

# **THE WELL-BEING OF ITALIANS: A COMPARATIVE HISTORICAL APPROACH**

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# Core Questions

## Measuring living standards

- **How much** has the well-being of the Italians improved over the 150 years since Unification?
- **When, how** and **for whom** did improvement occur?
- How does Italy's living standard dynamics **compare** to that of other countries?

# Outline

1. Material living conditions
2. Non-monetary indicators of well-being
3. Beyond averages
4. The timing of progress
5. Conclusions

# **Material living conditions**

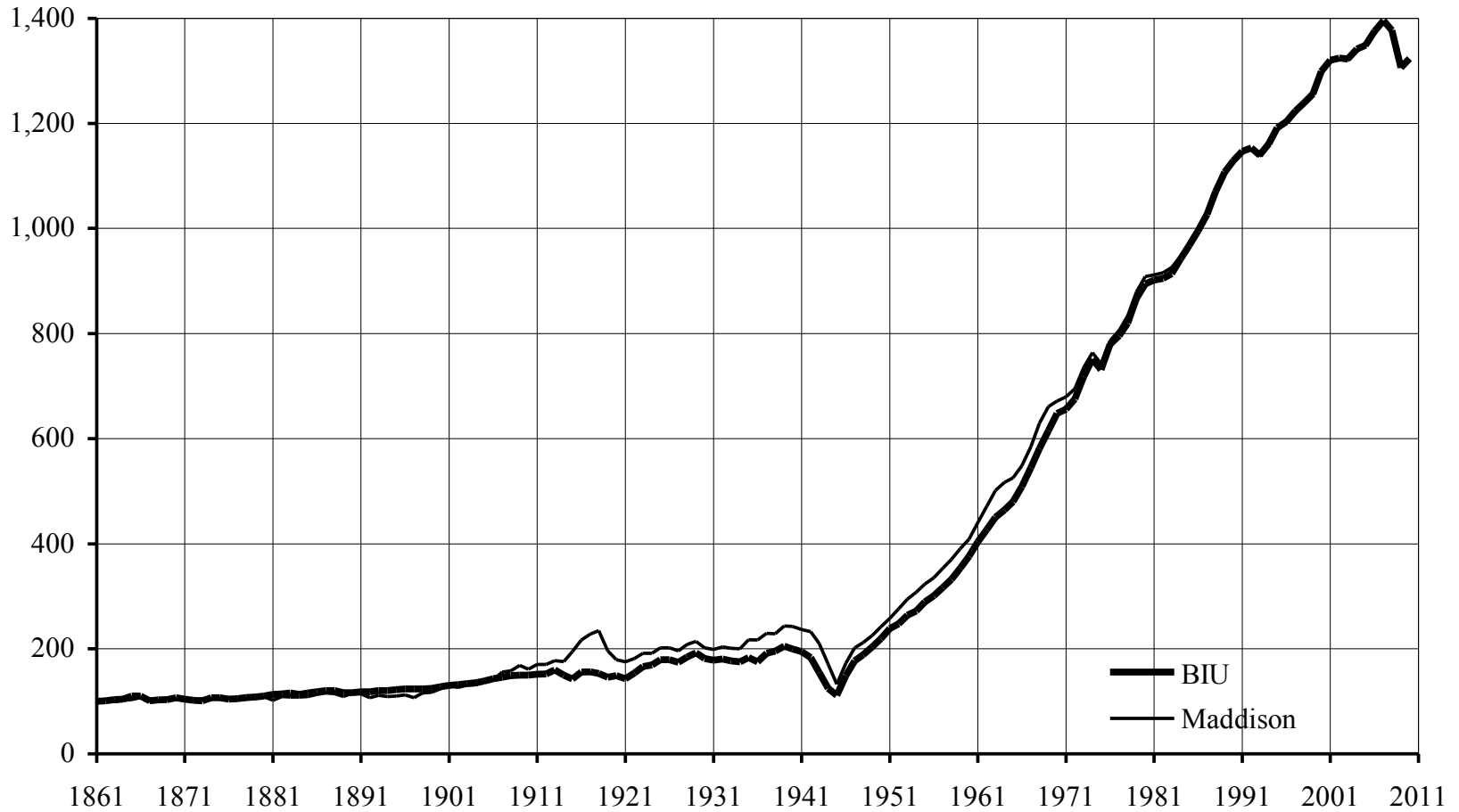
# **GDP-based measures**

1861-present day

- GDP **per capita** multiplied by 13.

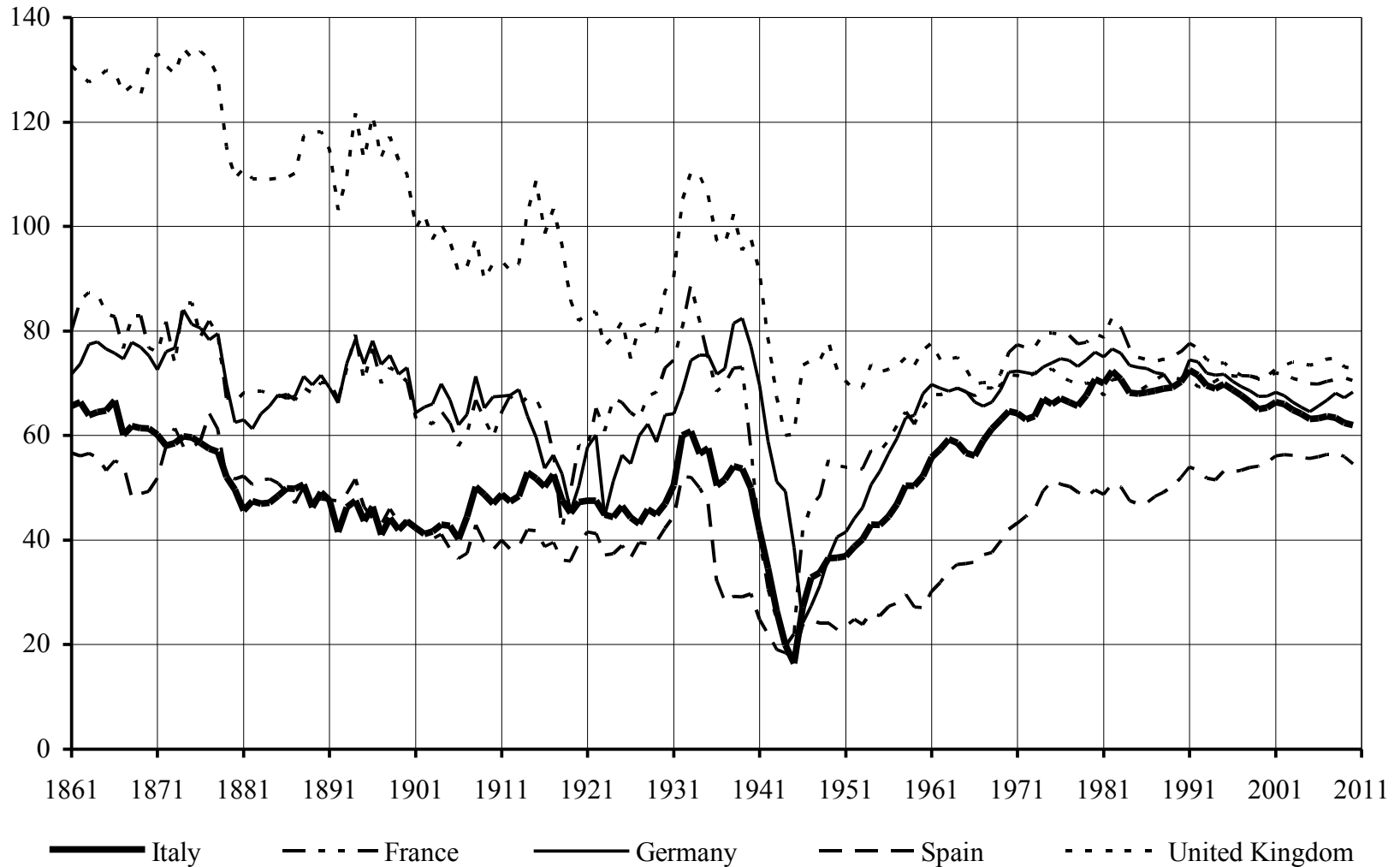
# GDP per capita

(index: 1861=100)



# GDP per capita

(index: United States=100)



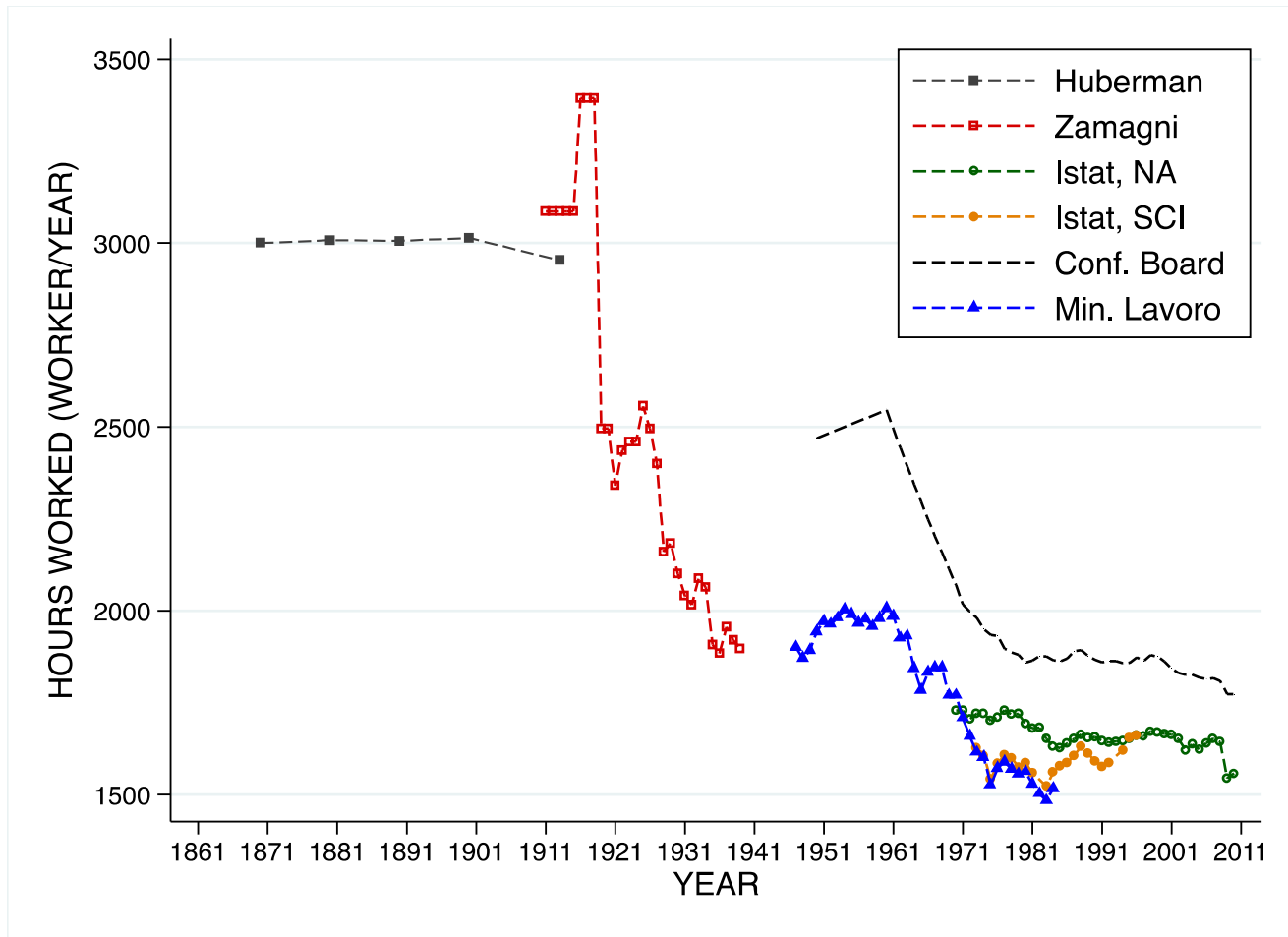
# **GDP-based measures**

1861-present day

- GDP **per capita** multiplied by 13.
- GDP **per adult equivalent** increased less  
(1881-2011: 8 vs. 11).
- **Labour effort** to produce GDP has decreased significantly (in line with other countries).



# Worked hours

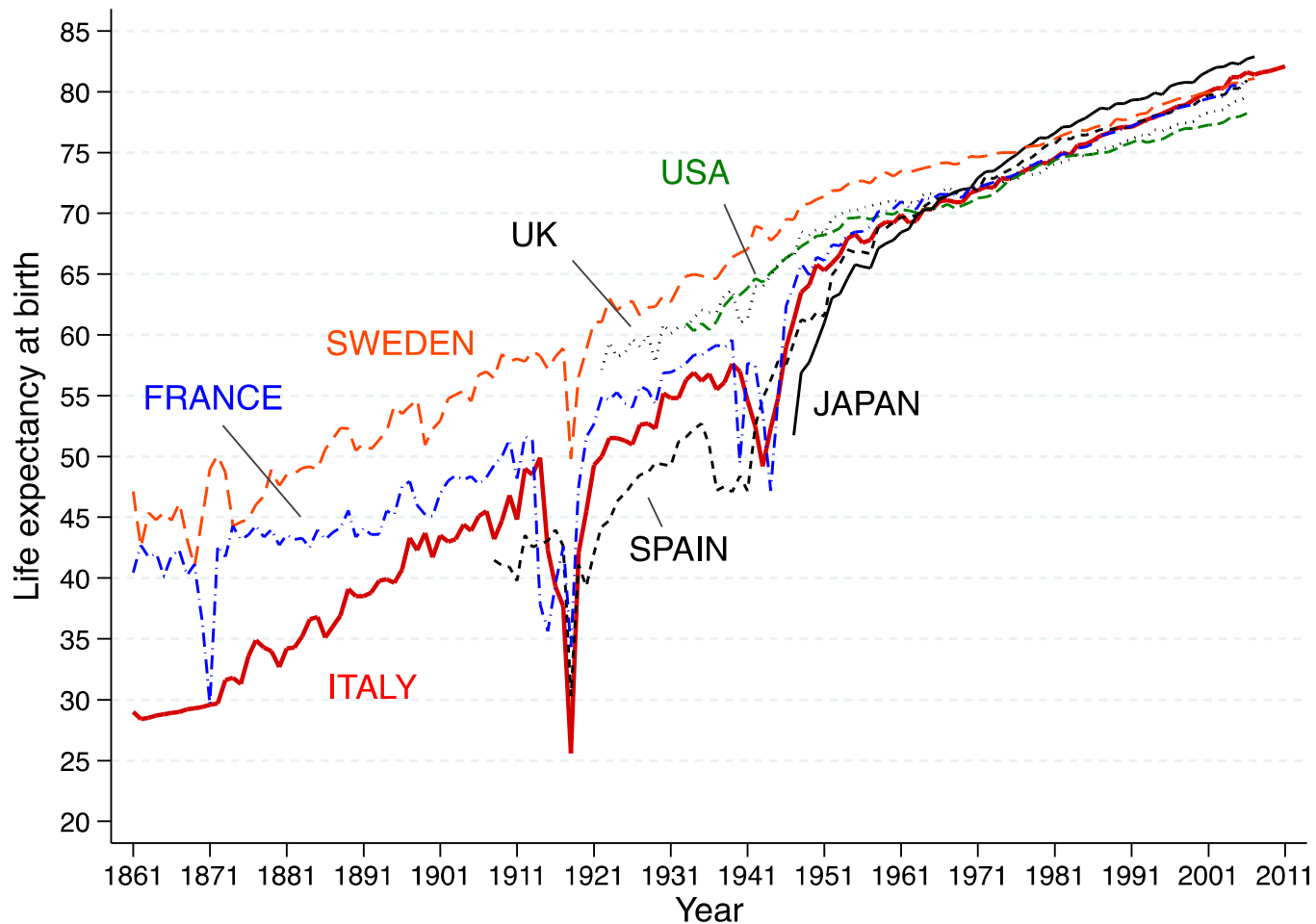


# Child work (age 10-14)



# **Non-monetary indicators of well-being**

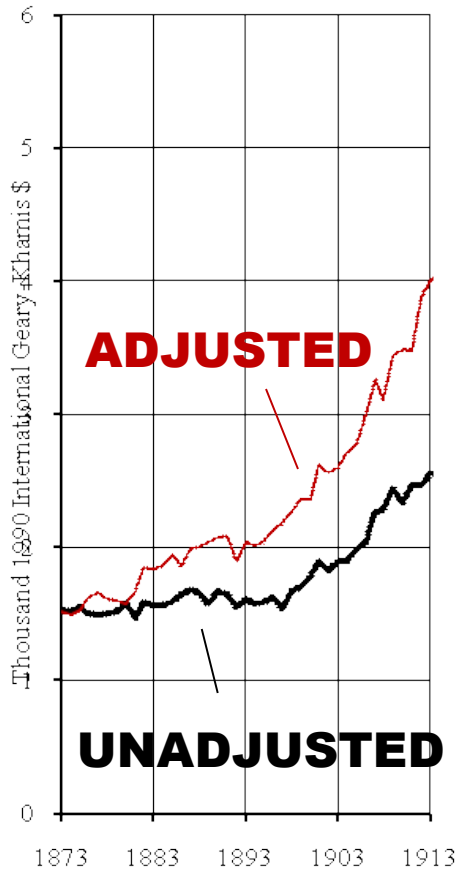
# The conquest of longevity



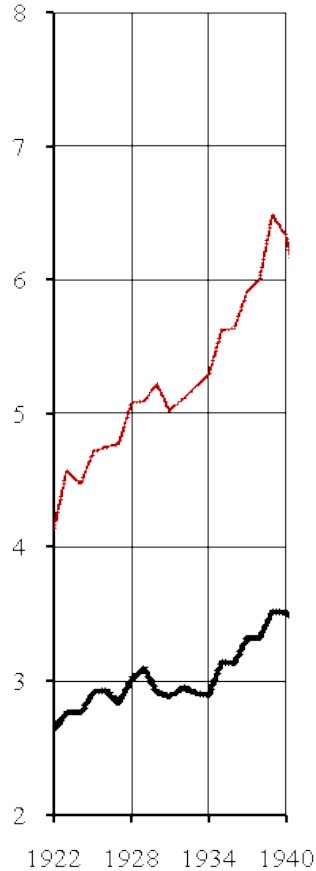
# GDP adjusted for longevity

[Usher (1973), Williamson (1984)]

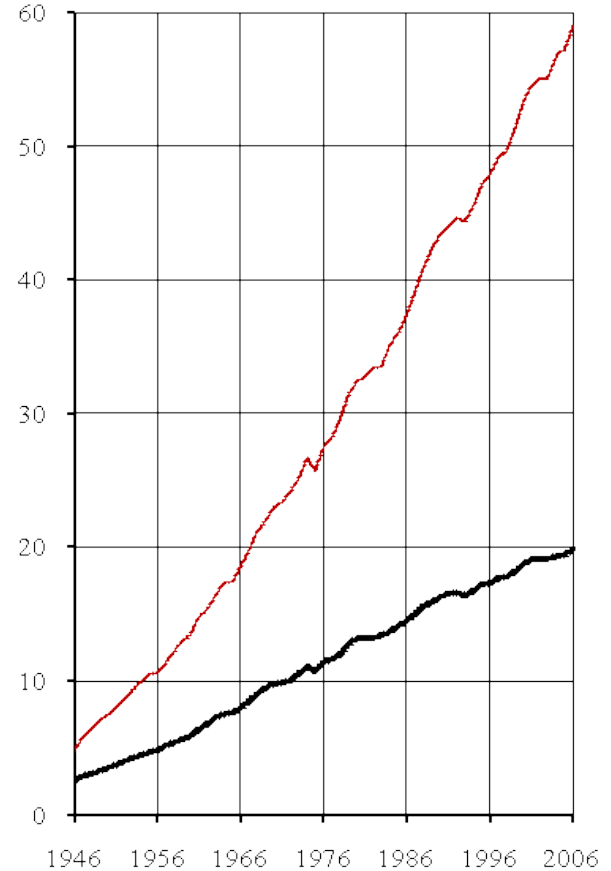
**LIBERAL ITALY (1873-1913)**



**FASCIST ITALY (1922-1940)**



**ITALIAN REPUBLIC (1946-2006)**



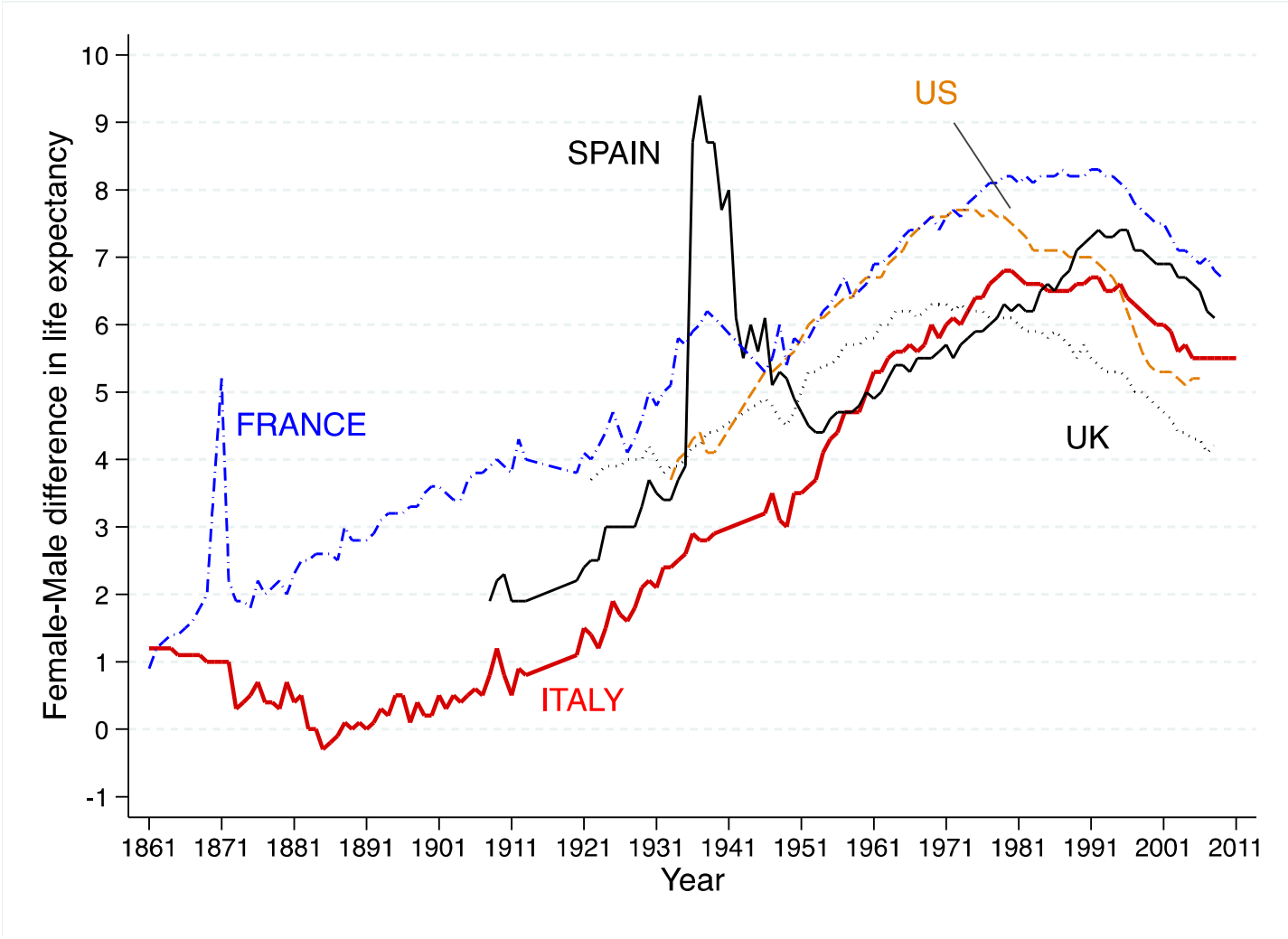
# **GDP adjusted for longevity**

[Usher (1973), Williamson (1984)]

## **Annualised growth rates**

	<b>unadj.</b>	<b>adj.</b>		
		<b><math>\beta=0.45</math></b>	<b><math>\beta=0.3</math></b>	<b><math>\beta=0.25</math></b>
<b>1873-1913</b>	<b>1.1</b>	<b>1.8</b>	<b>2.1</b>	<b>2.3</b>
<b>1922-1940</b>	<b>1.5</b>	<b>1.9</b>	<b>2.1</b>	<b>2.2</b>
<b>1946-2008</b>	<b>3.6</b>	<b>4.0</b>	<b>4.2</b>	<b>4.3</b>

# Sex differences in life expectancy at birth



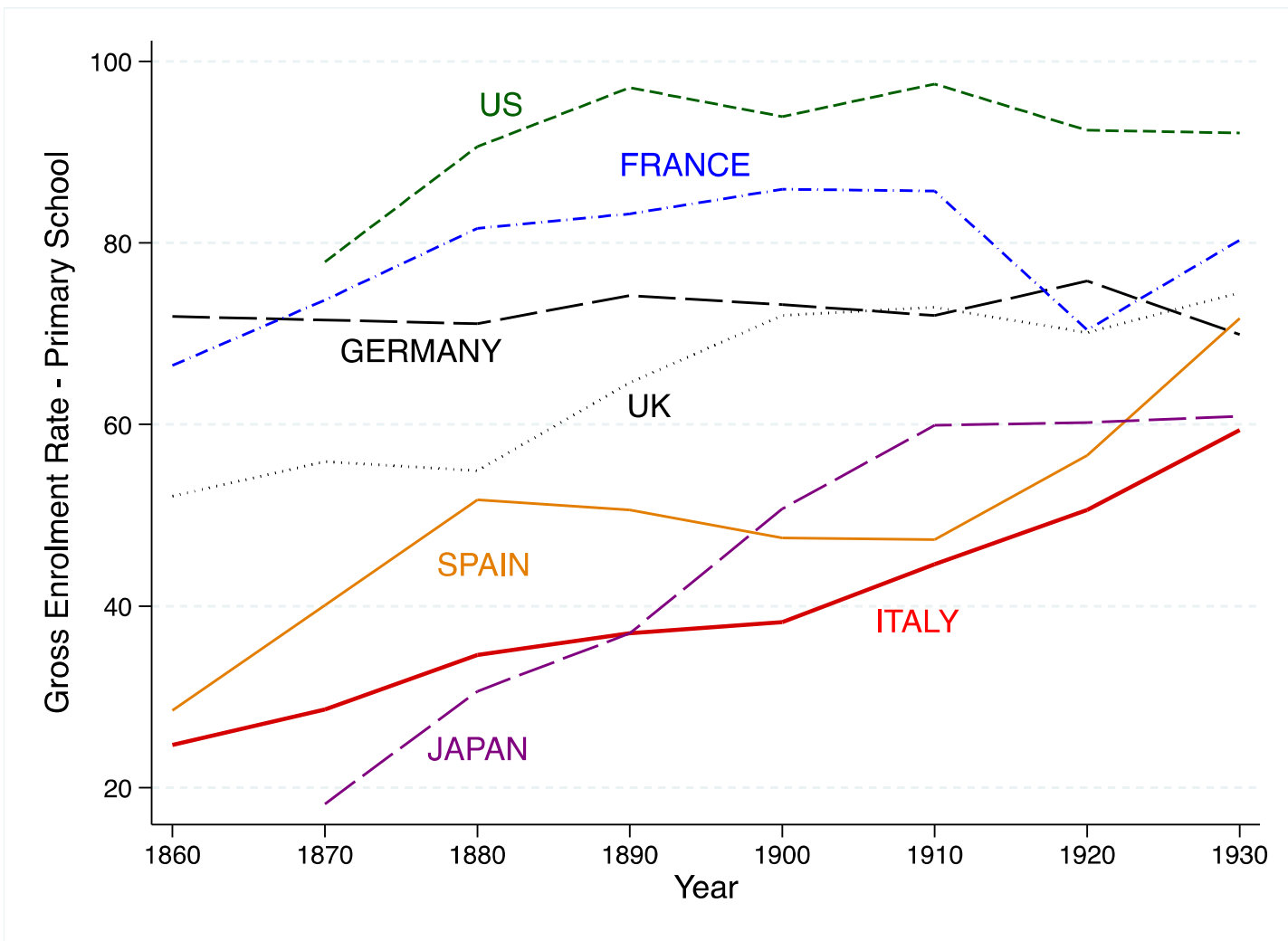
# Education

- Current record rather poor in school attainment levels and proficiency scores in PISA or TIMMS
- Situation not too different in 1870:
  - year of schooling: Italy: <1; US: 5.6; Germany: 5.5; France and UK: 4; Spain: 2.4 (Morrisson and Murtin 2009).
- Bolton King and Thomas Okey in *Italy Today* (1901):

***“Education is the gloomiest chapter in Italian social history, a chapter of painful advance, of national indifference to a primary need, of a present backwardness, that gives Italy (next to Portugal) the sad primacy of illiteracy in Western Europe”***



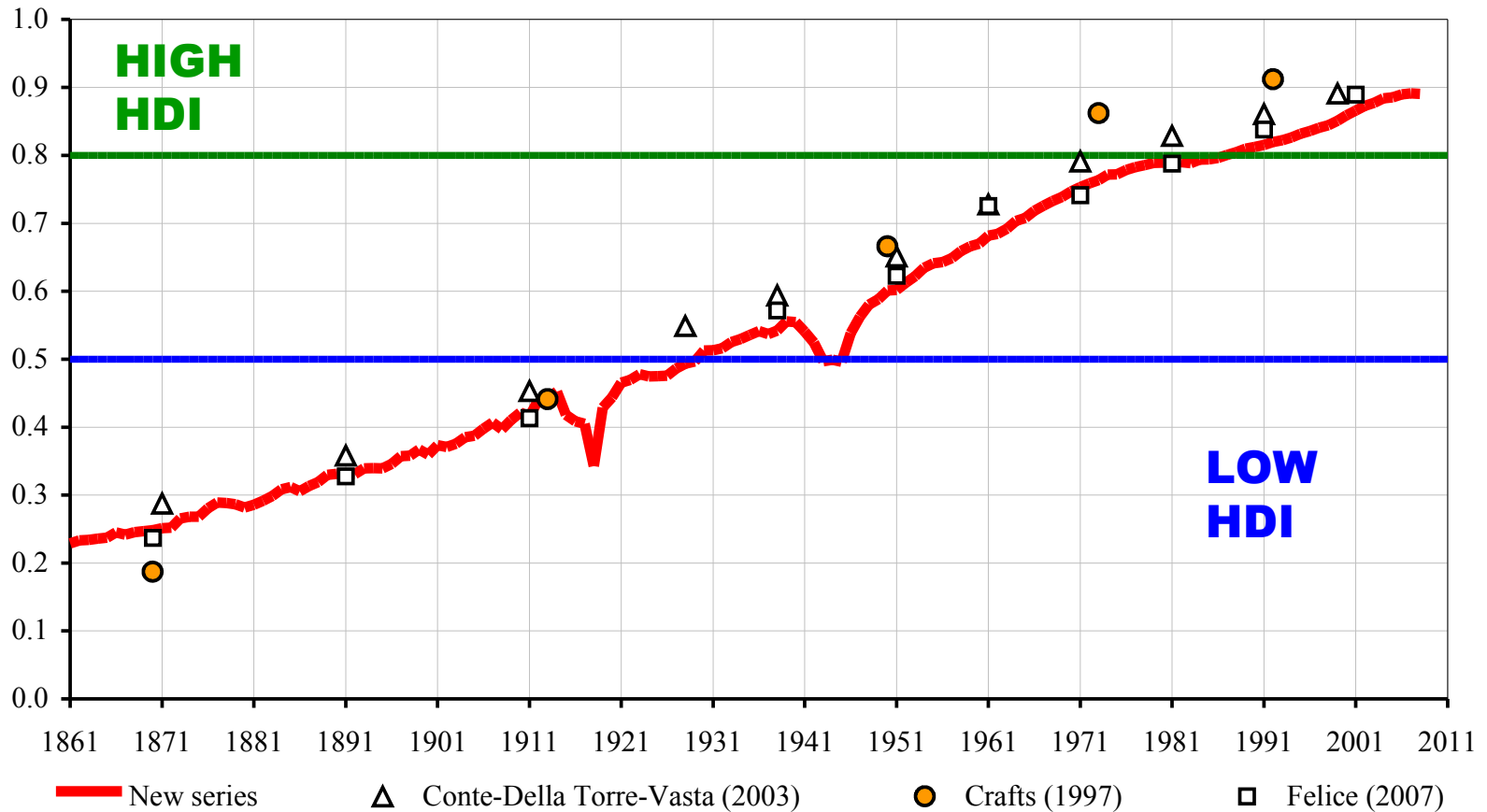
# Education



# The curse of multidimensionality

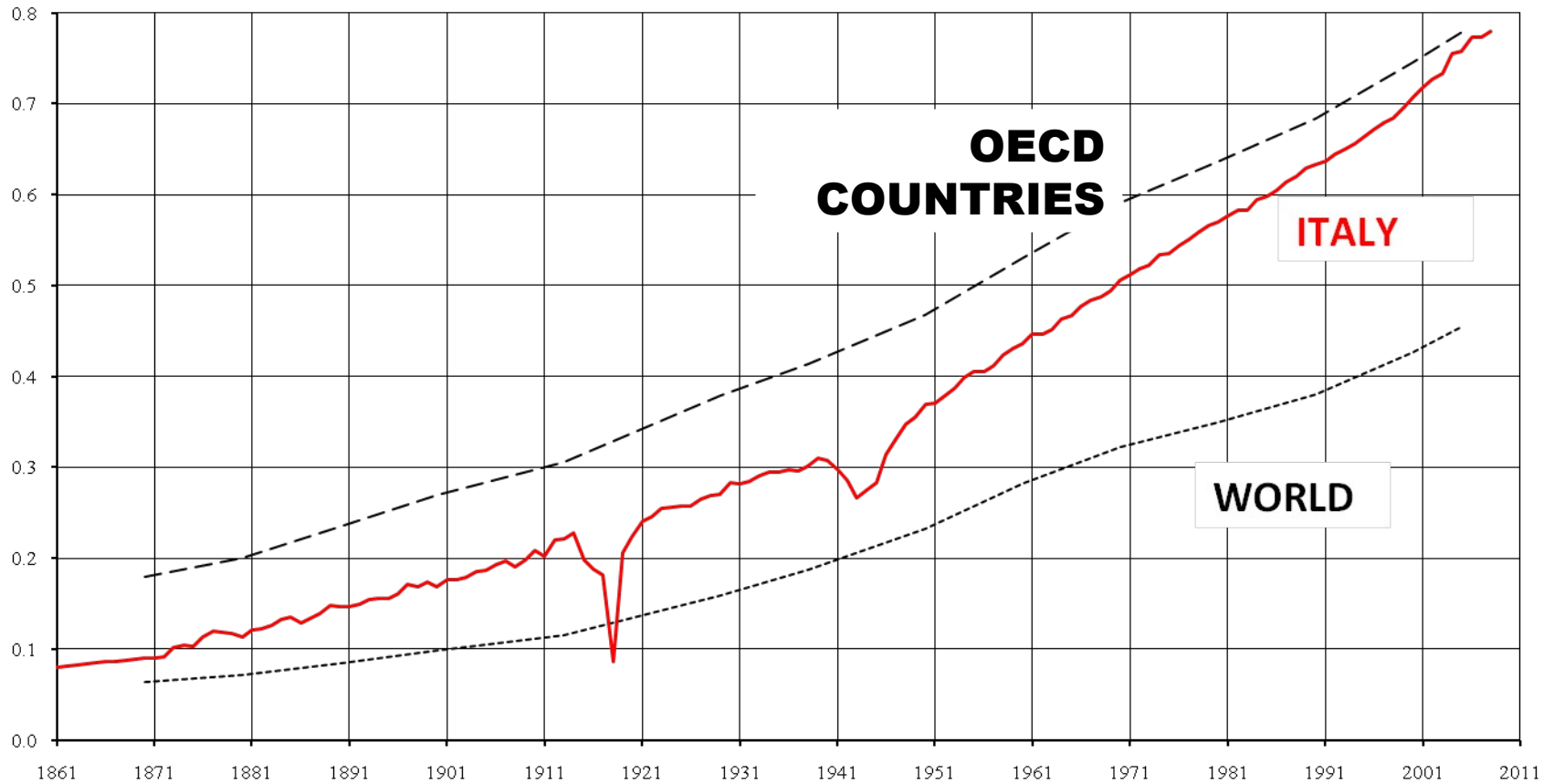
- Well-being is an  $n$ -dimensional **vector**
- How to assess the evolution of this vector over time?
- Three strategies:
  - 1) Transform dimensions into **money equivalent** and adjust income
  - 2) Collapse dimensions into a scalar measure (**composite index** or **mashup index**)
  - 3) Construct a **dashboard of indicators** and get used to deal with multiple dimensions.

# Human Development Index



# Improved Human Development Index

[Prados de la Escosura, 2010]



**Beyond averages**

# Beyond average incomes

- Venturing beyond **average** income one meets with its **variance**.
- How do we **estimate** income inequality for 150 years? (Hard especially for the epoch prior to modern surveys)
- **Italian Household Budget Dataset (IHBD)**
  - novel and innovative methodology
  - rich database: 20,000 households (1861-1931)

GIORNALE  
DEGLI  
ECONOMISTI

RIVISTA MENSILE DEGLI INTERESSI ITALIANI

(fondato a Padova nel 1875,  
proseguito a Bologna nel 1886 dal Prof. A. ZORLI)

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QUADRO I.

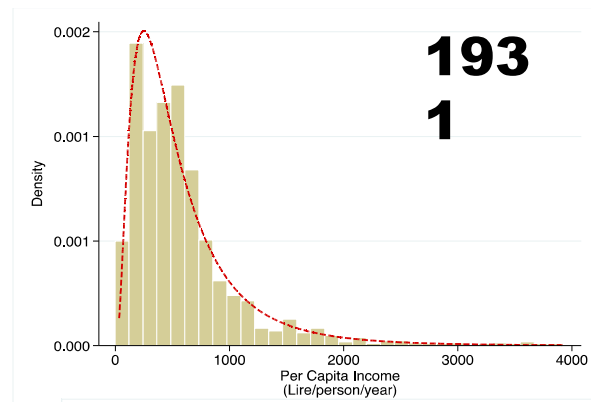
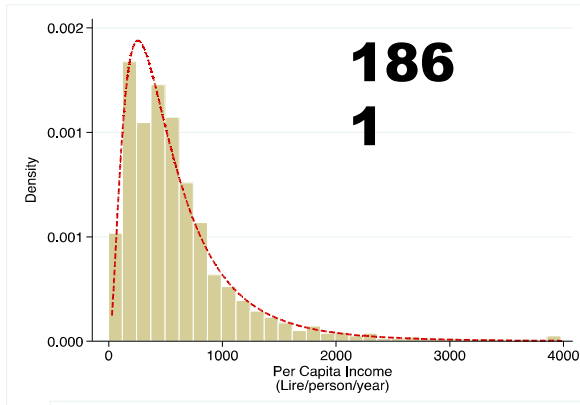
ENTRATE				SPESE						
Oggetti e servizi concessi, attribuiti	Avuto per regalo un letto . . . . . L.	20	—	Cereali	Grano comprato Staja 12 (Ettoltri 6.96) . L.	147	30			
	Un fazzoletto di seta dalla madre della Giuseppa . . . . . >	1	20		Granturco comprato Staja 12 . . . . . >	80	—	—		
Prodotti dei diristi di uso	Due vestiti regalati dalla madre della Giuseppa . . . . . >	12	—	Un sacco di grano in regalo . . . . . >	33	—	—			
	Un Sacco di grano avuto in regalo . . . . . >	33	—	Fagioli comprati . . . . . >	18	—	—			
	Spigolatura fatta dalla madre e dai due figli >	30	—	Corpi grassi	calcolati L. 1 la settimana . . . . . >	—	278	30		
	Erba raccolta sui fondi altrui o per i fossi delle strade Comunali . . . . . >	33	—	Ova	4 ova circa la settimana con 2 galline per mesi 6 . . . . . >	6	—	55	—	
Profitti dell'industria	Stecchi raccolti dalla famiglia . . . . . >	15	—	Carne	la domenica ogni 15 giorni, 45 centesimi . >	—	6	72		
	Prodotto di 2 galline . . . . . >	—	78	Legumi	pomidori 8 libbre a 15 centesimi per far conserva di pomodoro - il resto comprato per consumo diretto . . . . . >	—	3	70		
Salari della famiglia	Giornate del Padre che ha lavorato circa 9 mesi. Per le opere dal Gennaio all'Aprile L. 1.25, da Maggio a Ottobre L. 1.40 . . . . . >	270	—	Bevanda	vino niente - solo in caso di malattia - nel 1890 salute perfetta. . . . . >	—	19	25		
	Più opera sua seguendo la macchina per la trebbiatura del grano L. 2.80 più il vitto calcolato L. 1.50 al giorno per 28 giorni >	118	40	Condimento	Sale K. 1 per settimana . . . . . >	—	42	—		
	Bucato fatto dalla moglie per un possidente >	9	60	Cibi consumati fuori di Casa per 28 giorni L. 1.50 al giorno a Poletti Luigi seguendo la macchina del grano . . . . . >	—	—	—	416	67	
	Lavoro di Stuoje fatto dal ragazetto di 13 anni . . . . . >	23	80	Abitazione	—	—	—	—	—	
	Ricavo dal filato L. 0.10 al giorno l'inverno fatto dalla moglie per incarico dei Contadini >	14	—	Alloggio	Fitto di 2 Camere . . . . . >	13	—	40	—	
			435	80	Riscaldamento	Legna comprata . . . . . >	15	—	28	—
		L.	588	72	Vestuario	Stecchi raccolti dalla famiglia . . . . . >	—	13	20	—
					Avuto per regalo com'è specificato di contro >	5	—	—	—	
					Scarpe comprate per Giuseppe . . . . . >	5	—	—	—	
					Altre pel Padre . . . . . >	1	—	—	—	
					Un fazzoletto . . . . . >	2	25	—	—	
					Camicie pel ragazzo . . . . . >	12	—	25	25	
					Due vestiti di rigatino . . . . . >	—	—	10	—	
					Filatura di 50 libbre di canape a 4 soldi la libbra che ha reso 19 braccia di rigatino >	—	—	—	48	45
				Mobili	Letto regalato . . . . . >	—	—	—	20	—
				Lumi	Quattro soldi di petrolio la settimana . . . >	—	—	—	11	—
				Debiti-Imposte	verso la Società di mutuo soccorso, 50 centesimi il mese . . . . . >	—	—	—	6	60
				Risparmio	Due Staja di formentone alla fine di Dicembre . . . . . >	—	—	—	16	16
									588	72



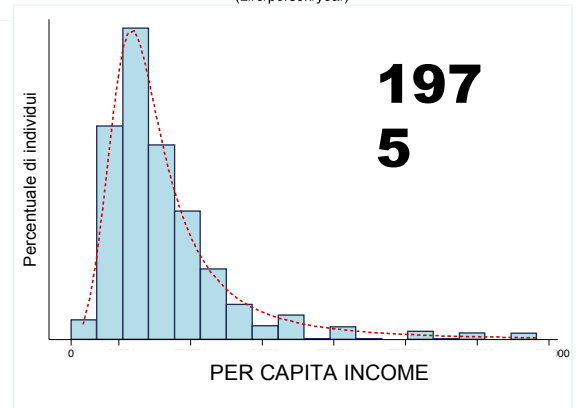
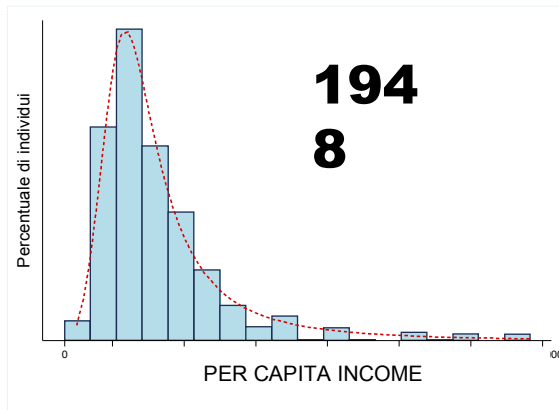
# From IHBD to Gini index in five steps

- Organize household budgets into **10-year samples** (1861, 1871, ..., 1931)
- Use population censuses to create **weights** (expansion factors)
- **Associate** weights to households (post-stratification)
- **Fit** a (4-parameter) Generalized Beta of the Second Kind (GB2) by maximum likelihood
- **Estimate** the Gini index (as a function of estimated parameters of the GB2)

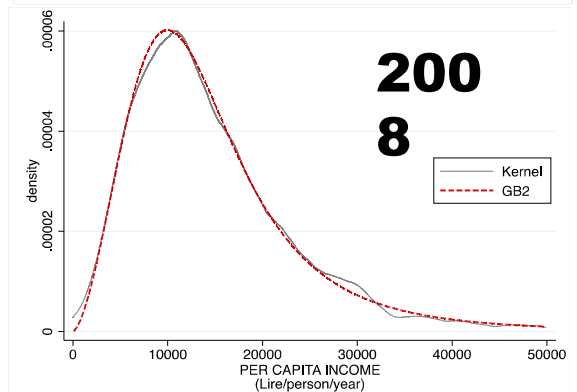
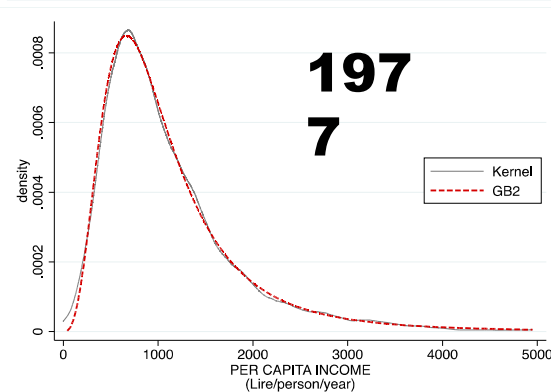
# Maximum likelihood estimates of income distribution



...  
**(IHBD-  
II)**

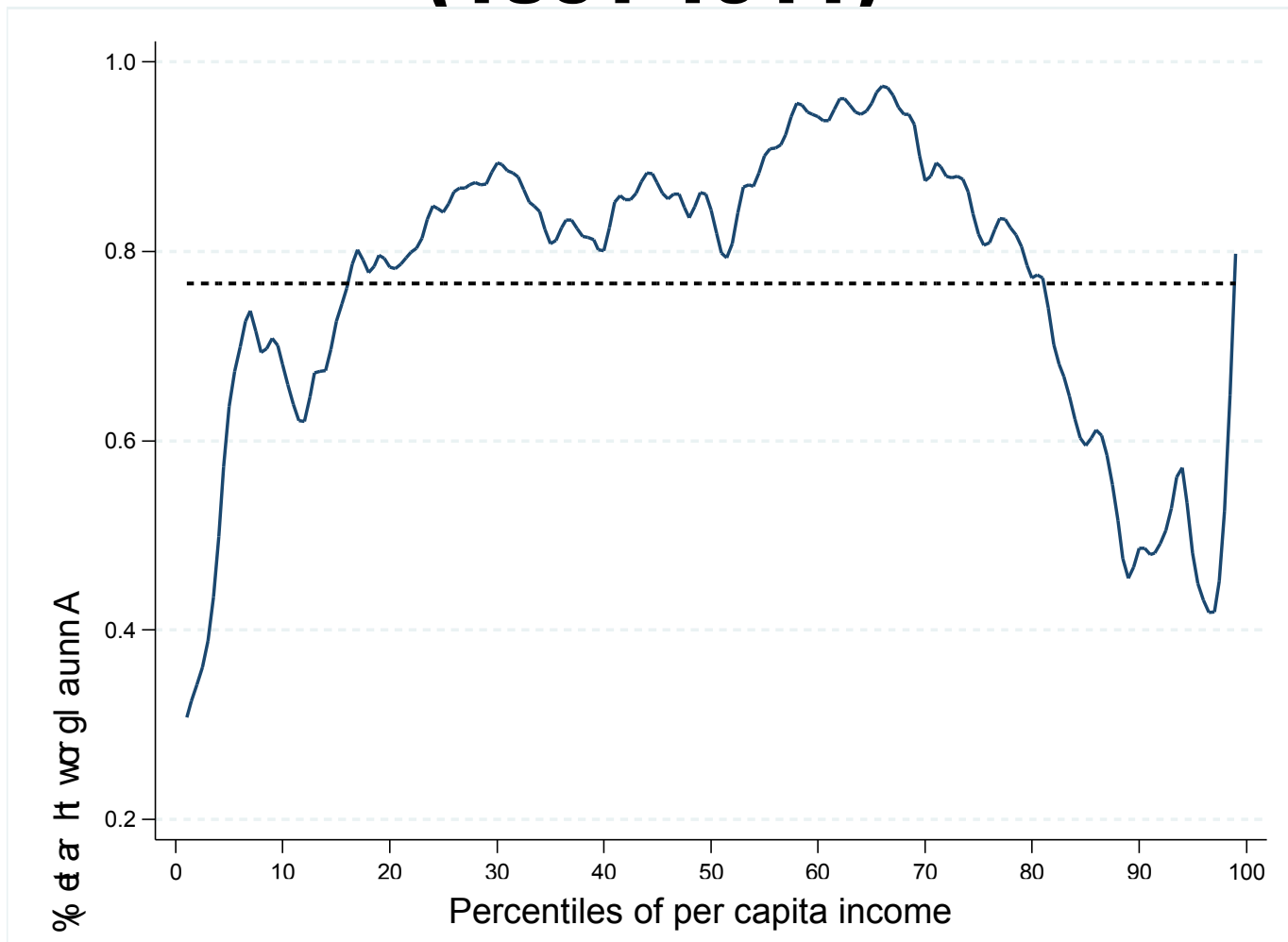


...  
**(tabular  
data)**



...  
**(micro  
datasets)**

# Income growth curves: Liberal Italy (1861-1911)



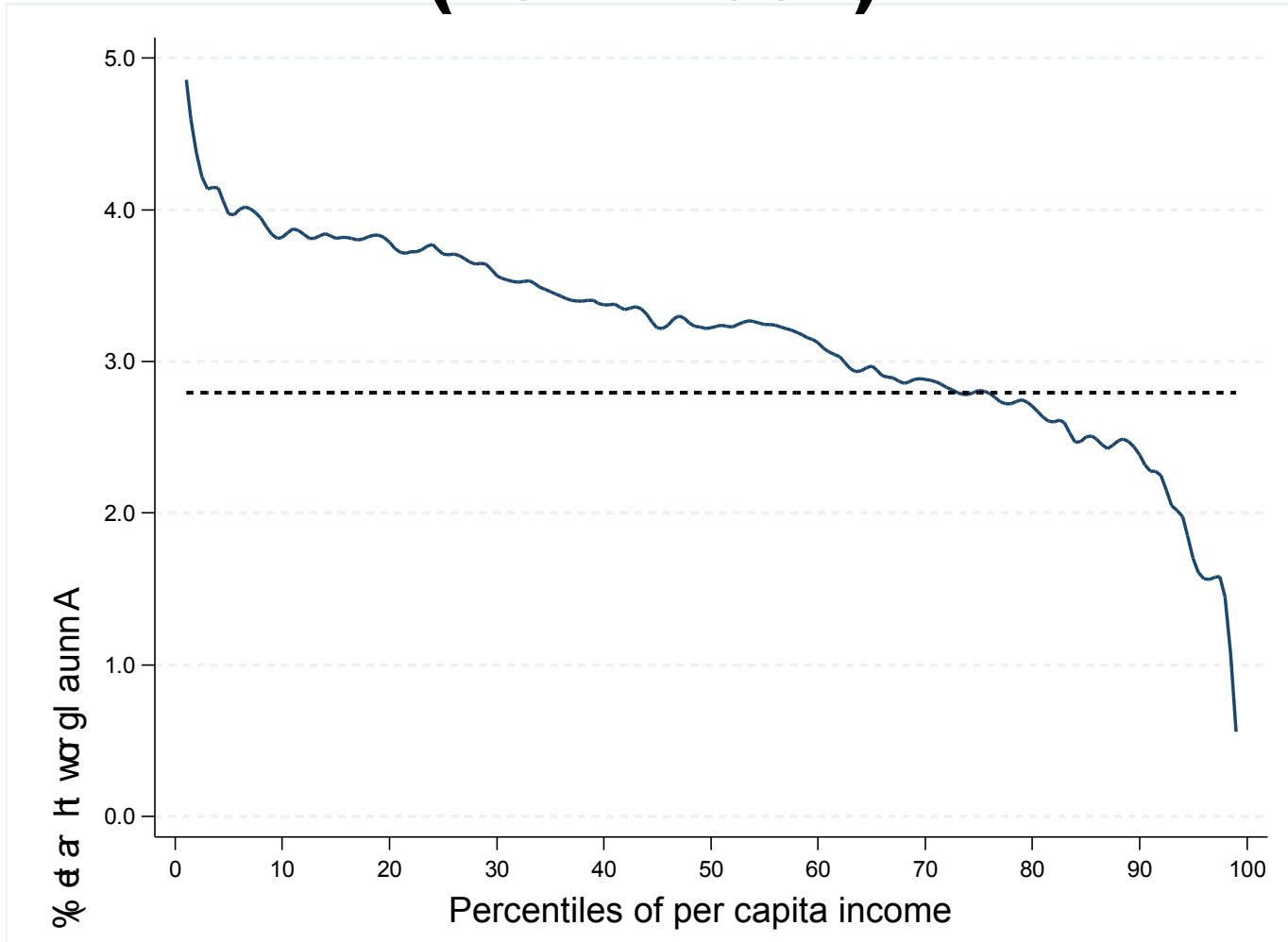
Source: Amendola, Salsano and Vecchi (2011)

# Income growth curves: Fascist Italy (1921-1931)



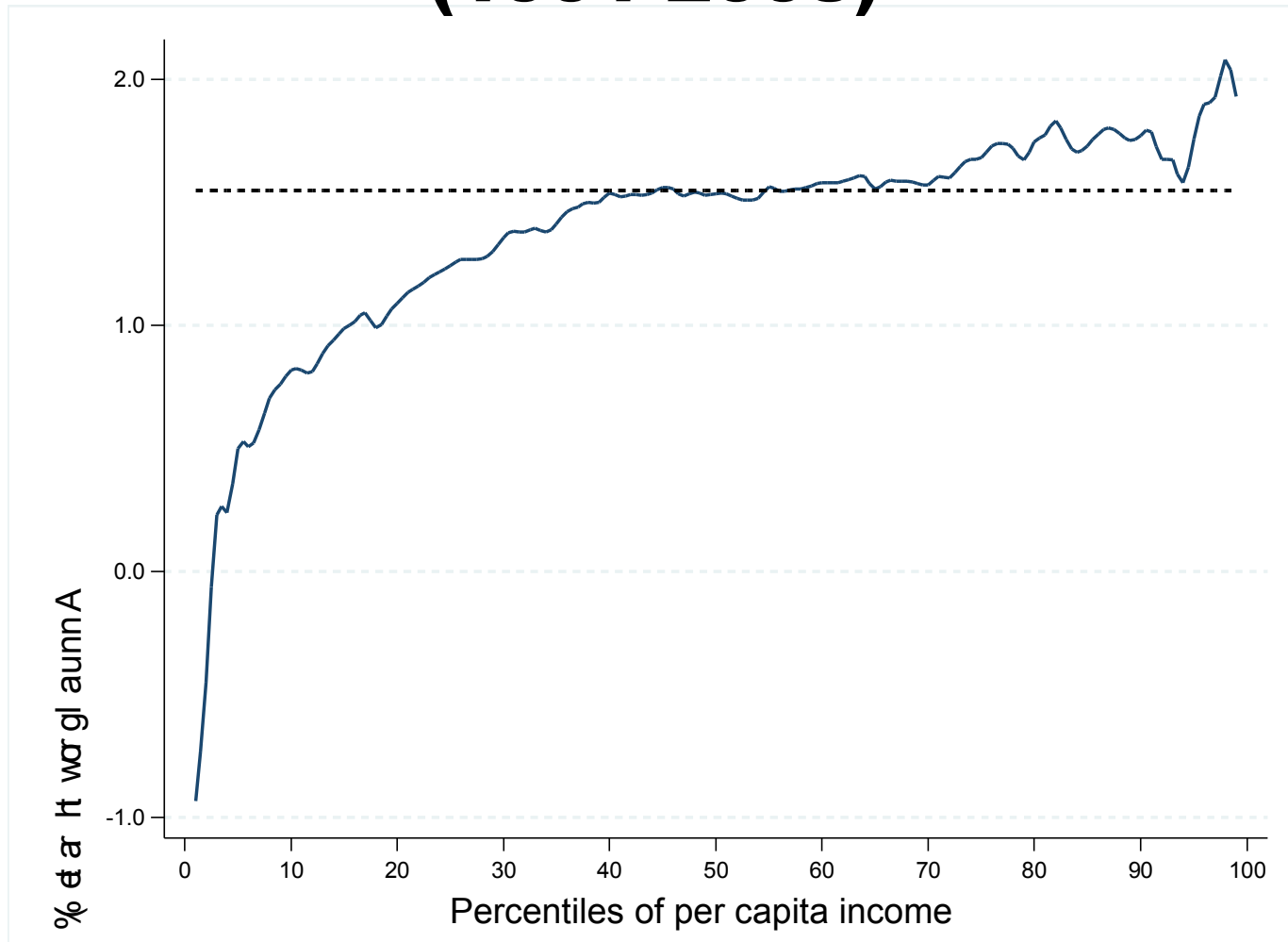
Source: Amendola, Salsano and Vecchi (2011)

# Income growth curves: Modern Italy I (1977-1991)



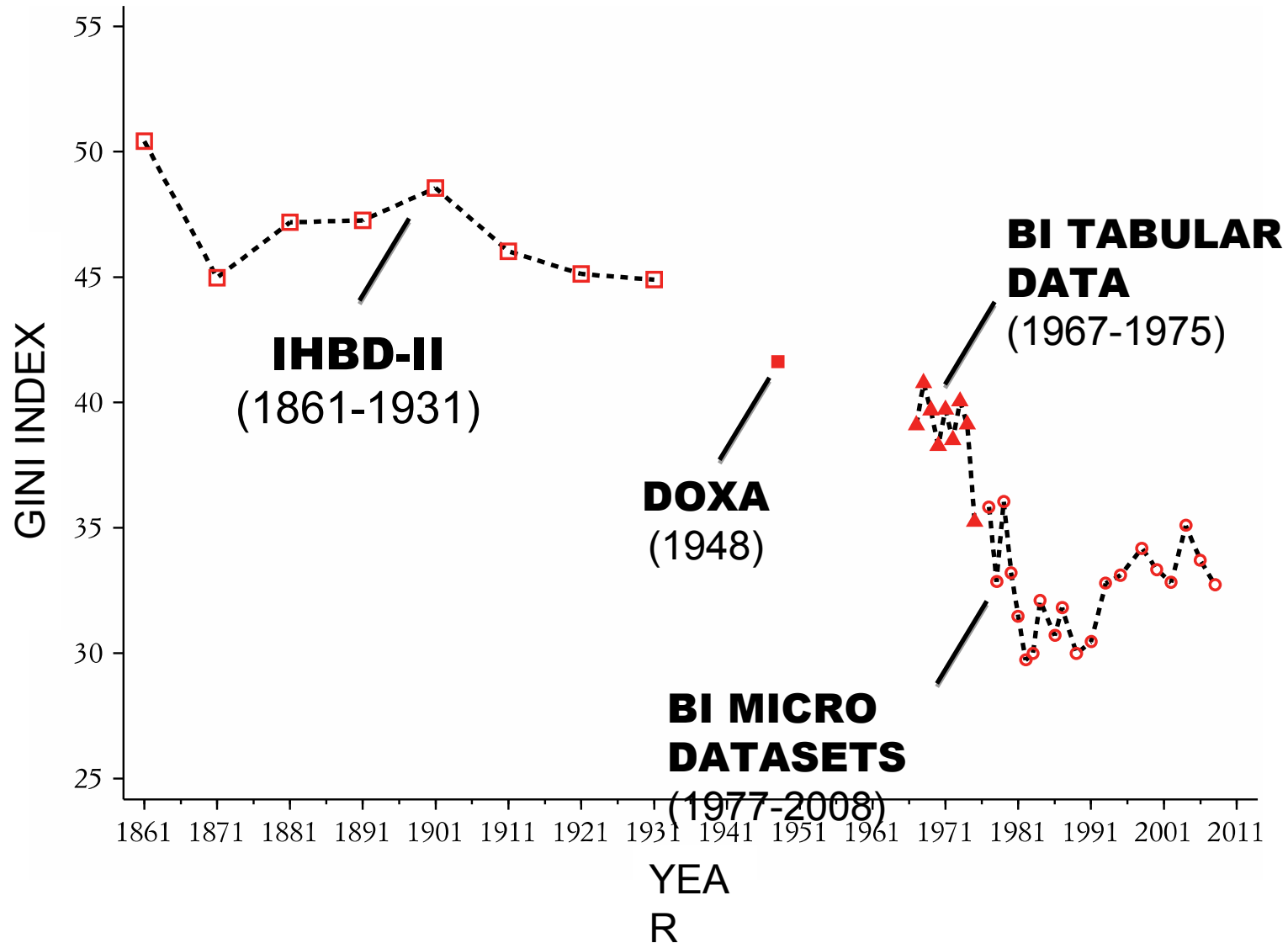
Source: Amendola, Salsano and Vecchi (2011)

# Income growth curves: Modern Italy II (1991-2008)



Source: Amendola, Salsano and Vecchi (2011)

# Income inequality in Italy since 1861

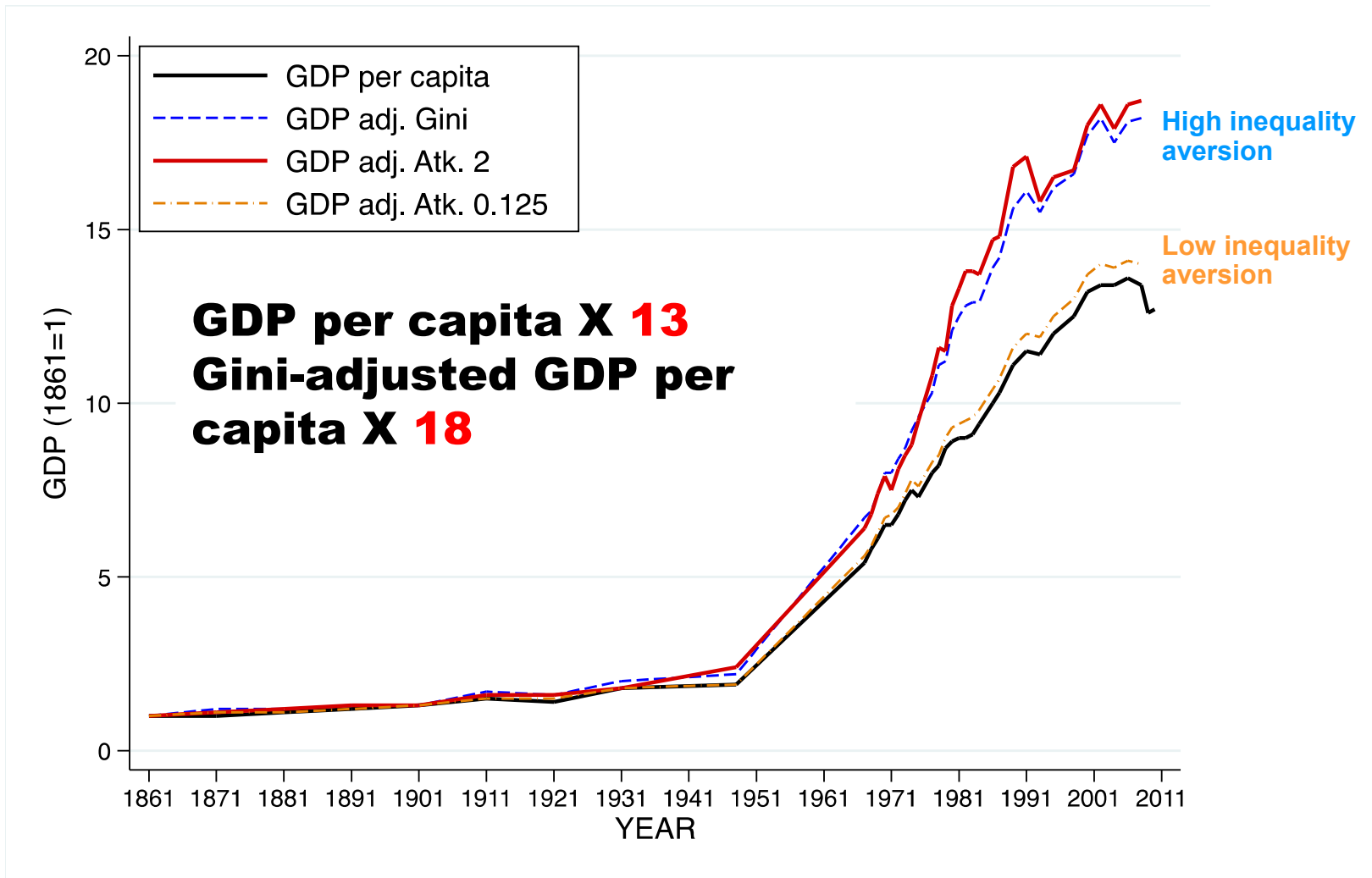


# Three comments

- 1) Italy's **modern economic growth** accompanied by a long-run **reduction in inequality** (not the case for most countries for which evidence is available)
- 2) Atkinson (1997) is right: rather than “**trends**”, better look at “**episodes**” to describe the evolution of inequality
- 3) The **fall of inequality amplifies** extent of **economic progress** – as suggested by indices proposed by Atkinson (1970) and Sen (1976).



# Distributionally-adjusted GDP per capita

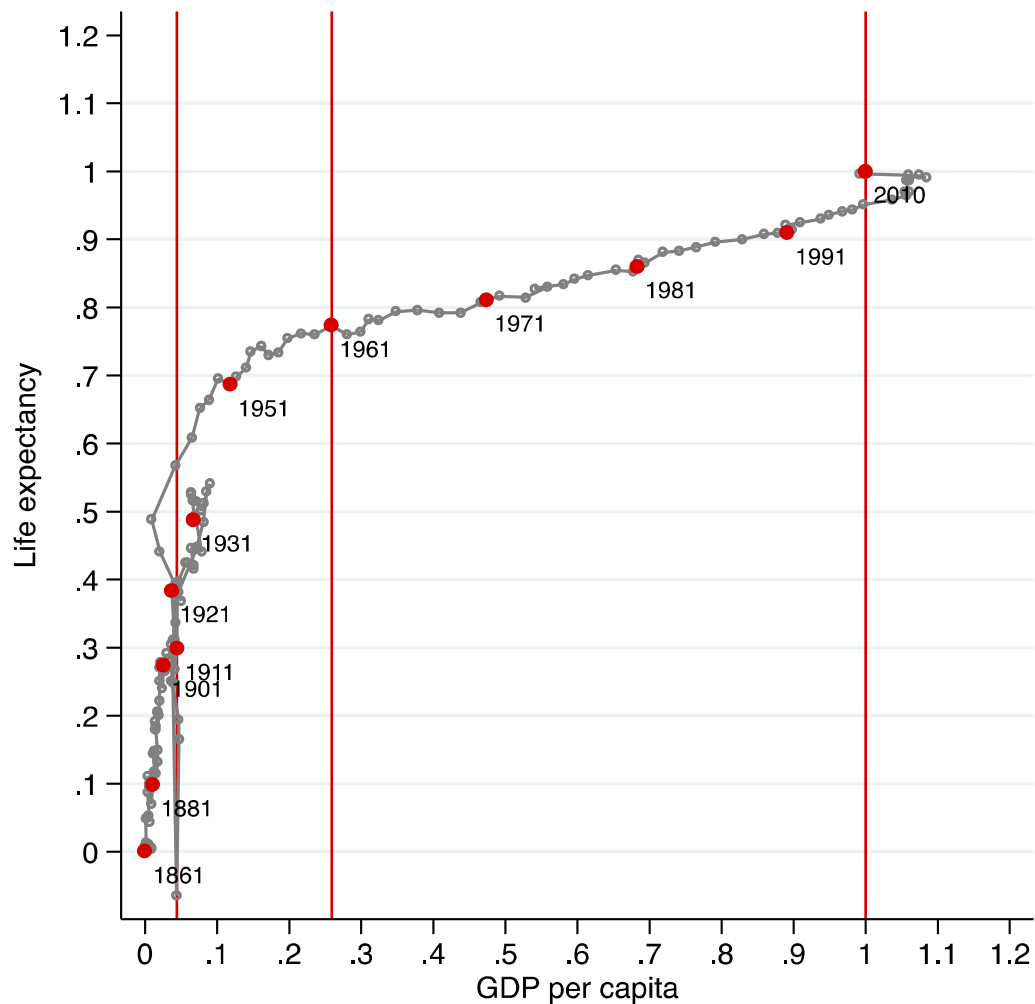


# **The timing of progress**

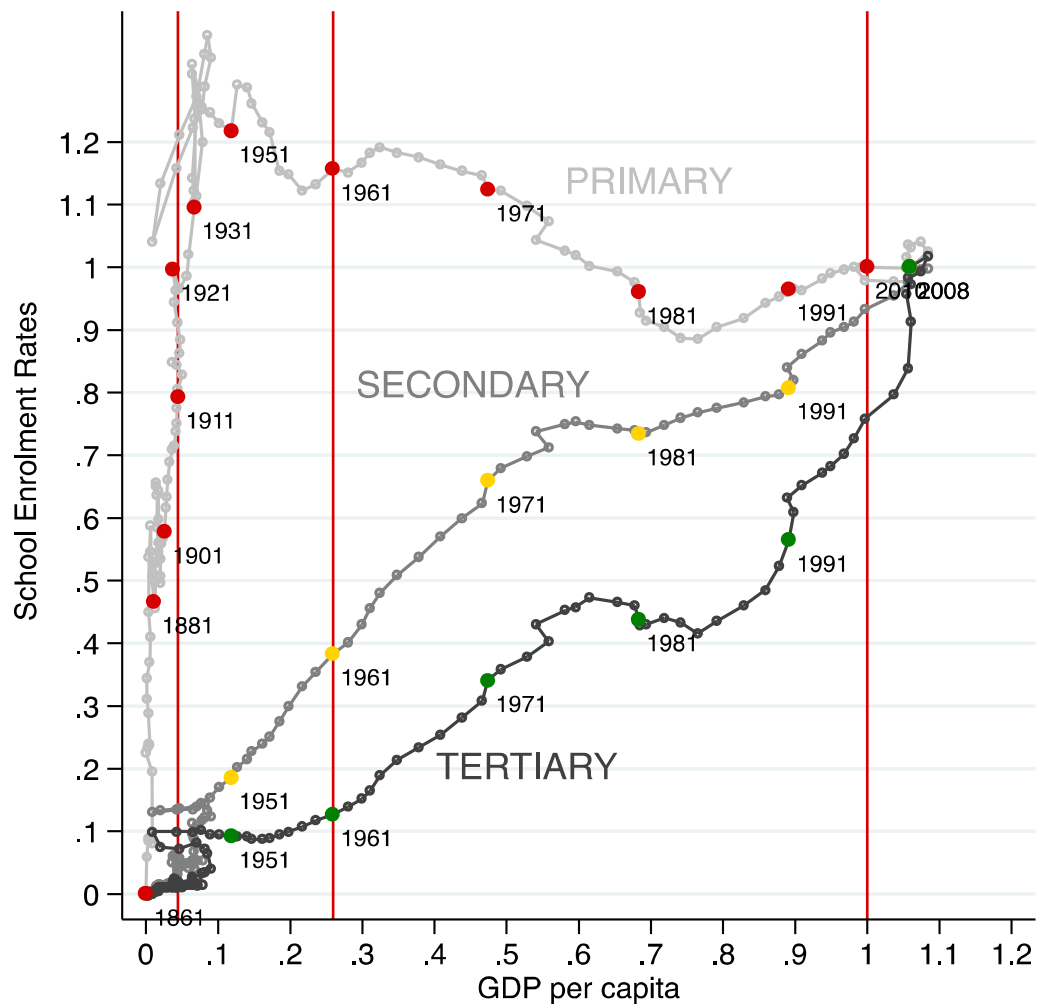
# Dynamics of improvements in well-being

- So far, emphasis on **relative** progress: proportional improvements.
- Alternative: assess **absolute** progress and its timing.
  - Look at how much of **absolute difference** between end (2010) and beginning (1861) covered in various sub-periods

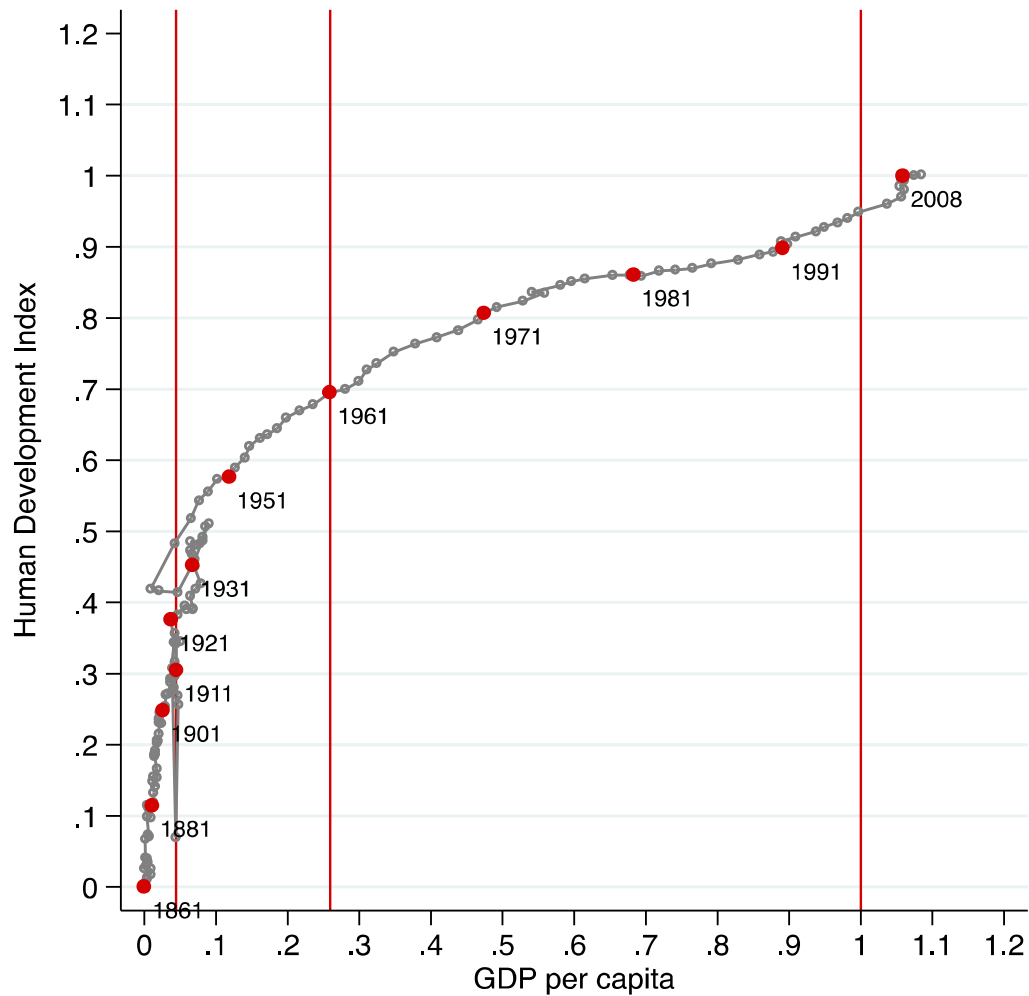
# Dynamics of absolute improvements in well-being (1)



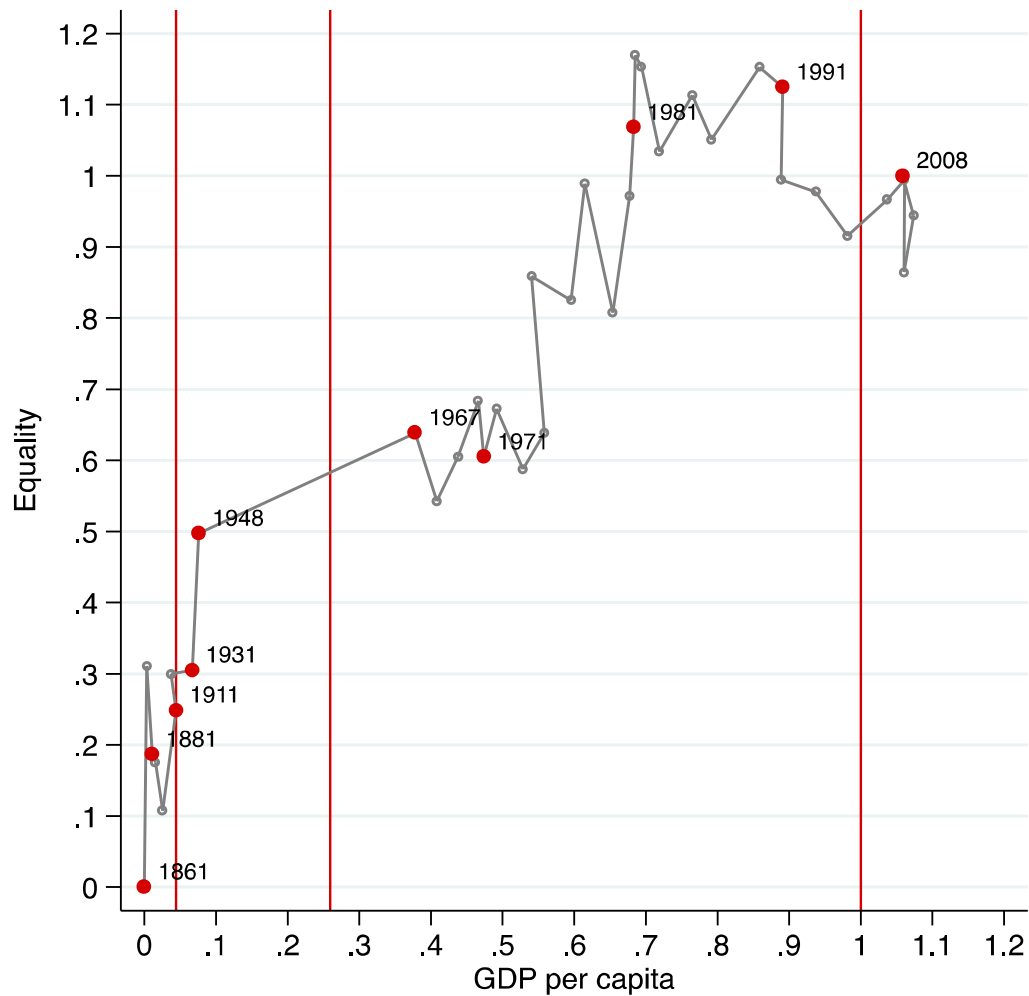
# Dynamics of absolute improvements in well-being (2)



# Dynamics of absolute improvements in well-being (3)



# Dynamics of absolute improvements in well-being (4)



# **Conclusions**



# Conclusions (1)

- 1) GDP per capita** provides a **partial view** of secular evolution of Italians' well-being.
  - **Timing** differs between GDP and non-monetary indicators.
  - International **convergence** looks better with non-monetary indicators than with GDP alone.
- 1) Great progress** in basic living standards – infant mortality, primary education – at the beginning and **up to “first globalization”**.

## Conclusions (2)

- 3) During **interwar years** progress slows down, but does not stop. But need to account **for political freedom and civil rights** – missing dimension in our analysis
- 4) Greater well-being improvements in **1970s** than during the ***economic miracle's*** years.
- 5) Evidence from **1990s** onwards supports concerns about well-being of **future generations**.
- 6) Better long-run picture if we consider **income distribution**, but concerns for more recent period.

**Many thanks for your attention**