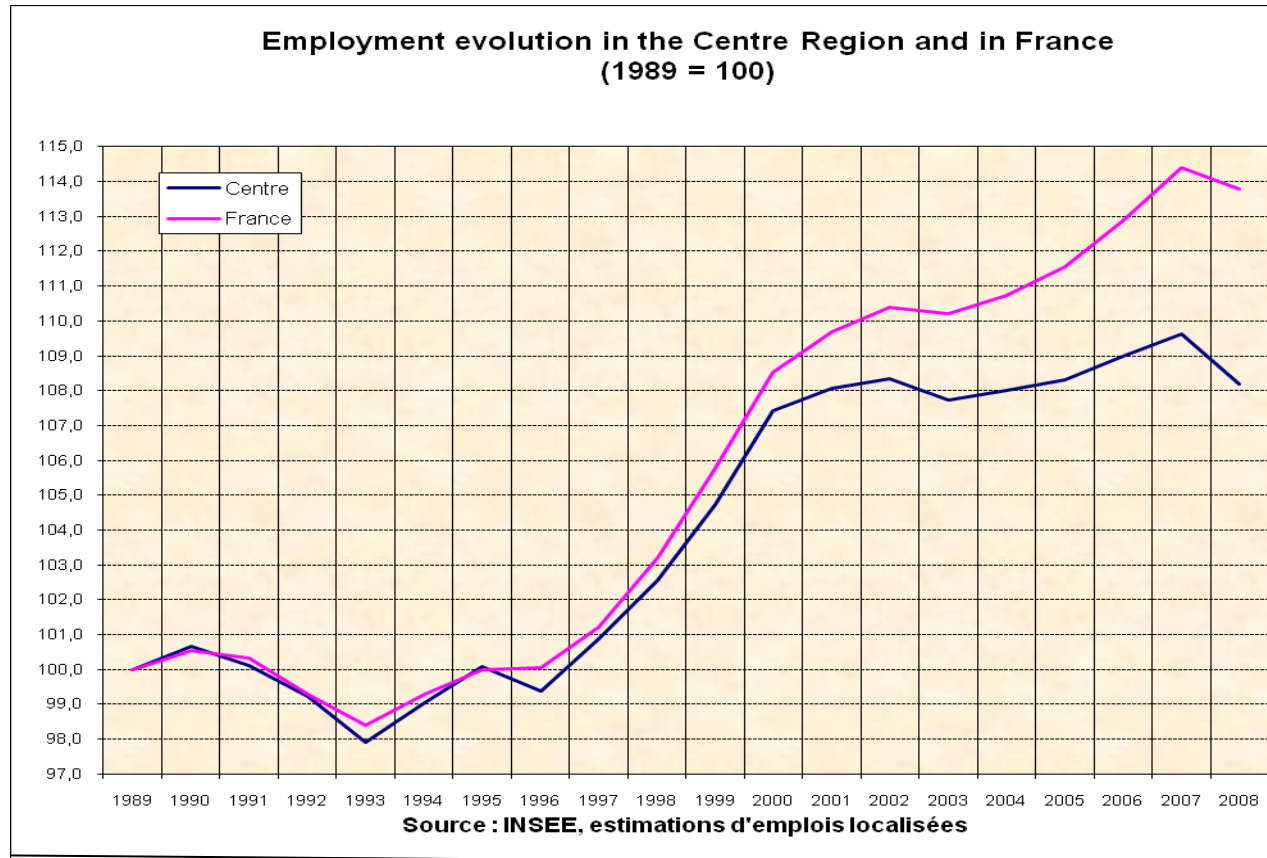
Which legitimacy for a regional macroeconomic model ?

- Regional territory: does not seem relevant to be the subject of economic modelling.
 - A region is a « small » territory crossed by complex principles:
 - Public decisions are taken at national level (systems of reference for diplomas, taxes, unemployment benefits...).
 - Economic system that is more and more globalized.
 - In the Centre Region: many subcontracting industries with their head offices outside the region.
- It seems more interesting to use forecasting studies carried out at national and European levels.

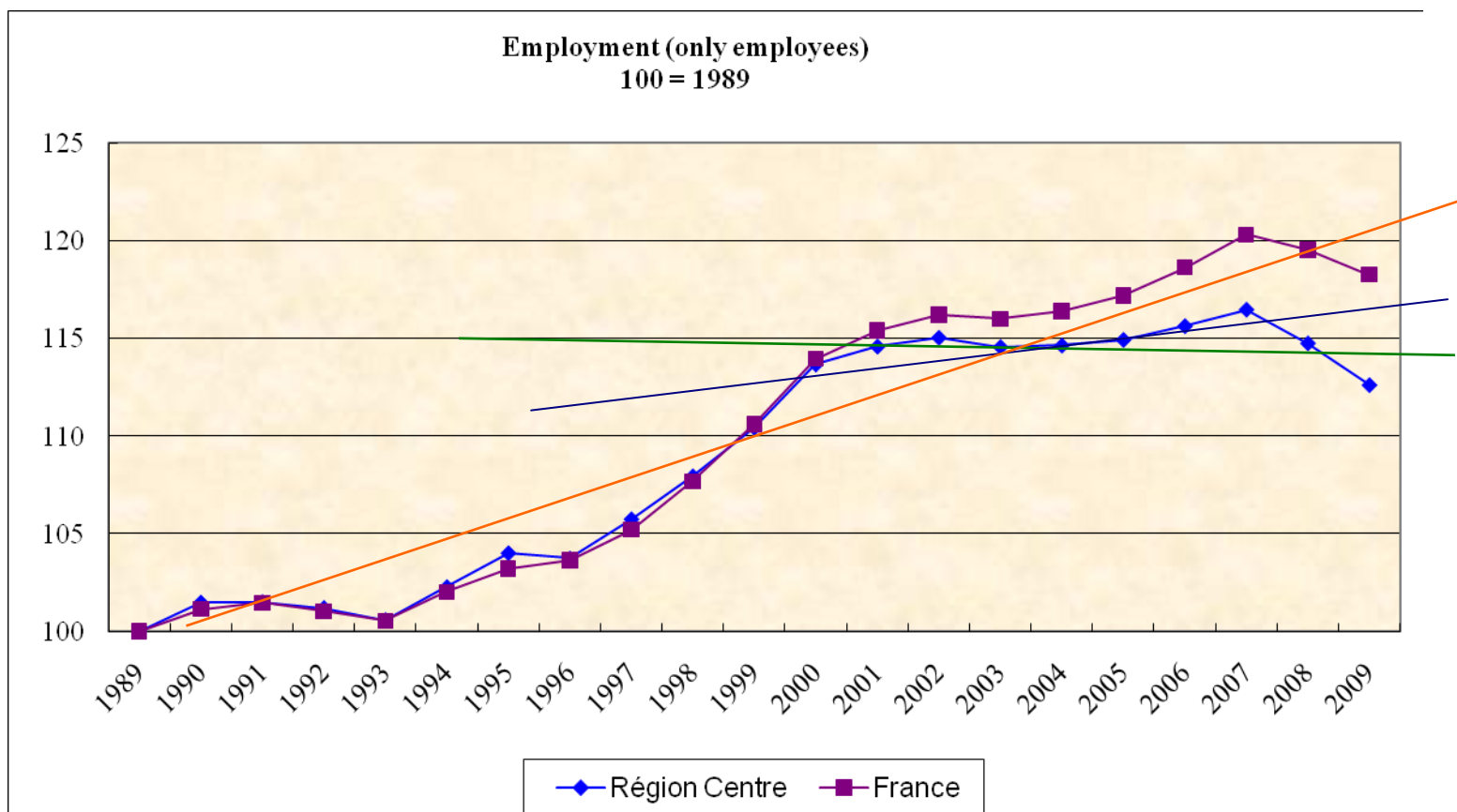
A model to help decision-making

- **Where does it come from?** : Within the framework of the « Regional Plan for Vocational Training ».
- **What is the goal ?**: To estimate employment (+5 to +10 years), to understand and analyse labour market mechanisms in order to shed light on choices .
- **A working hypothesis**: All other things being equal, the trends go on.
- **Results** : Three employment estimations, corresponding to possible cyclical hypotheses.
- **Referring to recent trends** (cyclical evolutions)
- **Simple modelling**: To apply to employment in the basis year an average annual growth rate until (+ 7 or +10 year).

Observing trends



How to choose base periods?



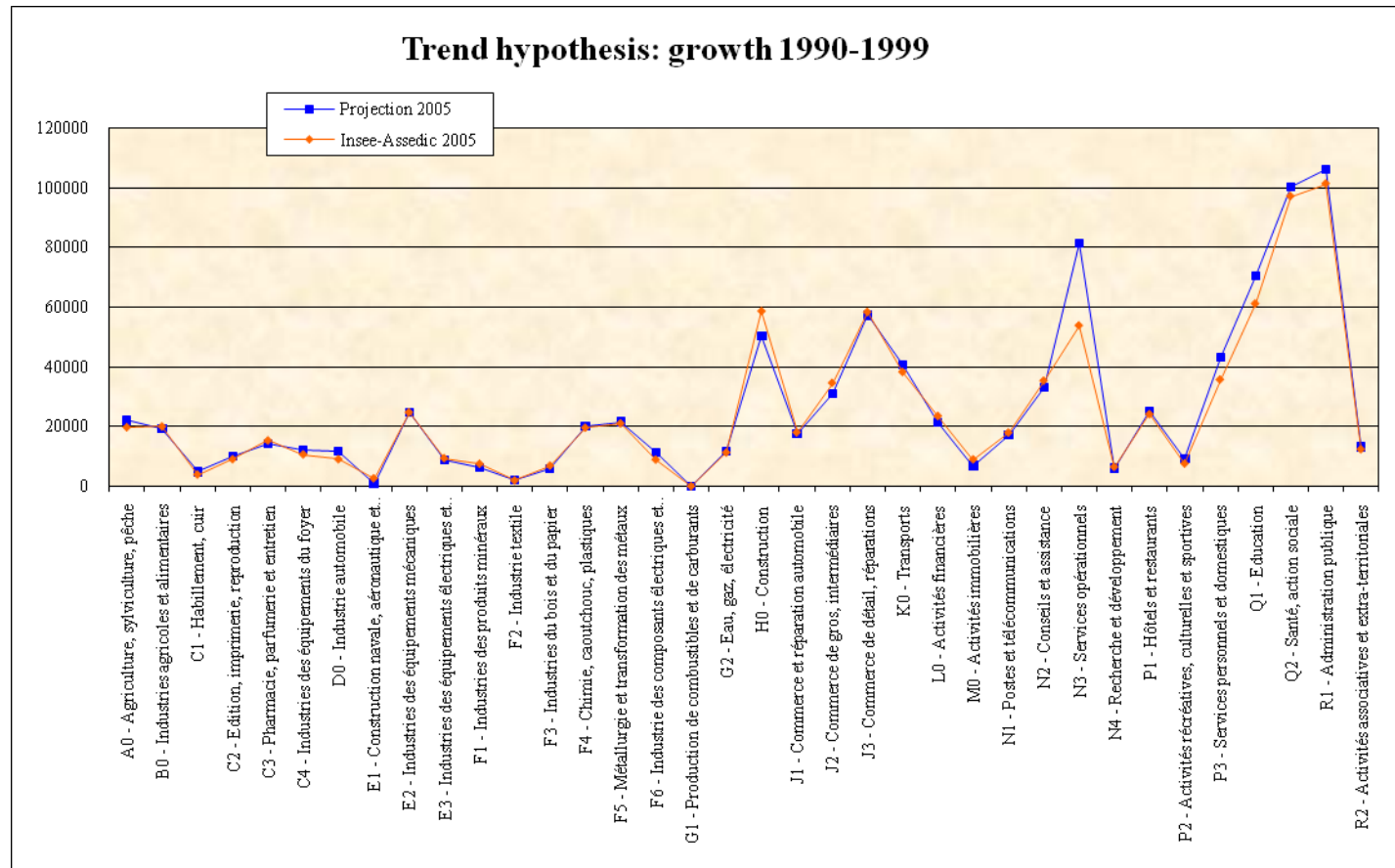
1. Trend 1990 - 1999

2. Unfavourable 2001 - 2003

3. Recovery 2003 - 2005

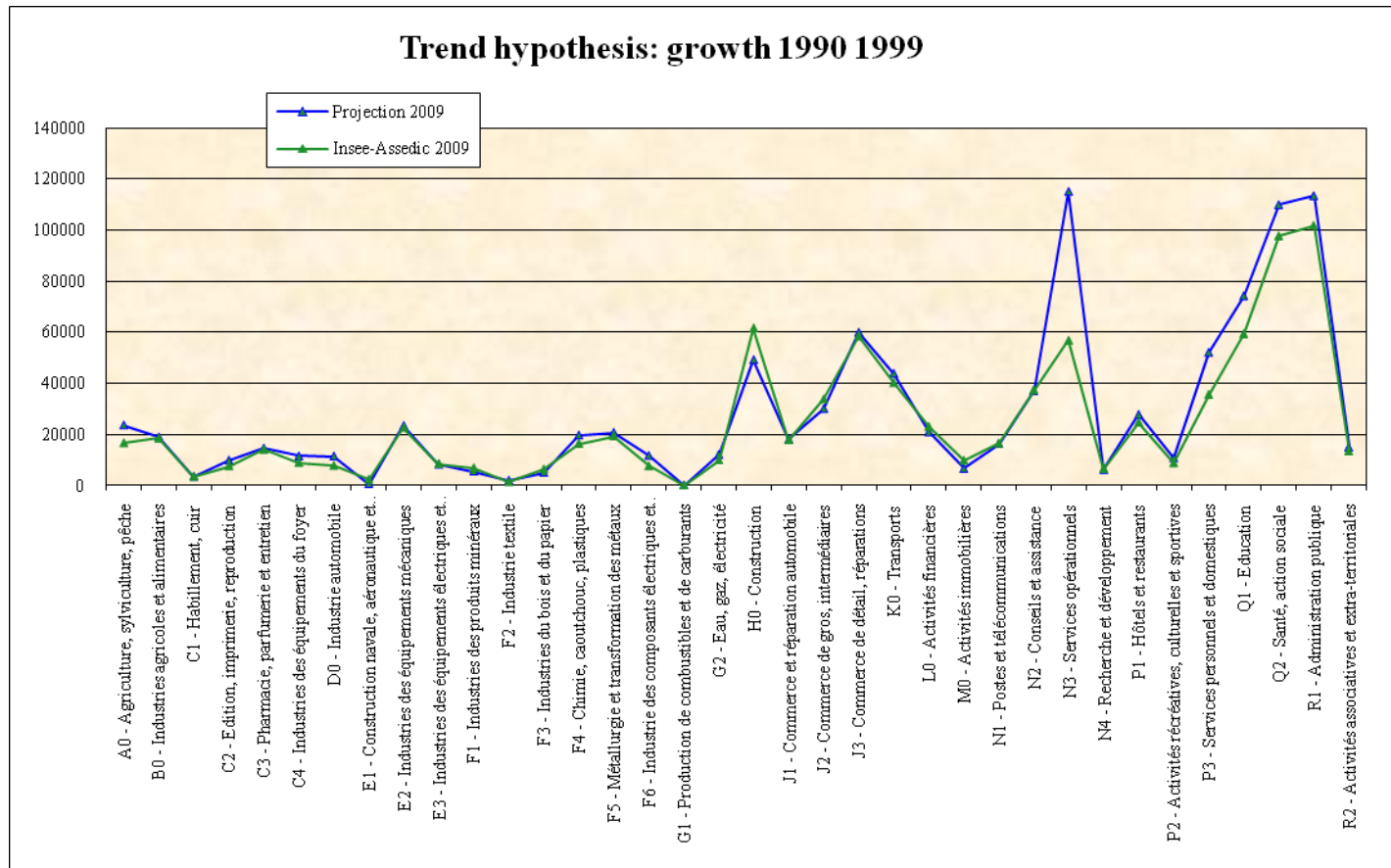
A monitoring tool : Validating our model by 2015

Employment projection in 2005, according to the trend hypothesis



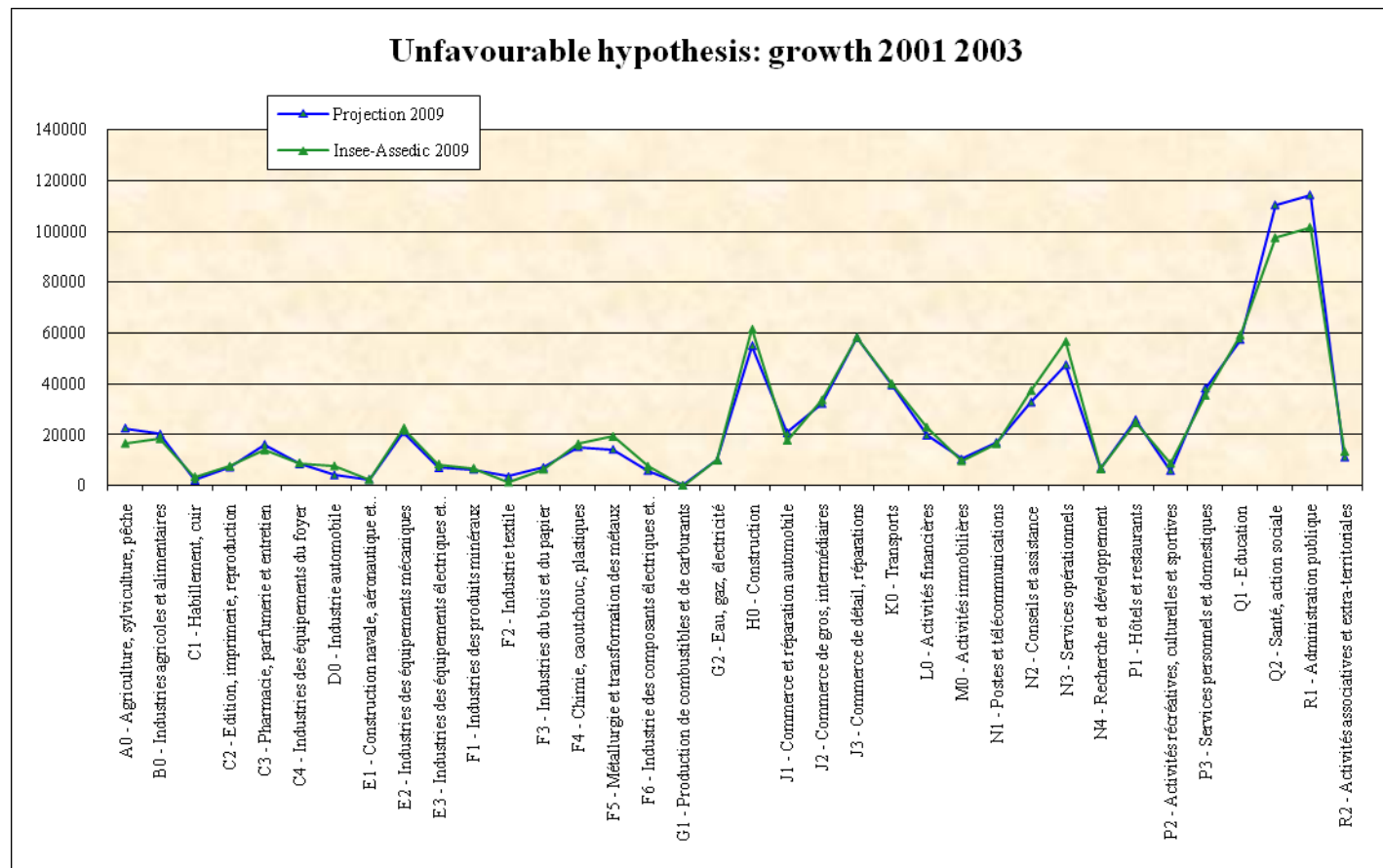
A monitoring tool : Validating our model by 2015

Employment projection in 2009, according to the trend hypothesis



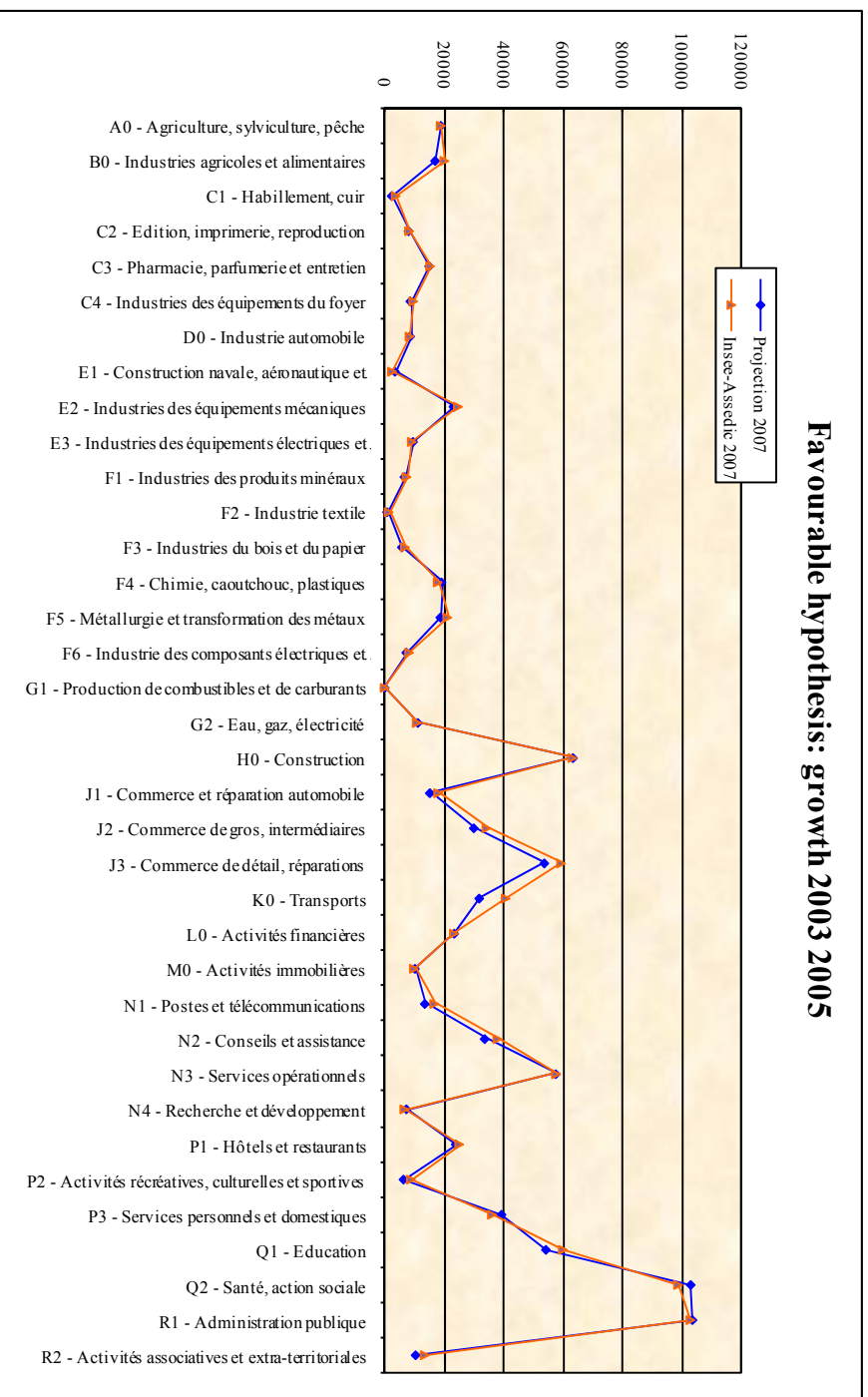
A monitoring tool : Validating our model by 2015

Employment projection in 2009, according to the unfavourable hypothesis



A monitoring tool : Validating our model by 2015

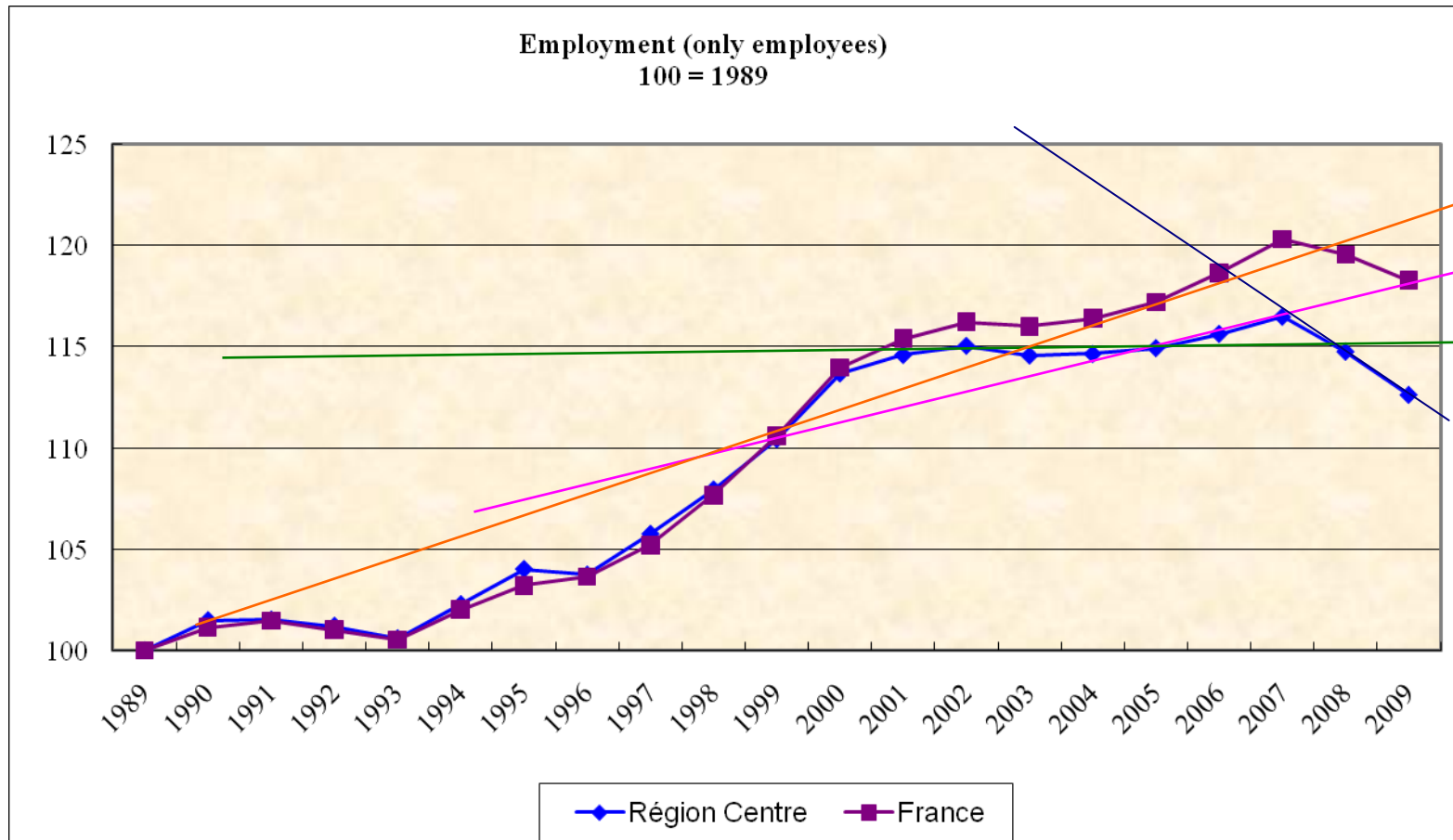
Employment projection in 2007, according to the favourable hypothesis





Our model by 2020

How to choose base periods?



1. Growth 2005 - 2007

2. Stability 2001 - 2005

3. Crisis 2007 - 2009

How to calculate estimations

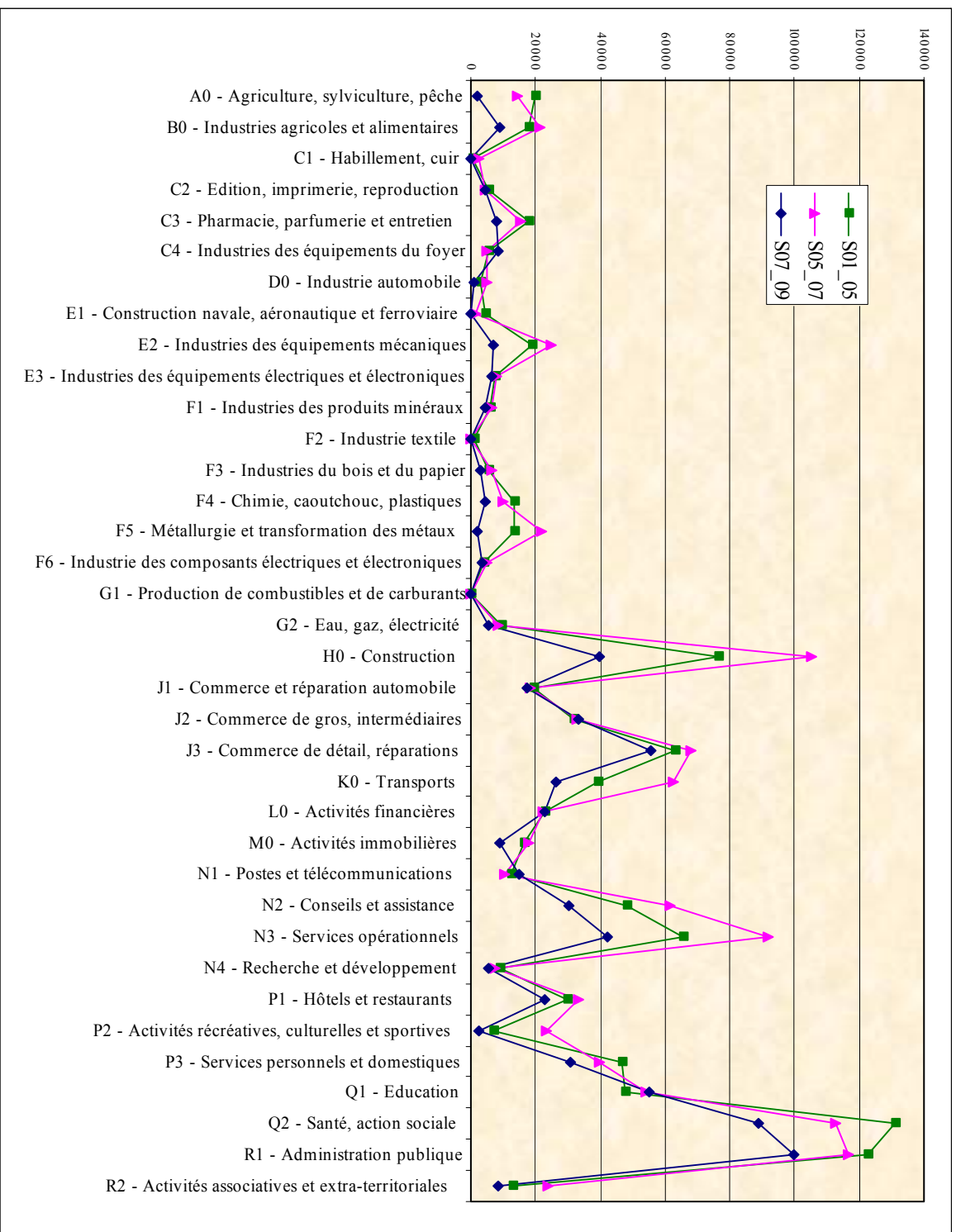
Three employment projections by 2020 :

- A central projection (trends observed between 2001 and 2005),
- A « growth » projection (trends observed between 2005 and 2007),
- A « crisis » projection (trends observed between 2007 and 2009).

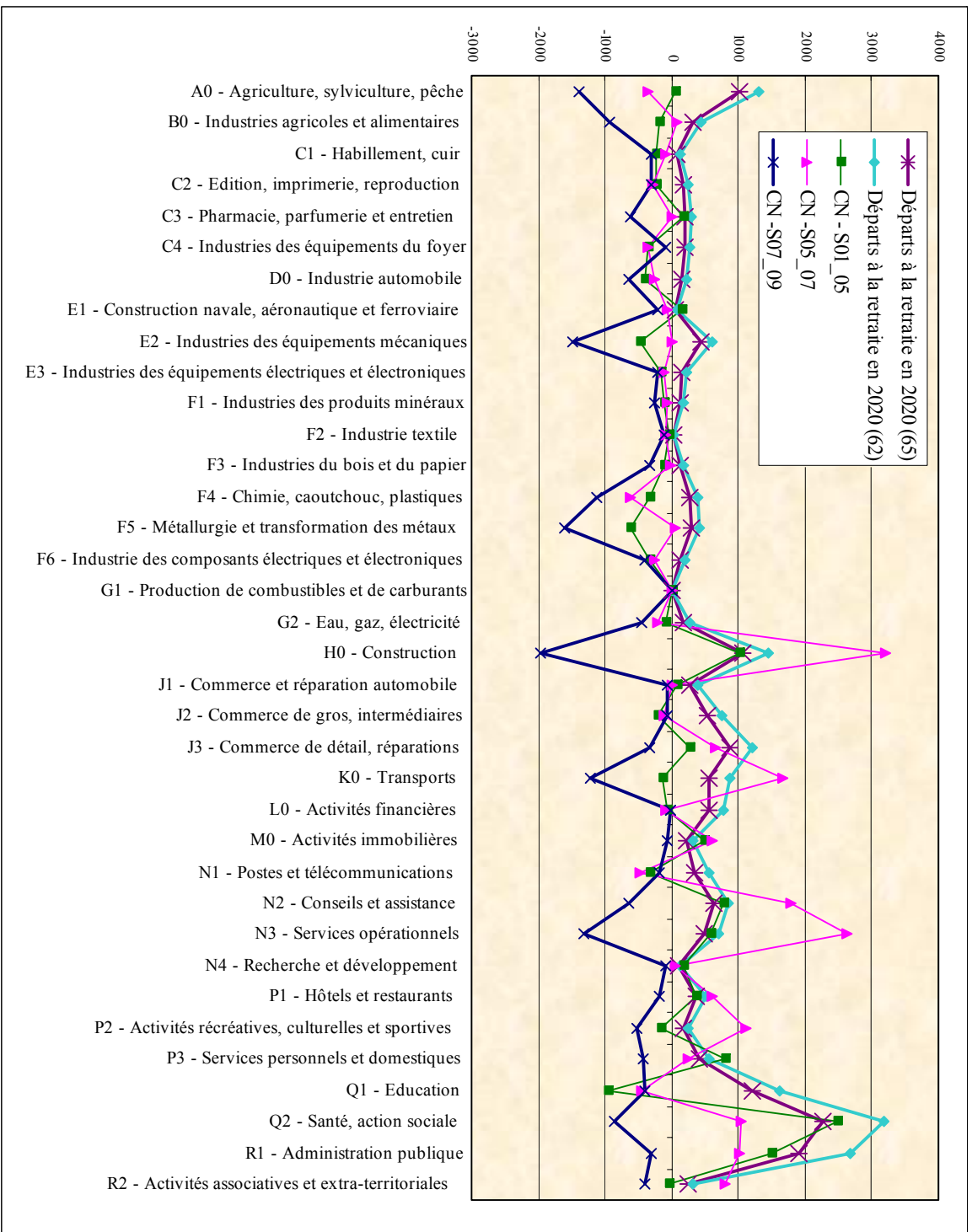
➤ Recruitment needs

$$\begin{aligned} & \text{Job creations} \\ & (\text{Employment in 2020} - \text{Employment in 2007}) \\ & + \\ & \text{Retirements} \\ & (62 \text{ in 2020}) \\ & (65 \text{ in 2020}) \end{aligned}$$

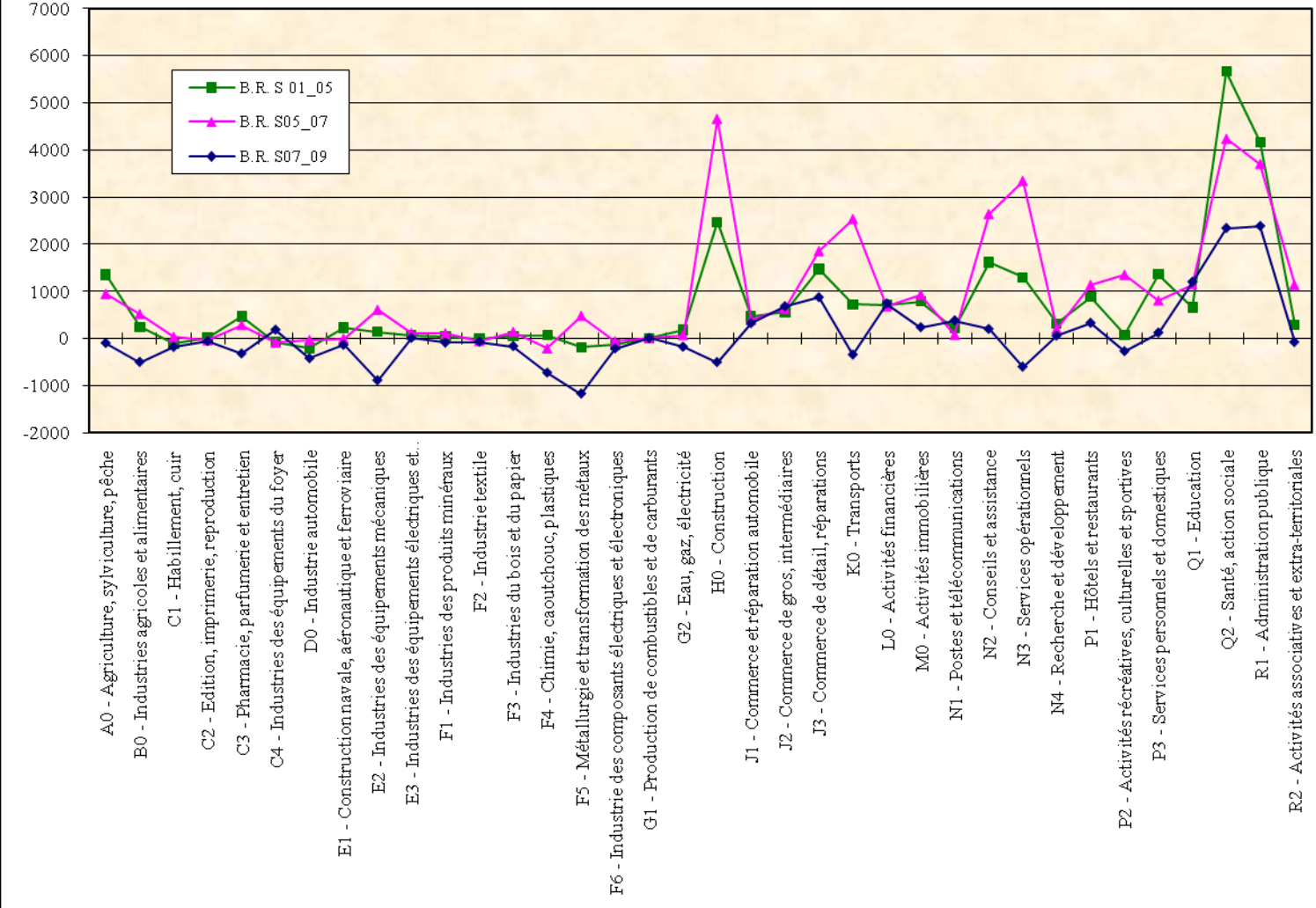
Results for economic sectors : employment projections by 2020



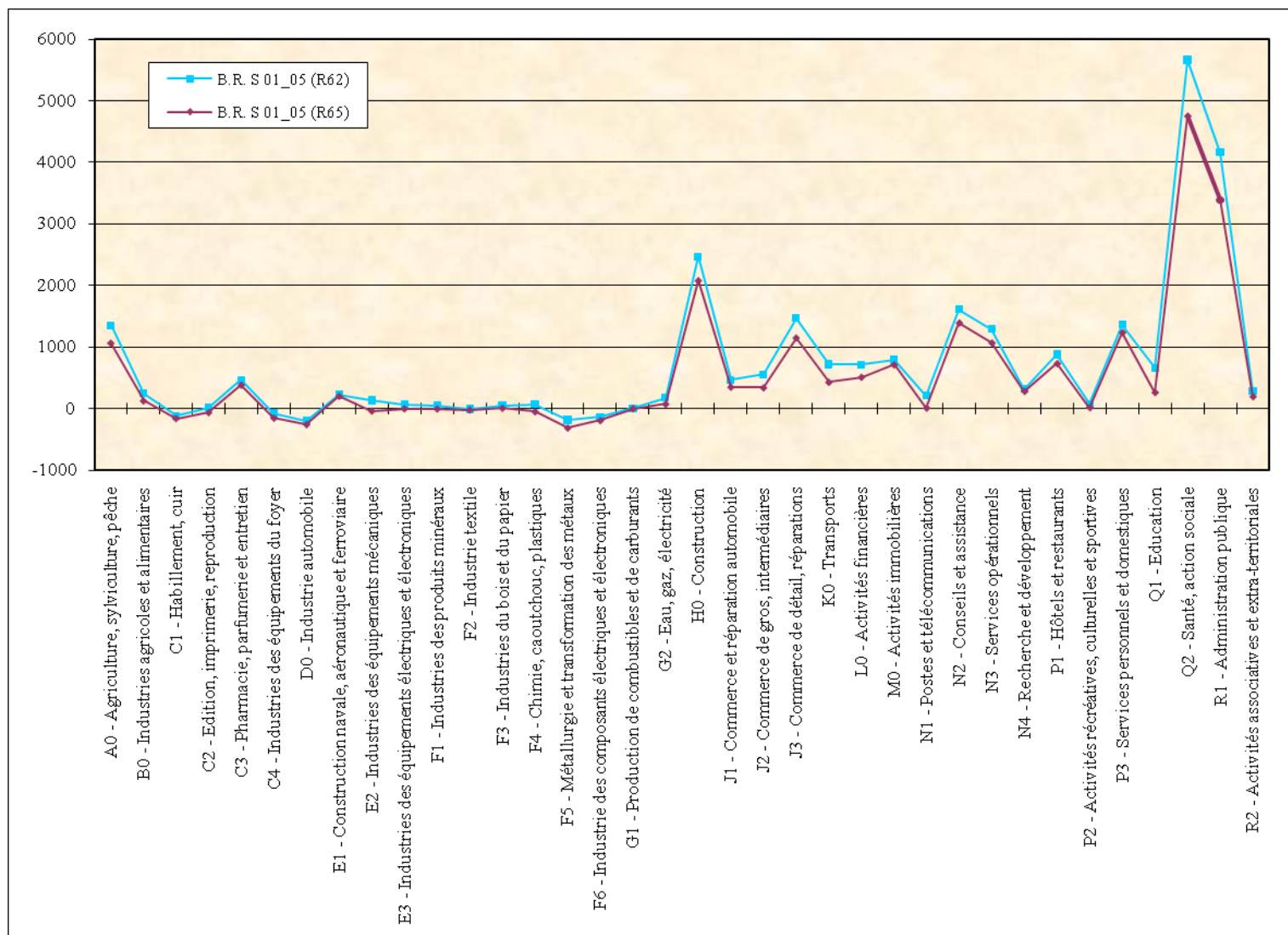
Job creations and retirements by 2020



Recruitment needs by 2020



Recruitment needs (retirement 62 or 65 years old)



How to use the results: Detecting professions in need in the region

« Structural » professions in need

	« Tension rate » 2007	Supply	Demand	«Tension rate » 2009	Supply	Demand
52332-Maintenance technician for thermic, climatic and refrigerating systems	160,8	328	204	80,9	266	329
44313-Adjusters	145,2	228	157	73,4	105	143
44341-Poly-maintenance technician	128,6	562	437	70,2	394	561
52333-Electronic maintenance technician	121,2	292	241	70,7	200	283
52133-Electric and electronic designer	105,6	38	36	155,2	45	29
52231- Production technician for process industries	102,4	126	123	73,6	106	144
51211-Maintenance managerial technician	95,7	89	93	87,3	96	110

« Tension rate » = Supply (job ads) / Demand

How to use the results: Detecting professions in need in the region

« Cyclical » professions in need

lib Rome	“Tension rate” 2007	Supply	Demand	“Tension rate” 2009	Supply	Demand
44112-Metal cutting out technician	174,1	47	27	52,4	22	42
44211-Operator on automatic machines for electric and electronic production	157,5	230	146	36,6	64	175
45113-Operator on forming machines for plastic and rubber	144,2	274	190	42,3	82	194
44121-Operator-adjuster on machine tools	126,5	1056	835	22,5	261	1162
45212-Operator on metal production	125,8	83	66	10,3	8	78
52211-Production technician in mechanical construction and metalwork	107,5	57	53	35,9	23	64
44311-Maintenance mechanic	105,2	365	347	39,7	149	375
44132-Solderer	105,0	953	908	34,6	406	1172

« Tension rate » = Supply (job ads) / Demand

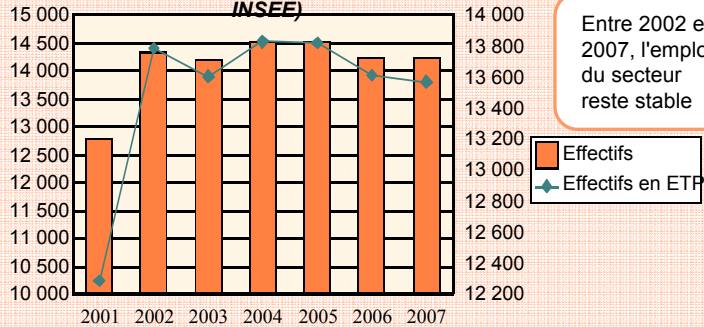
How to use the results: Making tools to anticipate economic changes on territories/ economic sectors : Outils d'Aide à la Décision



http://www.etoile.regioncentre.fr/GIP/site/etoilepro/Emploi-et-formation-des-outils-en-ligne-pour-anticiper_1

SECTEUR PHARMACIE, PARFUMERIE, ENTRETIEN

Fig 1 : Évolution de l'emploi du secteur (DADS - INSEE)



Principaux métiers du secteur

- Ouvriers qualifiés des industries de process = 18,1%
- Ouvriers non qualifiés des industries de process = 15%
- Techniciens et gents de maîtrise des industries de process = 14,4%

Fig 5 : Évolution des offres et des demandes enregistrées du domaine professionnel des industries de process (ANPE-DRTEFP)

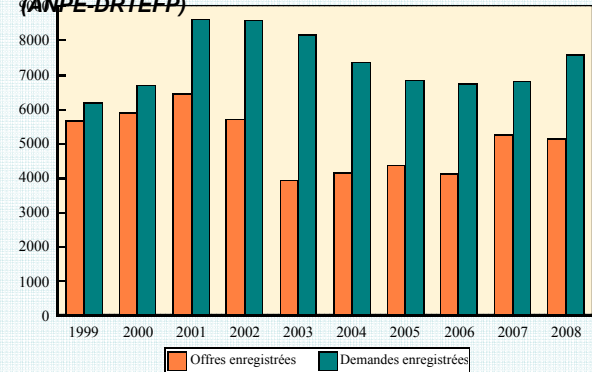
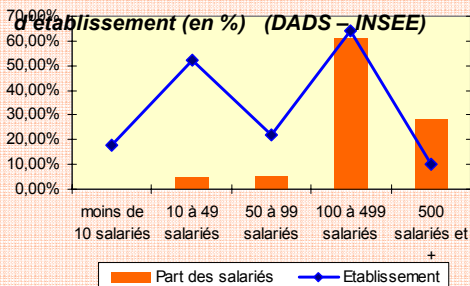


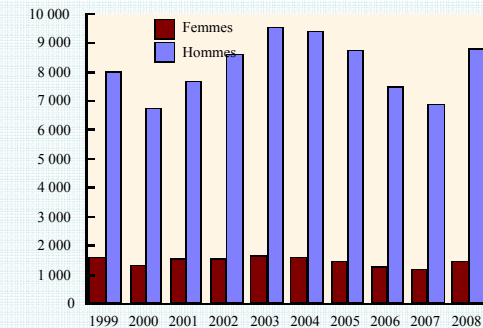
Fig 2 : Établissements et effectifs du secteur par taille



90 % des salariés travaillent dans 37 établissements
+ 624 créations nettes d'emploi dans les établissements de 10 salariés et plus entre 2004 et 2008.

En 2008, les tensions portent principalement sur les métiers d'ouvriers qualifiés

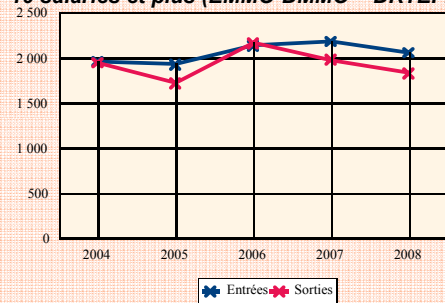
Fig 6 : Évolution du nombre de demandeurs d'emploi du domaine (ANPE)



En baisse depuis 2004, le nombre de demandeurs d'emploi du domaine enregistre une augmentation en 2008 (+ 26,7 % par rapport à 2007)

EMPLOI

Fig 3 : Entrées - Sorties des établissements de 10 salariés et plus (EMMO-DMMO - DRTEFP)



99 % des salariés du secteur travaillent dans les établissements de 10 salariés et plus

Fig 4 : Évolution des entrées selon le type de contrat (DRTEFP)

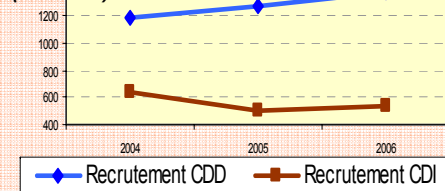
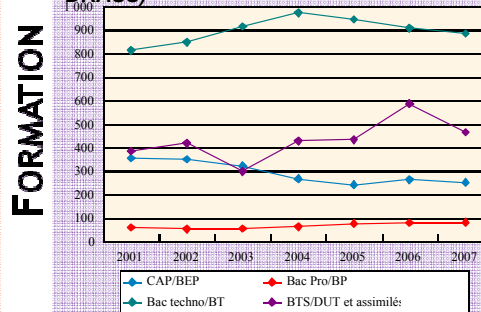


Fig 7 : Évolution du nombre d'inscrits dans la filière selon le niveau de formation (Rectorat - DRAF - Conseil Régional - DRDJS - DRASS)



1 683 jeunes inscrits à la rentrée de 2007.
52,5 % sont inscrits en Bac techno/BT et 27,6 % en BTS/DUT
+ 0,7 % = croissance annuelle moyenne des effectifs inscrits entre 2001 et 2007

FORMATION

MARCHE DU TRAVAIL

This is not a forecast model

- Projections give a framework to make plans for 2020.

They aim at helping stakeholders to set up measures in order to put a brake on undesirable trends, modify them or to carry on with measures to accelerate desirable trends.

- From these projections , we can build probable, desirable and undesirable scenarios.

- The debate between stakeholders allow to build « shared » scenarios.