

# Economic-Financial Literacy (EFL) and (Sustainable) Pension Reforms why the former is a key ingredient for the latter\*

Elsa Fornero

University of Torino and CeRP, IZA and Netspar

Cherry Blossom Financial Education Institute

Washington, April 15, 2016

*\*From: 1. «Reform, Inform, Educate: A New Paradigm for Pension Systems' Sustainability», in: Bernd Marin (ed), The future of Welfare in a Global Europe, Ashgate, 2015; 2. (with Calcagno R., Coda Moscarola F.) **Too busy to stay at work. How willing are Italian workers "to pay" in order to anticipate their retirement?** Mimeo, March 2016*

# Outline

1. Pensions and Pension systems
2. Reforms
3. Why reforming pensions is so difficult
4. Why EFL is important for reforms
5. Lessons from the Italian pension reform
6. Conclusions

# 1. Pensions and Pension systems

- **A pension**

- an *insurance product* (not an ordinary financial instrument) that provides a *flow of income* conditional on beneficiary'/dependents' survival

- **A pension system (social security)**

A *public institution* (not a market arrangements) governed by law to

- help people provide for their retirement (the life cycle perspective)

- *prevent poverty* among older population and *reduce inequality* (assistance and redistributive functions)

Participation is **compulsory** and **financing** is usually PayGo

- **Risks (demographic, economic, political) are pervasive in both micro/macro dimension**

# What makes a *good* pension design?

- A *good distribution of risks* (*in* individual life cycle and *across* generations)
- A good *incentive structure* (to encourage work in regular forms and not moonlight; to reward the continuation of work)
- *Fair (re)distribution* (to defeat privileges and help the less fortunate)
- *Poverty reduction and prevention* [EU27: *at-risk of-poverty-rate* for 65+ *slightly below* the rate for <65 (15.9 vs 16.5%); *older people less affected by material deprivation than the rest of the population* (6.4 vs 8.5%); *inequality is also lower*]
- *Transparency, uniformity* and *low political manipulation*

# Directions for reforms

- *Strengthen* the **correlation** (at the individual level) between **benefits** and **contributions/retirement age**
- *Increase* both **statutory** and **effective** retirement ages but make retirement more *flexible*, i.e. *variable ret age* (minimum age *plus* an age window with *actuarial adjustments*) and *partial*
- *Link* retirement age to longevity (?)
- *Boost* employment opportunities of older workers
- *Balance* sustainability and adequacy concerns (indexation of pensions, means-tested minimum income or a “zero pillar” pension)
- *Encourage* (EFE/nudges/fiscal advantages) or make compulsory participation in supplementary funded pensions
- Devote special attention to groups more at risk (women)

## 2. Reforms

(From: Wordreference.com and Oxford Dictionary)

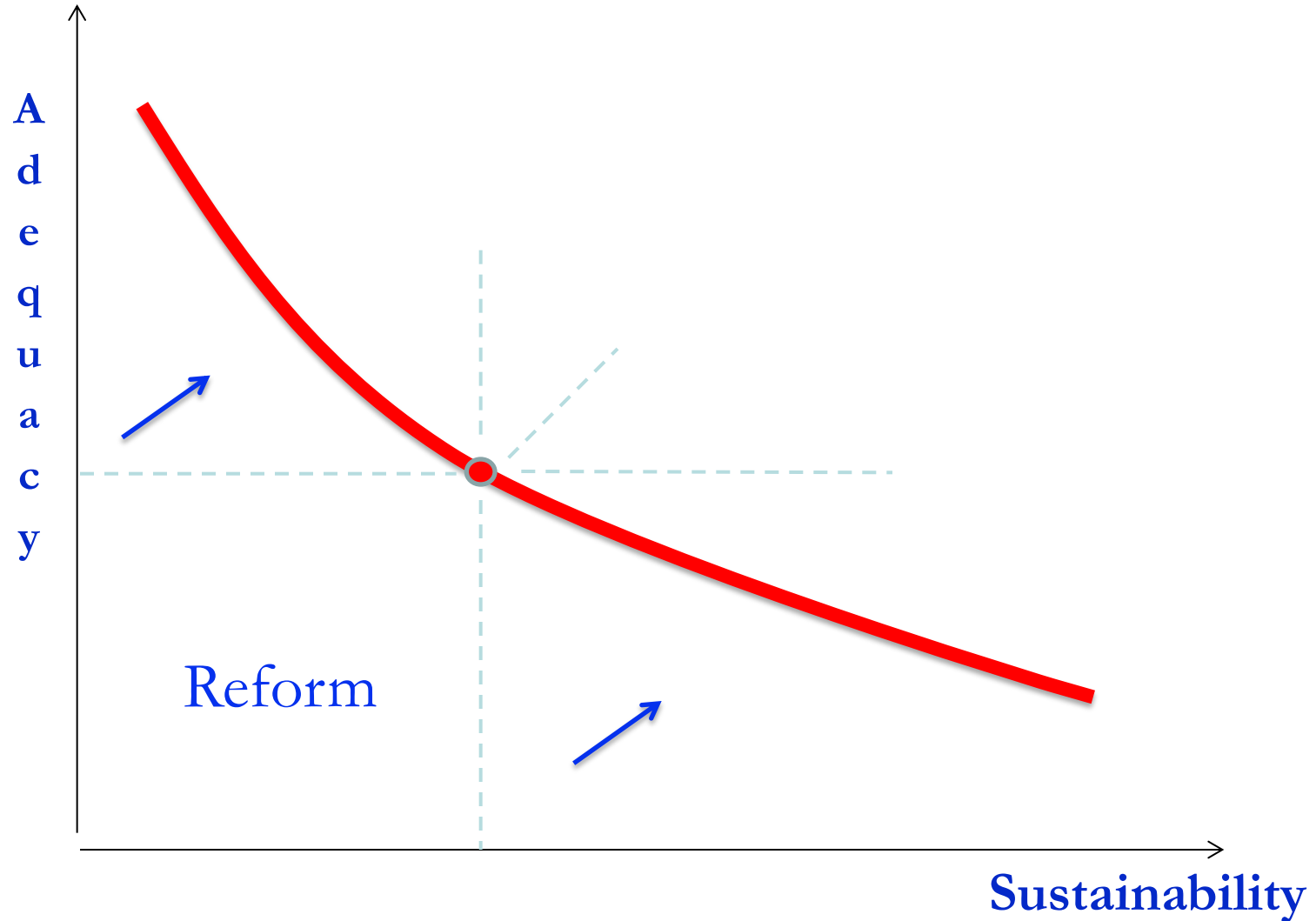
- *«To improve an existing institution, law, practice, etc. by alteration or correction of abuses»*
- *« Make changes in (something, especially an institution or practice) in order to improve it »*
- *«To give up or cause to give up a reprehensible habit or immoral way of life»*

**All definitions refer to changes not only in rules and institutions but, more importantly, in people's behavior**

# Pension reforms: why are they needed?

- to regain financial sustainability:
  - to remedy the long run negative impact of population ageing, low growth
- to reduce *distortions/inefficiency and inequality*
- to strengthen adequacy of provisions for old age:
  - which mix work/retirement, PayGo/funding and public/private?
  - which indexation (wages or prices) of pension benefits?
  - which mix of monetary benefits/services (i.e. LTC)

# Not just a choice in the trade off between *adequacy and sustainability*





# 3. Why reforming pensions is so difficult

It is a reform that:

- redistributes across *families, men and women, present and future generations*
- is mainly in the interest of the young (*future*) generations, who are a political minority (*not yet born*) in an ageing society
- is permeated by value and ideological judgments that tend to prevail over technicalities and hinder *social dialogue*
- has great communication problems, also motivated by widely held *misconceptions* (“acquired rights”, the “lump of labor fallacy”...)

**Technical arguments provides only a guide** but “*the devil is in the detail*”

Important trade offs are involved (“*gradual reforms*” vs “*cold showers*”)

- transition, credibility and time consistency problems
- coordination with other reforms (labor market reform, training and life long learning, liberalization and so on) essential but difficult

➤ **Participation of citizens is very important**

# The respective roles of political parties and of experts/technocrats in carrying out reforms

- Reforms: *a mix of political and technical elements*, the former forefront in communication, the latter more behind the scene
- Political communication starts from an ideological perspective, plays down more “technical” aspects
- In emergency situations, technical aspects become dominant and “technocrats” (experts from WB, IMF, academia etc.) may be called in to prepare the reform
  - *When people are not correctly informed and do not understand its basic principles, the reform risks being ineffective or reversed*

# Do politicians prefer to exploit citizens' ignorance?

- Jean-Claude Juncker's aphorism: “**We** all know what to do, but we don't know how to get re-elected once we have done it” (*The Economist*, March 15, 2007). «We» vs «them», the people, who cannot see the good in a reform

*But: “Economic logic does not tell us what to do, but it teaches us to look for the non-obvious costs and benefits of various policies”. (Stigler, G., 1970, The Case, If Any, for Economic Literacy, Journal of Economic Education, Vol. 1(2), pp. 77–84).*

- Awareness of a reform's costs/benefits could be a more important determinant of its viability
- In “civic education” theory, education is a process whereby people increase civic skills and general knowledge, and human capital accumulation facilitates the participation to political life and political engagement
- The quality of policies may depend on the quality of the electorate; lower turnout rates may be associated to better policy outcomes (Lo Prete and Revelli, 2014).
- EFL could make citizens understand the reform's **social investment aspects**
- Governments should promote EFL thus indirectly inducing long-run support for virtuous reforms

# *FinLit* for personal wealth formation and management

- *Fin illiteracy* is widespread, regardless of the country's economic development stage; knowledge of inflation is correlated to personal experience; risk diversification is the most difficult concept
- *Fin knowledge* has a hump-shaped profile over the life cycle (Lusardi and Mitchell, 2011): it is highest among ages 45-55 and lower at younger and older ages
- *Gender differences* are significant and pervasive: women are more likely to suffer the consequences of wrong/myopic/imprudent choices (Sunden and Surette, 1998; Lusardi and Mitchell, 2008; Bertocchi, Brunetti, and Torricelli, 2012; Bücher-Koenen, Lusardi, Alessie, and van Rooij, 2012; Boggio, Fornero, Prast, and Sanders, 2014)

# *FinLit* for personal wealth formation and management

- *Fin lit and human capital indicators* are (strongly) positively correlated (Jappelli, 2010)
- *Fin lit and the generosity of social security system* are negatively correlated (Jappelli and Padula, 2013)
- *Fin knowledge is a key determinant of wealth distribution*, accounting from 30-40 per cent of wealth inequality in the US (Lusardi, Michaud and Mitchell 2014).
- *Econ lit and income inequality growth* are negatively correlated (Lo Prete, 2013)

# Why is fin lit ignored in political-economy models?

- Little has been done up to now to include *fin illiteracy* in models studying why governments fail to deliver and implement economic reforms, even when both experts and politicians agree that these would improve welfare

## Explanations:

- *Distributional conflicts* focused on the preservation of the status quo (Alesina and Drazen, 1991).
- *Interest groups* hurt by the reform process could succeed in blocking it (Grossman and Helpman, 2001)
- Lack of knowledge about the distribution of costs and benefits of a reform could spoil citizens' chances to benefit from them if they are risk averse (Fernandez and Rodrik, 1991)

## 4. Why EFL and correct information are essential

- **Accumulation of pension wealth:** *a long and complex endeavor*
- Workers must have a correct notion of their accumulated “*pension wealth*, options, benefits variations with retirement postponement, survivor benefits ....”
- This knowledge is essential – especially with *DC benefits* – to avoid mistakes/disappointments in individual planning/decisions: work longer? participate in a pension plan? consume less?
- Information also fundamental *for the sustainability of the pension system and of a reform*: if people misinterpret the system and the need for reform they will try to reverse it
- Technical possibilities for a good and transparent information are now available and good practices exist (the US *Social Security Statement*; the Swedish and now also Italian *Orange Envelope*).





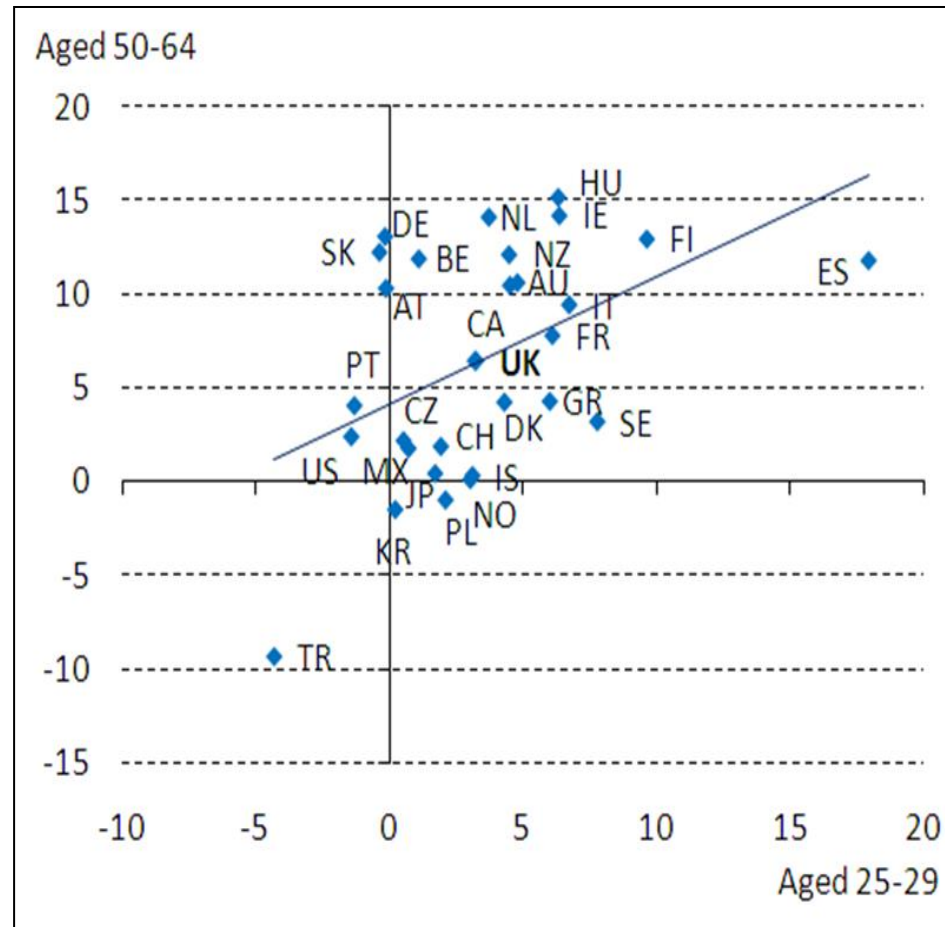
# What people should know about pension systems

- PAYGO system: an “*intergenerational compact*” that has an implicit debt dimension
- Equilibrium “rate of return”: depends on demographic and economic trends ( $n+g$ )
- Notion of *compound interest*: crucial to understand that  $W_p$  is accumulated by paying contributions; that each euro paid into the “retirement account” will add to their retirement income and the longer the period the higher the accumulated wealth
- *postponing retirement contributes twice to benefit increase*: through more contributions and lower expected longevity
- Notion of *risk diversification* (“do not put all your eggs in one basket”) supports participation in a pension fund, to combine unfunded with funded pensions, as they are characterized by different risk/returns combinations

# ...to avoid (pervasive) misconceptions

- “Acquired rights” or unjustified privileges?
- If people understand their pension “entitlements” are partly built on debt to be honored by future generations *they can be less hostile to pensions restructuring*
- The “lump of labor fallacy”: jobs are not in a fixed number and early retirement does not facilitate jobs for the young
- An expensive pension system is financed mainly from contributions by *workers/employers*, implying a trade-off between “generous” pensions and high labor costs.

Change in employment rates by age group - 1997-2007 (% points)



The  
Economist

JULY 16TH-22ND 2011

Economist.com

Murdoch's empire under siege  
Will the F-35 be the last manned fighter?  
The Arab spring, six months on  
Remembering the Orgasmatron  
The greatest Habsburg



**On the edge**

**Why the euro crisis has  
just got a lot worse**

## 4. Lessons from the emergency driven Italian reform

Paul Krugman «Now, with Italy falling off a cliff, it's hard to see how the euro can survive at all», The New York Times, November 10, 2011

TIME (November 7): «[Italy,] the world's most dangerous economy»

Süddeutsche Zeitung (October 24), «Italien–schlimmer als Griechenland » (Italy – worst than Greece)

# The 2011 “cold shower” reform

- Application, as of Jan 2012 and for future seniorities, of the **DC formula** to all workers, with periodic (every 2 years) updates of annuity rate coefficients
- **Increases in the statutory retirement ages** (66+longevity, in 2018) and phasedown of seniority pensions
- **Alignment**, as of 2018, of **ages and seniority requirements for women** in the private sector to those of men/women in the public sector
- **Indexation of eligibility requirements to life expectancy** (three preceding years var)
- **Increases in payroll tax rates** for farmers and the self-employed
- **Temporary freeze of indexation** for average-high pensions (>1400 €)
- **Solidarity tax** on higher pensions (sadly cancelled, later, by the Constitutional Court)
- **Free “totalization”** of contributions for NDC benefits
- **Elimination of “exit windows”**, by which workers had to wait 12/18 months to retire after reaching pensionable age

# Financial achievements but...social problems

- Important reduction in pension/expenditure over the next decades
- However, the swift implementation of the reform created a problem with workers that had left their job in expectation of a relatively near retirement
- The young, women and elderly workers more at risk of inadequate contributions and thus inadequate pensions
- Notional contributions (to be paid by the public budget) are devised for out of work periods, but hardly sufficient
- The communication was just on the negative side

# Are people aware of the main characteristics of the reform?

- No systematic survey of people's understanding (partial, small sample surveys for *talk shows*)
- Our survey:
  - GFK-Eurisko survey, July 2014: a data set specifically designed in order to examine the effects of the 2011 Italian pension reform on several aspects of older workers' understanding/behaviour
  - representative of older *workers* (public and private employees), conducted by the same institute running BI-SHIW
- It shows: a fair understanding of the reform based on a very simple index of comprehension (agreement/disagreement with statements such as: reduction of burden on young and future generations)

# How willing are Italian workers “to pay” in order to anticipate their retirement?

- Effects of the 2011 reform on two aspects of (older) workers’ behaviour:
  - preference for anticipated retirement
  - willingness “to pay” for doing so
- **Data:** GFK-Eurisko survey, July 2014
- **Sample:** employees aged 55+ extracted from two GFK panels (Panel GFK “dialogue” and “Toluna”), both representative of the Italian population with respect to the principal socio-demographic characteristics, namely: region of residence, gender, age, education, occupation, household size
- **Methodology**
  - OLS - Dependent variable: difference between the *expected* age of retirement and the *desired* age of retirement
  - Tobit - Dependent variable: amount of pension the individual is willing to renounce to anticipate retirement

# A general aspiration to anticipate but very limited willingness «to pay» for it

- The willingness to anticipate retirement is particularly strong for workers forced by the reform to postpone retirement and for women
- As for the willingness to pay to anticipate retirement, workers affected by the reform do not react differently from those who were not, and this result holds for both men and women
- Informal care duties play a role in explaining the willingness to pay and, interestingly, this role differs across genders
  - Women who are involved in informal care (to children) are willing to pay significantly more than women who are not
  - no effect of caregiving duties is observed for men



Table 1 – OLS – Dep variable: difference between the expected and desired retirement age

	(1) b/se	(2) b/se	(3) b/se
Age	-0.417*** (0.037)	-0.419*** (0.038)	-0.428*** (0.037)
Man	-0.817*** (0.203)	-0.808*** (0.203)	-0.872*** (0.203)
Couple	0.151 (0.282)	0.148 (0.282)	0.140 (0.284)
North	-0.047 (0.230)	-0.045 (0.230)	-0.144 (0.231)
Center	-0.068 (0.260)	-0.066 (0.260)	-0.134 (0.259)
University degree	0.077 (0.394)	0.073 (0.394)	0.013 (0.389)
High school degree	0.450 (0.341)	0.439 (0.342)	0.364 (0.338)
Manager	-0.637* (0.343)	-0.629* (0.344)	-0.706** (0.342)
White-collar	-0.155 (0.266)	-0.149 (0.267)	-0.217 (0.269)
Caregiving Children	-0.254 (0.216)	-0.254 (0.216)	-0.248 (0.213)
Caregiving Elderly	0.166 (0.229)	0.172 (0.229)	0.125 (0.225)
Expected age of retirement	0.573*** (0.041)	0.572*** (0.041)	0.580*** (0.041)
Arduous work	0.534** (0.212)	0.526** (0.213)	0.497** (0.211)
Bad health status		0.316 (0.413)	0.340 (0.394)
Treated			0.631*** (0.208)
Constant	-9.761*** (2.542)	-9.617*** (2.553)	-9.750*** (2.577)
R-squared	0.452	0.451	0.460
N	525	525	525

Note: Significance levels: \* 0.10 \*\* 0.05 \*\*\* 0.01; robust standard errors in parenthesis. Omitted dummies: female, single, South, blue collar, good health status. “Treated” stays for: “obliged to postpone retirement because of the reform”

Table 2 – Tobit - Dependent variable: amount of pension the individual is willing to renounce to anticipate retirement

	(1) b/se	(2) b/se	(3) b/se
Age	0.013 (0.151)	0.008 (0.150)	0.008 (0.150)
Man	-0.332 (0.842)	0.941 (1.503)	0.941 (1.501)
Couple	1.169 (1.177)	1.134 (1.183)	1.134 (1.183)
North	1.399 (0.941)	1.417 (0.935)	1.417 (0.943)
Center	-0.120 (0.969)	-0.062 (0.965)	-0.062 (0.980)
University degree	1.746 (1.567)	1.709 (1.548)	1.709 (1.548)
High school degree	0.494 (1.393)	0.405 (1.374)	0.405 (1.375)
Manager	0.605 (1.420)	0.731 (1.426)	0.731 (1.426)
White-collar	-0.097 (1.173)	-0.036 (1.171)	-0.036 (1.172)
Bad health status	0.538 (2.444)	0.475 (2.447)	0.475 (2.444)
Expected age of retirement	0.378*** (0.141)	0.373*** (0.140)	0.373*** (0.141)
Arduous work	0.922 (0.831)	0.987 (0.826)	0.987 (0.827)
Caregiving children	1.528* (0.839)		
Caregiving elderly	-0.230 (0.889)		
Caregiving children *men		0.150 (0.990)	0.150 (0.991)
Caregiving children*women		3.704** (1.476)	3.704** (1.478)
Caregiving elderly*men		0.212 (1.017)	0.212 (1.015)
Caregiving children*women		-0.938 (1.608)	-0.937 (1.607)
Treated			-0.002 (0.824)
Constant	-27.523** (11.335)	-27.688** (11.395)	-27.687** (11.450)
Sigma _constant	7.890*** (0.383)	7.851*** (0.382)	7.851*** (0.382)
N	525	525	525

Note: Significance levels: \* 0.10 \*\* 0.05 \*\*\* 0.01; robust standard errors in parenthesis. Omitted dummies: female, single, South, blue collar, good health status. "Treated" stays for: "obliged to postpone retirement because of the 2011 reform"

# Conclusions

After a period of serious cuts in the public component (and the near collapse of financial markets), a question arises:

- *how can people's confidence in the welfare system be restored?*

The answer has to be constructed around three building blocks:

- *Continuation of reforms* to strengthen sustainability, improve adequacy and modernize the system
- *Honest and transparent information on reforms as social investments*
- *Economic-Financial Literacy and education programs*