



## NEW WAY OF MONITORING “JUST IN TIME” LABOUR MARKET USING AMMINISTRATIVE DATA

Research report by

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Sassari,  
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### THE QUESTION :

**Could statistical data from administrative sources help to understand cyclical fluctuation of labour market dynamics “just in time”?**

Traditional answer: NO!

- For economic dynamics (**variation over previous period**) it's possible to use only ISTAT workforce survey (RFL);
- Sources not available : INPS, INAIL, CO (compulsory communications)

**We want to explain:**

1. Why traditional answer was justified
2. Why that answer is already “old” today

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## Long long time ago, before Employment Centres computerized (IT):



- Compulsory communications on paperwork (fax, mail, etc.);
- Statistical information: count/sum of compulsory communications and results were collected by Employment Centres on paper forms;
- Data transfer on pyramid hierarchy:

from Employment Centres to provincial authority



from provinces to regional authority,



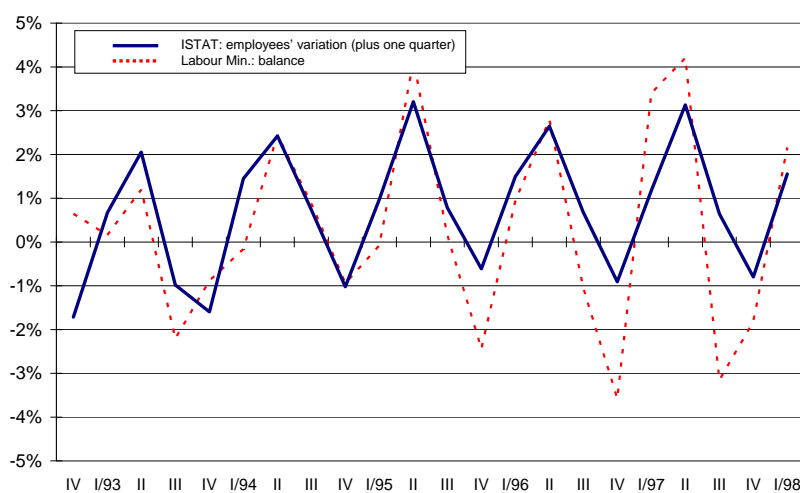
from regional to National Labour Ministry)

Results:

1. possible human errors, conditional results, no checking
2. low usability and limited availability of information ...Just some benefits (where possible!) ...

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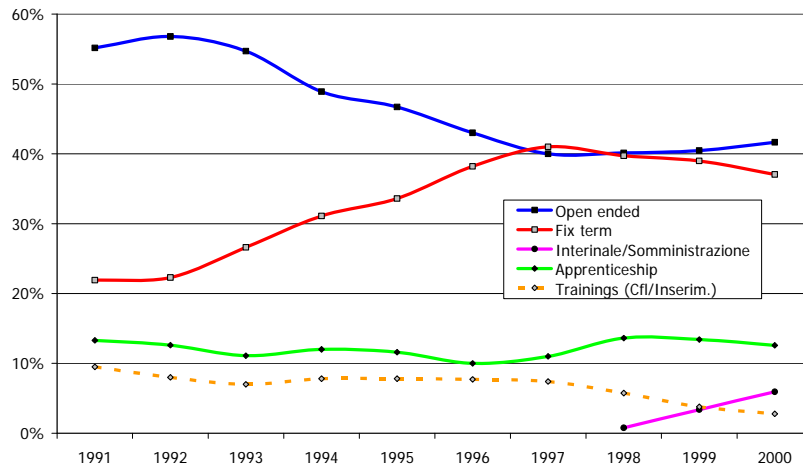
Fig. 1 - Veneto, dependent work: employees' variation estimate over the same quarter of previous year (4th quarter 1992 – 1st quarter 1998)



Source: processing of Veneto Lavoro on Netlabor-Labour Ministry data

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Fig. 2 - Veneto: hiring flows by contracts. 1991-2000 (%)



Source: processing of Veneto Lavoro on Netlabor-Labour Ministry data

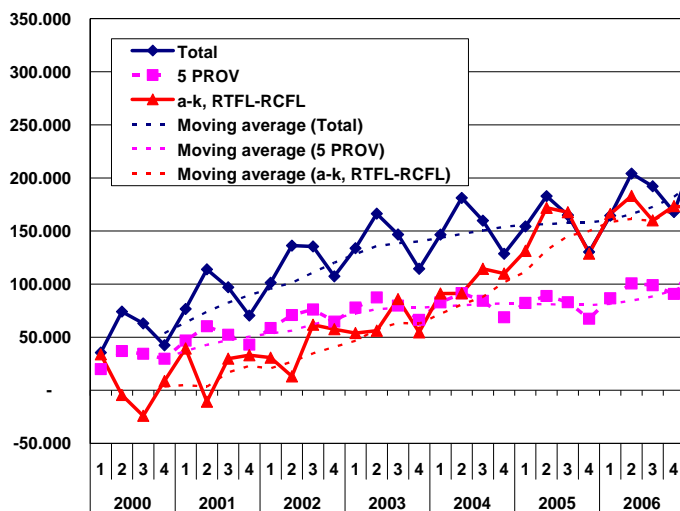
## Employment Centres computerization (first stage)

1. A bottom-up transition, in a non-homogeneous manner (like spots on the leopard skin), without territorial equality;
2. A new constraint: data (on DB) could be "counted" only after data input activity (from paper to DB);
3. Client/server architecture (less than intranet).

### Results:

- ✓ Good but not well-timed computation (not just in time data entry)
- ✓ Limited territorial coverage
- ✓ 40 different DB (in Veneto region) and replication issue (Master and slave synchrony)

Fig. 3 - Veneto: Employees' variation over the same quarter of previous year. 2000-2006



Source: processing of Veneto Lavoro on Netlabor-Labour Ministry data

**In the beginning Employment Centres  
computerization allowed a different analysis point of  
view:  
Longitudinal Analysis**

Trying with "Giove" setting up: a statistical DB with good and accurate data  
Main use is for longitudinal meaning:

- employment mobility analysis
- immigrants' work experiences/careers, regularization effect, etc.
- careers and forms of contract
- length probability of employment
- PUF (Public Use File)

## THE FOUR CHANGES



Four big changes between 2007 and 2008 (involving law, regulation system, practice and IT).

**“Just in time” economic dynamics analyses are now possible.**

1. All the dependent work
2. Compulsory communications by web
3. New form for compulsory communications
4. New IT programs support (SILL/CO)

- the first three have a large, wide, effect in all the National context
- the fourth has a different impact from one Region to another

**Let's see them closer...**

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## FIRST BIG CHANGE



New point of view: all the dependent work (and more)

Since the 1st of January 2007 hiring, conclusions, transformations and extension communications become a duty also for:

- public employment;
- domestic work (unfortunately until January 2009).

...plus Collaborator (Co.co.co/Co.co.pro) contracts

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## SECOND BIG CHANGE

Compulsory communications by internet  
(no more client-server)

- ✓ Communications by companies, labour consultants and government
  - ✓ Immediate verification of communications
  - ✓ “Temporary work” agencies one month delay CO

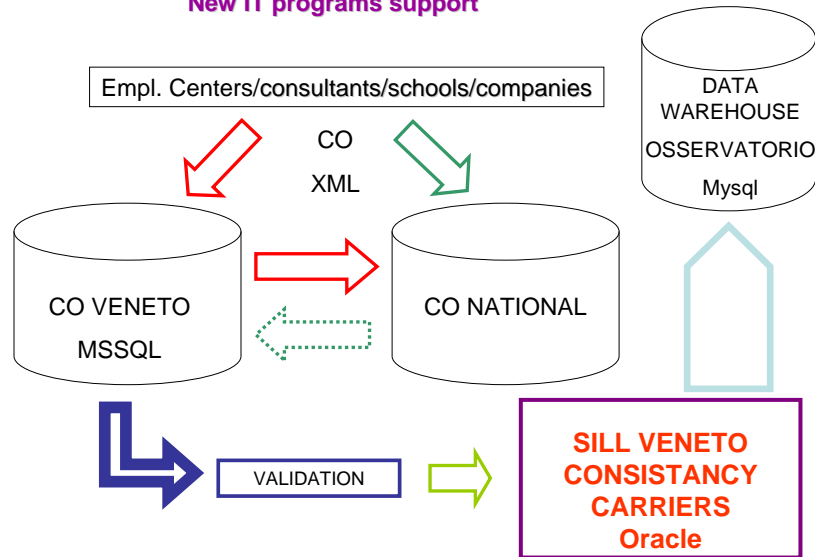
## THIRD BIG CHANGE

New form for compulsory communications:

- ✓ Biagi law is included (CO catches up with law)
  - Job on call
  - Job sharing
  - Training
  - Odd job

## FOURTH CHANGE

New IT programs support



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## GOOD NEWS, BAD NEWS



### Drawback:

- ✓ national junction
- ✓ validations
- ✓ difficult way to check all the flow

### Benefits:

- ✓ "too much database and replication"
- ✓ leopard spot skin input

RESULTS  
"just in time movements analyses"

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Tab. 1 - Veneto. Regular dependent employment. Hiring and conclusions by quarter  
(not included "job on call" and domestic work)

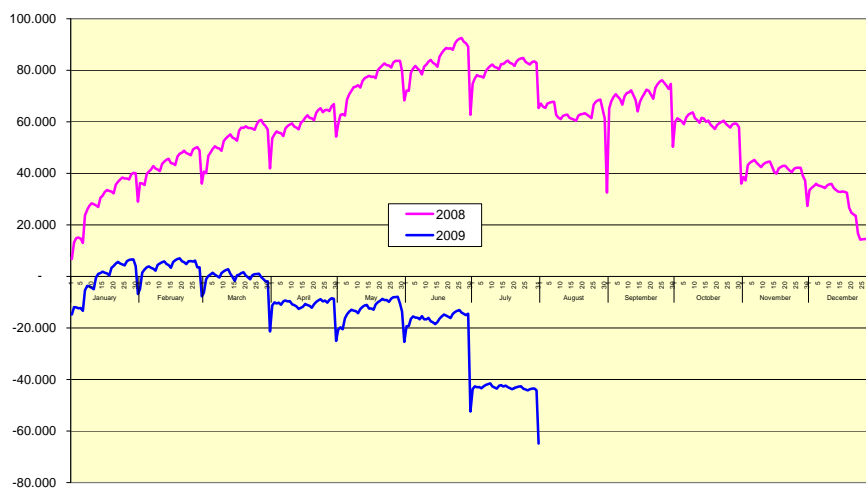


		Hiring	Conclusions	Quarterly balance	Employment yearly variation (yearly balance)
2008	First quarter	191.495	149.555	41.940	
	Second quarter	201.331	180.526	20.805	
	Third quarter	196.702	209.175	-12.473	
	Fourth quarter	135.042	206.092	-71.050	-20.778
2009	First quarter	142.379	142.998	-619	-63.337
	Second quarter	155.265	186.338	-31.073	-115.215

Source: Veneto Lavoro

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Fig. 4 - Veneto. Daily cumulate employees' variation (education included) by year



Source: Veneto Lavoro

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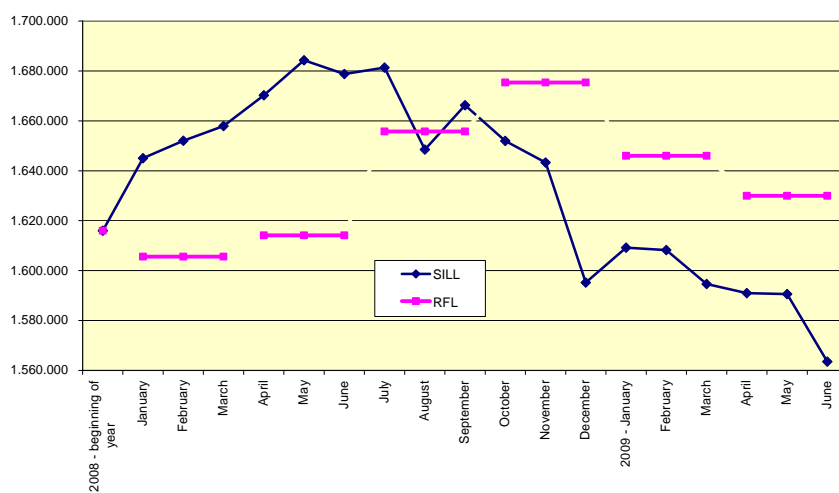
## LOOKING FOR THE STOCK...

It's not possible to calculate an "exactly" stock because of the "ghost employees"

It's possible to compute hiring and conclusions balance but the stock has to be calculated from:

- a. external sources like ISTAT-RCFL
- b. "ghost employee" estimate

Fig. 5 - Veneto. Employment dynamics 2008-2009.  
ISTAT/RFL – Sill comparison



Source: processing by Veneto Lavoro

## SILL VS ISTAT

Main differences:

SILL	ISTAT
Dependent workers	Residents
Accurate estimates referring to a specific date	Quarterly average
"Job on call" → just the first CO	"job on call" → checking status
Administrative seasonal trend influence	Not seasonal influence

Our care for future → try to test "ISTAT method" on SILL data  
(but de Angelini already...)

Tab. 2 - Veneto. Employees' variation over the same period of previous year (thousands)

	30th June 2009 over 30th June 2008		30th June 2009 over 30th June 2008
<b>A. Dependent (not included "job on call" and domestic work)</b>			
<b>Total</b>	-115		
<b>by citizenship:</b>		<b>by age:</b>	
immigrants	-34	Until 24	-9
italian	-82	from 25 to 29	-17
		from 30 to 39	-37
<b>by sector:</b>		from 40 to 49	-25
Agriculture	-3	over 50	-27
Industry	-70		
- Manufacturing	-57	<b>by gender:</b>	
- Construction	-13	female	-46
Services	-42	male	-69
- Trade and tourism	-25		
- business services industry	-13		
- Government, education, health	1		
- Services to family	-5		
<b>B. Other contract</b>			
"job on call"	13		
Collaborator (Co.co.co./co.co.pro.)	-8		

Source: processing by Veneto Lavoro on Sill data

## **FUTURE**



Future perspectives of statistics based on compulsory communications will depend on:

- ✓ development possibility of the regional junction;
- ✓ development of each Region faculties;
- ✓ development/improvement of relationships with INPS.

## **Q&A session**

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