

Working time, work-life balance and quality of work

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Organisation of working time:
implications for working conditions

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Working time, work life balance and quality of work

- ❖ Quality of work dimensions and its measurement
- ❖ Working time and WLB
- ❖ Results from survey on workers at firm level in a homogenous area (in terms of welfare policies and labour market situation prior to the crisis)
- ❖ Differences by gender and type of contract
- ❖ Policies suggestions

Quality of work dimensions

- ❖ the **social** dimension;
- ❖ the **economic** dimension;
- ❖ the **work-life balance** dimension;
- ❖ the **complexity** dimension;
- ❖ the **organisational** dimension of autonomy and control;
- ❖ the **ergonomic** dimension.

QW measurement

Fuzzy Expert System

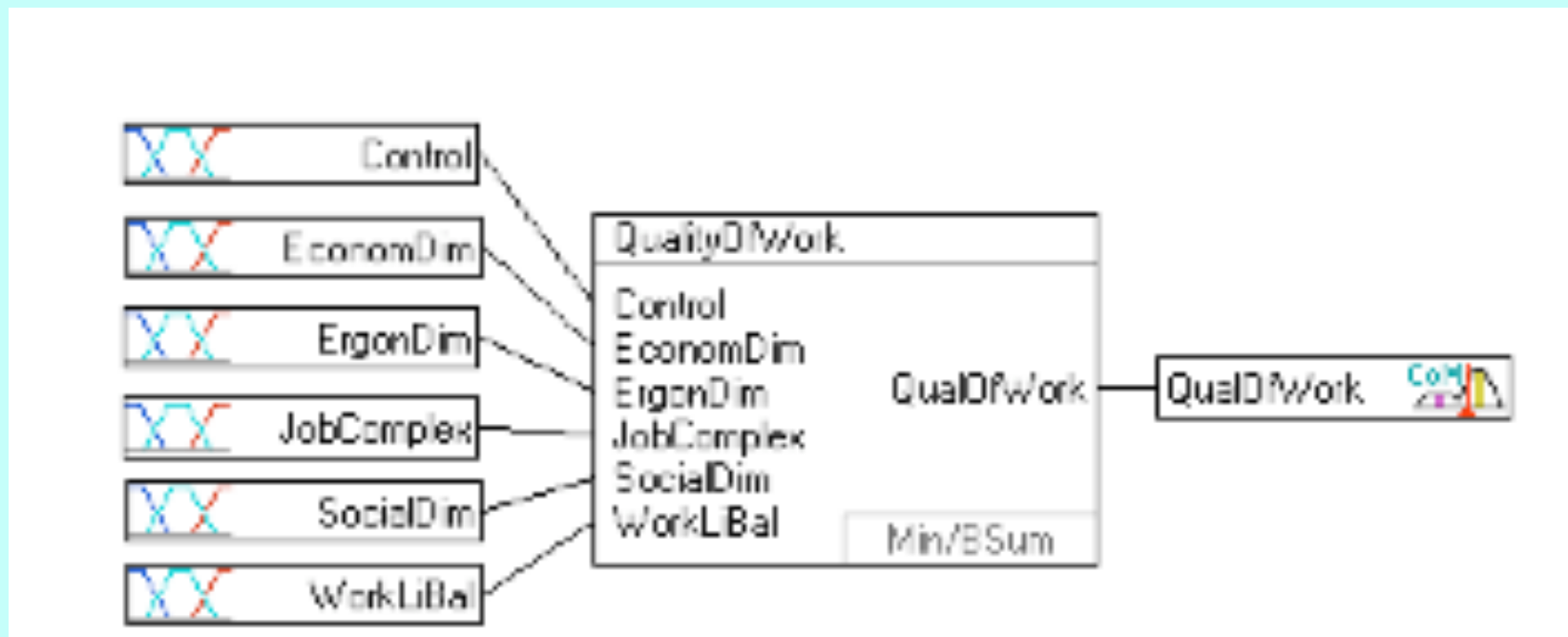
- ❖ The power of Fuzzy Expert System comes from the ability to describe linguistically a particular phenomenon or process, and then to represent that description with a small number of very flexible rules.
- ❖ In a Fuzzy Expert System, the knowledge is contained both in its rules and in fuzzy sets, which hold general description of the properties of the phenomenon under consideration.

Quality of work in fuzzy logic

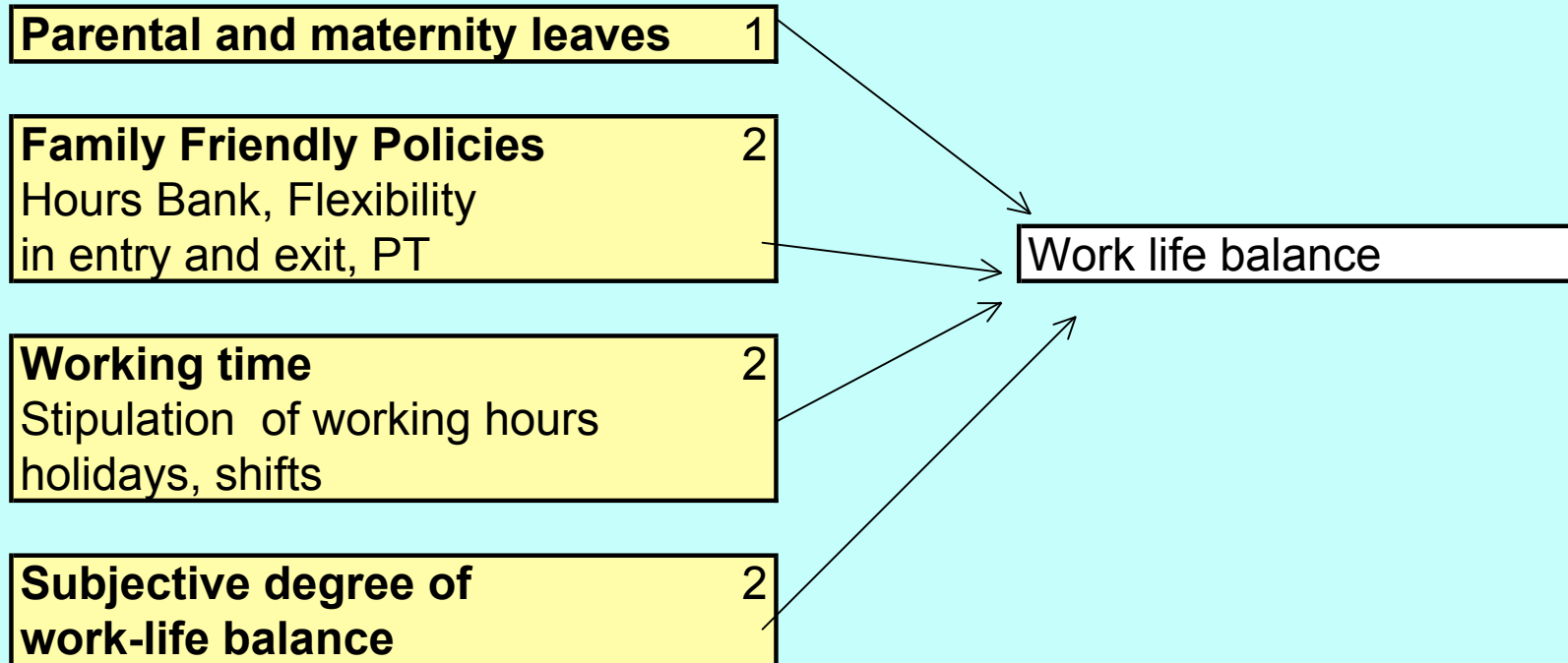
Addabbo, T., G.Facchinetti, G.Mastroleo and G.Solinas

‘A fuzzy way to measure quality of work in a multidimensional perspective’ in J.Pejas and K. Saeed Editors *Advances in Information processing and protection*, Springer, Part I, 13-23.

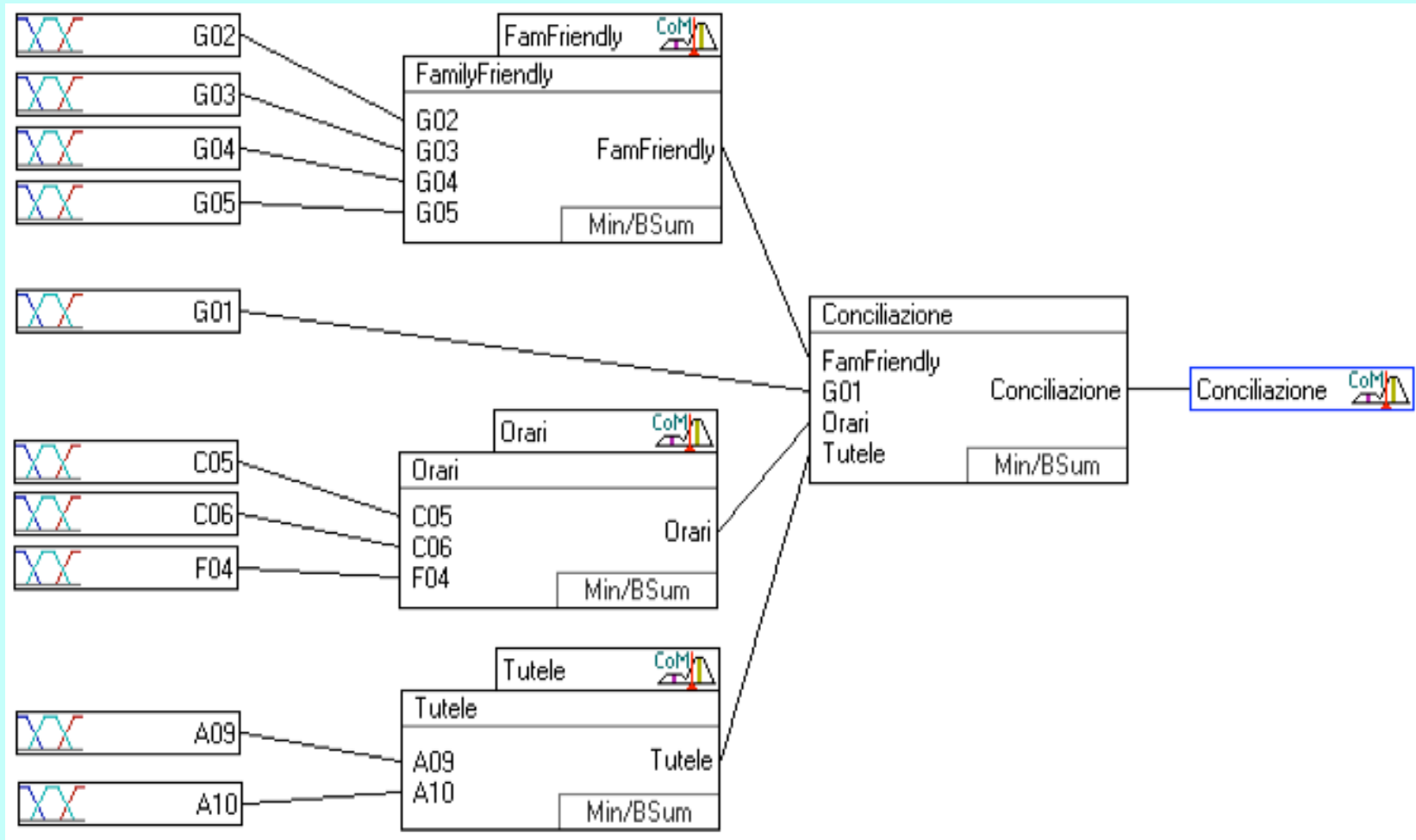
Quality of work: a fuzzy expert system for its measurement



Work Life Balance: the dimensions



Work life balance System Layout



Family Friendly

- ❖ Worker's assessment of the possibility to use time bank, flexibility at entry or exit, PT or other policies enacted by firms to improve reconciliation of family and working time
- ❖ The family-friendly function increases in all variables
- ❖ The set of variables allows in fuzzy logic a definition of the Family Friendly firm's assessment

Work life balance assessment

Individual worker's assessment on the degree of WLB in the firm. This dimension has a higher weight in the definition of the WLB dimension.

Working Time

This intermediate dimension refers to individual assessment of

- ❖ Worker's participation to holidays management and their distribution (C05)
- ❖ Working time regulation (C06)
- ❖ Shifts (F04).

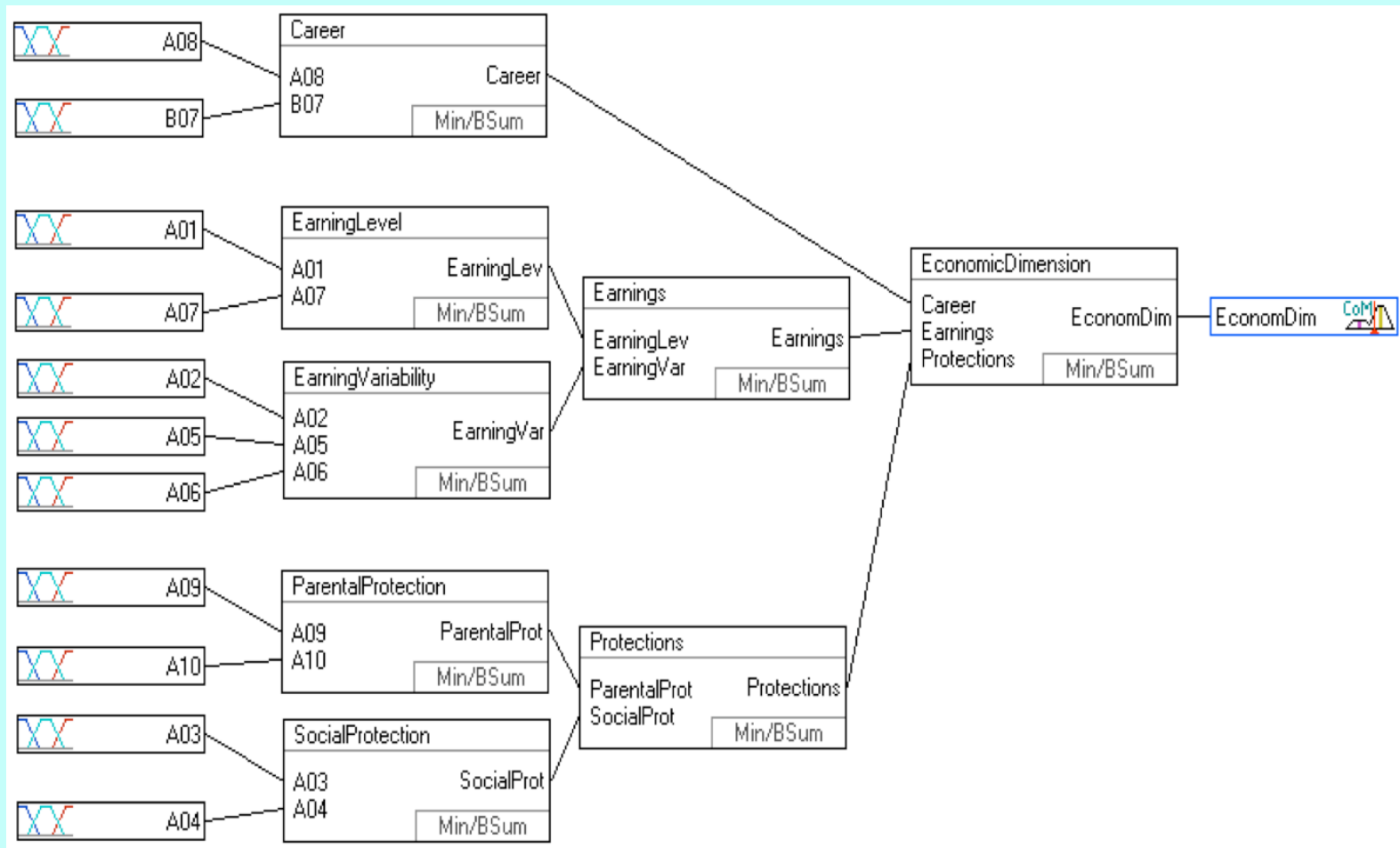
Parental and maternity leaves

Possibility for the worker to use

Maternity (A09)

Parental leaves (A10)

Economic Dimension. System Layout



Results from survey in Modena

- ❖ Most representative firms in the province of Modena
- ❖ light-engineering, building, food, IT, clothing, elderly care, public sector
- ❖ years: 2004-2007
- ❖ on the whole 2,500 employees

Quality of work and its dimensions

Lower values for the overall index of the quality of work and for the economic dimension with reference to **women and manual workers employed in manufacturing**, where growing values may be found when coupled with the rising level of qualification.

Working time and worker's assessment of working conditions

- ❖ Higher and positive impact of some dimensions of WLB (flexitime, PT, possibility to regulate shifts or working time) on worker's job satisfaction excluding wages
- ❖ Higher impact of time bank on the whole worker's job satisfaction including wages with a higher effect for women

Voluntary PT effect on WLB

Source: Addabbo, T., Solinas, G. (2011) 'Non standard employment and quality of work: evidence from case studies', Chapter 11 in Addabbo & Solinas (eds) *Non standard employment and quality of work. The case of Italy*, Springer Verlag, forthcoming.

Variable	Women		women PT voluntary	
	Mean	Std. Dev.	Mean	Std. Dev.
complexity	0,55	0,18	0,57	0,16
work-life balance	0,52	0,17	0,64	0,16
economic	0,42	0,17	0,4	0,13
ergonomic	0,57	0,23	0,61	0,24
organisational	0,57	0,2	0,6	0,15
social	0,55	0,17	0,57	0,13
quality of work	0,54	0,18	0,57	0,15

A multivariate analysis on quality of work.

Source: Addabbo and Solinas (2011)

	W.L. Balance	Economic	Complexity	Ergonomic	Organis.	Social	Quality
Woman	-0.023 (1.01)	-0.008 (0.36)	-0.001 (0.04)	-0.011 (0.34)	-0.008 (0.36)	0.010 (0.42)	-0.004 (0.16)
Temporary	-0.022 (0.57)	-0.033 (1.09)	-0.024 (0.56)	0.037 (0.74)	0.030 (1.03)	-0.013 (0.40)	0.010 (0.28)
Woman working Part Time	0.051 (1.78)	-0.023 (0.81)	-0.069* (2.18)	0.018 (0.44)	-0.046 (1.55)	-0.025 (0.93)	-0.026 (0.83)
Age	-0.002 (1.74)	-0.002* (2.18)	-0.001 (0.77)	-0.000 (0.05)	-0.002* (2.45)	-0.003** (3.30)	-0.002* (2.27)
Woman with Children	-0.023 (1.94)	-0.003 (0.20)	0.007 (0.47)	-0.014 (0.64)	-0.004 (0.28)	-0.012 (0.95)	-0.009 (0.59)
High School	0.015 (0.64)	-0.020 (0.88)	-0.002 (0.10)	0.079* (2.53)	0.009 (0.37)	-0.025 (1.07)	0.019 (0.70)
Degree	-0.015 (0.49)	-0.011 (0.37)	-0.055 (1.76)	0.037 (0.90)	-0.021 (0.64)	-0.037 (1.22)	-0.024 (0.71)
Low skilled/routin	-0.031 (1.55)	-0.040* (2.08)	-0.071** (3.68)	0.001 (0.05)	-0.117** (5.96)	-0.077** (3.97)	-0.068** (2.97)
Managerial	0.082* (2.07)	0.110* (2.32)	0.160** (2.82)	0.139* (2.24)	0.230** (6.42)	0.186** (4.40)	0.176** (4.27)
White Collar	0.022 (0.92)	-0.007 (0.30)	0.071** (3.09)	0.045 (1.39)	0.036 (1.39)	0.011 (0.48)	0.038 (1.43)
High respons.	0.051 (1.85)	0.009 (0.33)	0.073** (2.81)	0.083* (2.19)	0.056 (1.88)	0.039 (1.49)	0.078** (2.60)
More than 100 Employees	0.119** (3.42)	0.180** (5.46)	0.179** (5.49)	0.135** (2.94)	0.113** (3.37)	0.078* (2.56)	0.161** (5.01)
Constant	0.399** (6.87)	0.374** (7.02)	0.353** (6.45)	0.340** (4.45)	0.511** (9.54)	0.582** (11.41)	0.407** (7.32)

Robust t statistics in parentheses
* significant at 5%; ** significant at 1%

Policies and measurement suggestions

- ❖ Measurement: allow measurement of quality of work in its complexity (fuzzy logic can be a tool to be used in this direction)
- ❖ Segmentation wrt different dimensions of QL
- ❖ PTW can produce significant improvement in WLB dimension however this still bears costs wrt other QL dimensions:
 - ❖ Take these costs into account
 - ❖ Spread the use of PT by gender and positions
 - ❖ Remove obstacles in its conversion to FT

Policies suggestions

- ❖ Evaluation of institutions in the private and public sectors in terms of gender equity, incentives to use the national law that promotes the implementation of work life balance measures, integrated supply of services and guidelines to project new services for wlb (Pink Seal)

Ref.: Addabbo, T.; Facchinetti, G, Mastroleo, G. (2009) 'Child Well Being and Parents' Work: the Evaluation of Firm's Compliance to Work-Life Balance' *Polish Journal of Environmental Studies*, 18 (4), 18-26.

Policies suggestions

Need of developing interactions btw different actors to sustain work-life balance in the area

❖ Equal – A Private Matter (ACT 3982: France, Italy, Spain, Sweden) shows the relevance of public/private partnership to achieve WLB

❖ Project led by the municipality of Reggio Emilia and the University of Modena and Reggio Emilia involving social actors (trade unions, industrial associations) <http://www.municipio.re.it/retecivica/urp/pes.nsf/web/Cnclr?opendocument>