Università degli Studi di Roma Tor Vergata BA in Global Governance Global Conversation

## WHY EAST GERMANY DID NOT BECOME A NEW MEZZOGIORNO

#### Andrea Boltho

Magdalen College, University of Oxford

## Wendy Carlin

University College London and CEPR

#### Pasquale Scaramozzino

Università degli Studi di Roma Tor Vergata and SOAS University of London

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## German reunification (1990): will Germany become a new *Mezzogiorno?*

	Eastern Germany	Southern Italy
Shares in national totals		
Population	19.3	36.3
GDP	9.9	25.3
Ratios to rest of country		
GDP per capita	0.46	0.60
Consumption per capita	0.64	0.70
Gross fixed capital formation	1.17	0.63
Wage level in industry	0.65	$0.90^{a}$
Unemployment rate	$2.1^{b}$	2.5 <sup>c</sup>
Net imports (in per cent of regional GDP)	64.7	13.8

## Selected Indicators of the German and Italian Regional Problems, 1993

Neoclassical growth theory:

• Convergence of the "poorer" regions (or nations) to the "richer" ones *via* capital deepening

Traditional international trade theory:

• Productivity increases across all regions thanks to increased size of the market and opportunities for specialization

Endogenous growth theory:

• Integration can lead to rising differences between regions

New international trade theory:

• Trade itself can be a source of inequality persistence because of increasing returns and agglomeration economies (complexity of tradeable goods produced)

### Some stylised facts

- Lower income and consumption levels in "poorer" regions
- Persistence of disparities
- Faster catch-up in Germany than in Italy

East Germany:

Brandenburg, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt, Thuringia

### Mezzogiorno:

Abruzzo, Molise, Campania, Apulia, Basilicata, Calabria, Sicily, Sardinia

## **Earlier analysis**

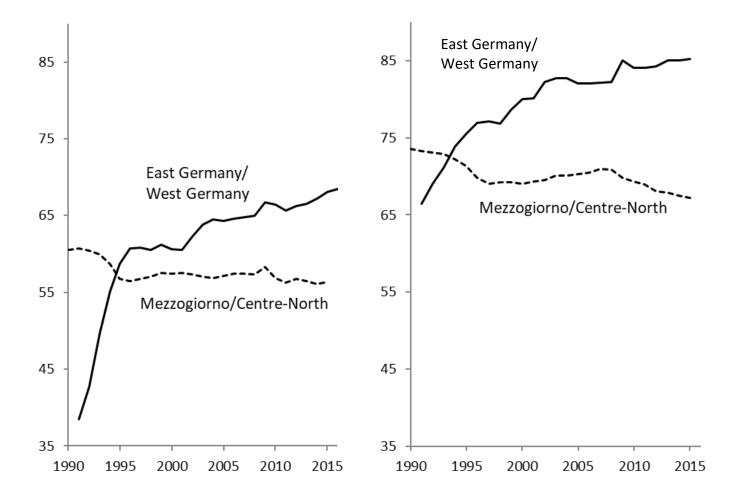
Cautious optimism for East Germany based on:

- Public intervention aimed at stimulating machinery and equipment investment
- Improvement in competitiveness
- Social capabilities

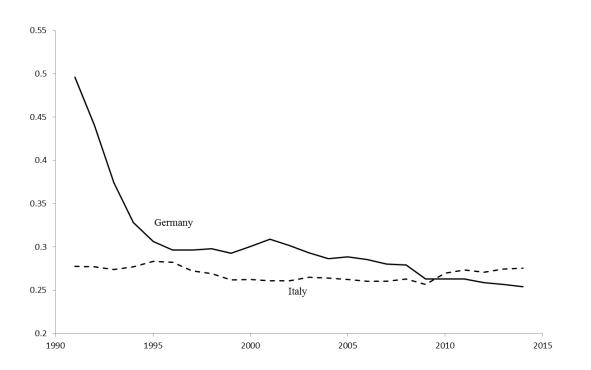
## Germany and Italy: The Regional Problem

GDP per capita

Consumption per capita



## GDP per capita Dispersion (standard deviation of regional GDP per capita)



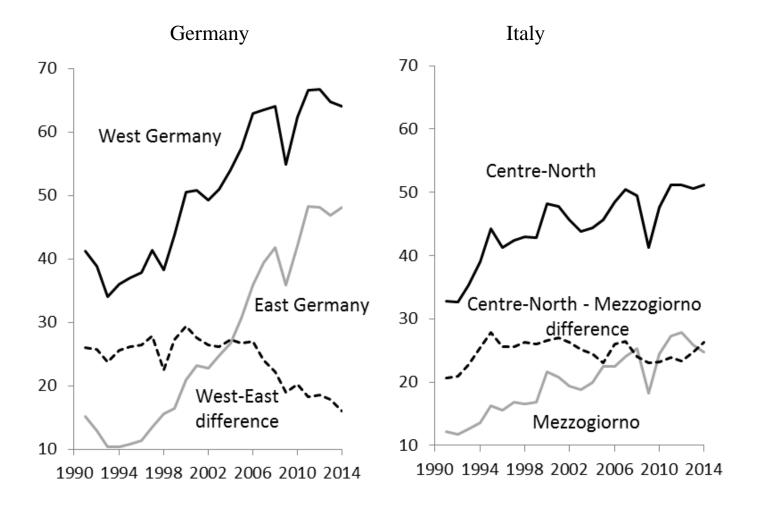
Regressions	s for per cap	oita output	growth, 19	90-2016		
		Germany			Italy	
	1991-2000	2000-16	1991-2016	1990-2000	2000-15	1990-2015
Dependent variable: $[\ln(Y_{i,t+T}) - \ln(Y_{i,t})]/T$						
β	-0.003 (0.005)	0.006 <sup>+</sup> (0.003)	0.003 (0.003)	0.051** (0.017)	-0.003 (0.005)	0.023* (0.010)
East	0.054*** (0.006)	0.005* (0.002)	0.020*** (0.003)			
Centre				-0.003 (0.002)	0.002 (0.002)	-0.003 (0.002)
South				-0.020** (0.006)	0.006 (0.003)	-0.009** (0.003)

## **Possible causes:**

- Trade
- Investment
- Comparative costs
- De-industrialisation
- Export complexity
- Institutions

## **Trade and growth**

Foreign Trade Share

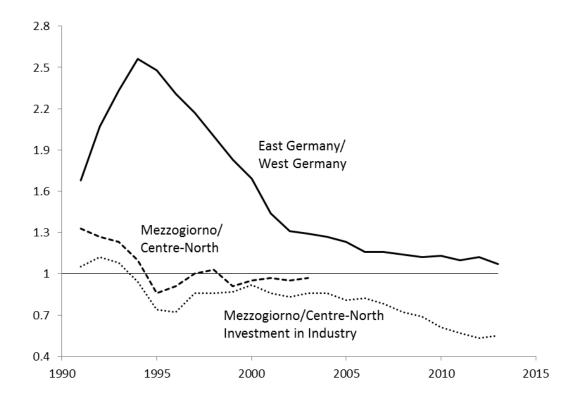


	Germany		Ital	v
	OLS	ĪV	OLS	IV
Trade share	0.570***	0.535***	0.360	1.386**
	(0.074)	(0.090)	(0.222)	(0.436)
Ln population	0.147*	0.145***	-0.066	-0.076
	(0.062)	(0.051)	(0.035)	(0.061)
Ln area	-0.086**	-0.088***	0.027	-0.116
	(0.026)	(0.025)	(0.064)	(0.119)
Dummy for	-0.083	-0.090	-0.417***	-0.217+
"poor" region	(0.085)	(0.066)	(0.081)	(0.119)

Regressions for trade and GDP per capita (2012)

## Investment

Germany and Italy: Investment in Machinery and Equipment (ratio of shares in GDP)

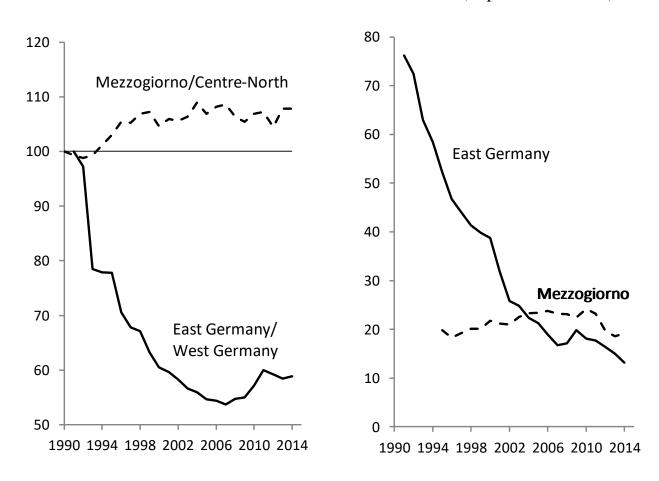


### **Comparative Costs**

Germany and Italy: Relative Unit Labour Costs in Industry and External Balance

Relative Unit Labour Cost, 1990 or 1991=100

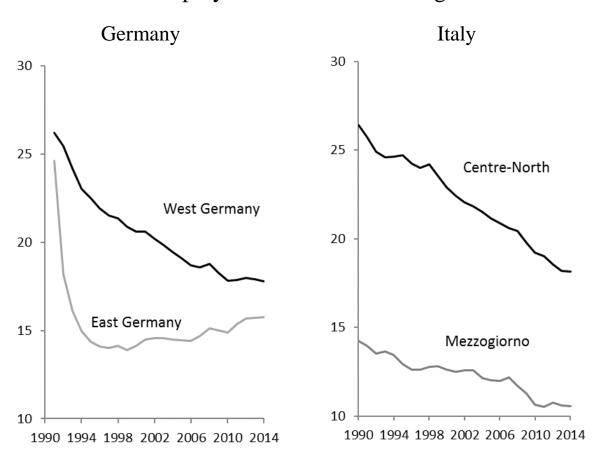
Deficit on Goods and Non-Factor Services (in per cent of GDP)



Regressions for evolution of per capita output gap between the "poor" and the "rich" region

	Germany (1992-2014)	Italy (1991-2014)		
Dependent variable: GDP per capita ("poor")/GDP per capita ("rich") (in const. prices)				
GDPgap <sub>t-1</sub>	0.445*** 0.578	0.175 0.190		
Invgap <sub>t-1</sub>	7.042*** 0.292	2.607* 0.305		
ULC	-0.144*** -0.269	-0.242* -0.536		
Migration from East/South <sub>t-1</sub>	0.00003*** 0.157	-0.00005 -0.146		

## **De-industrialization**



Employment in Manufacturing

# Export complexity and production capabilities

Export complexity indices

	Germany	West	East	
2010 2000 2014	1.96 1.87 1.70	1.90 1.75	1.70 1.68	
	Italy	Centre-North	Mezzogiorno	
2010 2000 2014	1.40 1.42 1.42	1.44 1.45	1.26 1.27	

### The role of institutions

- History
  - No historical East-West dualism in Germany: "free and imperial cities", trade fairs, universities
  - o Germany's industrialization was spearheaded by Saxony in the East
- Trust
  - Persistent effect of GDR
  - Anschluss?
- Quality of government

Some Indicators of Social Capital ("poor region" in per cent of "rich region")

_	Germany	Italy
Presence of underground economy (in % of GDP, 2004)	1.29	1.32
Incidence of voluntary work (population aged 15-64)	0.82	0.52
Presence of non-profit organizations (per head of popul.)	1.05	0.68
Number of organ donations (per million people)	1.32	0.43
EU assessment of government quality (deviations from national average, 2010)	0.21	-0.97

## Conclusions

The gap appears to be closing for East Germany, but not for Southern Italy:

- Relative performance of the tradeable sectors in the two regions
- Labour market behaviour and competitiveness
- Advanced and complex manufacturing products
- Trust and social capital?
- Emphasis on infrastructure provision in Germany but on transfers in Italy