



# Evolutionary Modernization and Cultural Change

Ronald Inglehart

University of Michigan and  
Higher School of Economics, St. Petersburg

HSE, Moscow  
November 8, 2012

- Modernization theory has been pronounced dead repeatedly.
- The concept has been fascinating and influential ever since Marx proposed it: it promises to help us understand where we've been going and perhaps even see into the future.
- But (in retrospect) Marx's simplistic economic determinism was obviously wrong

- Today, hardly anyone anticipates an inevitable revolution of the proletariat – or believes that the abolition of private property will usher in a Utopian society, free from exploitation, crime and war.
- And very few believe that Western societies are a superior model that the rest of the world should copy.

## Evolutionary Modernization theory:

- Modernization is probabilistic, not deterministic
- Modernization is not linear-- Industrialization brings a coherent syndrome of changes, but with the emergence of postindustrial society, the prevailing direction of change, changes.
- Modernization is path-dependent: a society's religious, cultural and historical heritage continues to shape its development.
- But the **CENTRAL THEME** of the modernization concept remains useful: economic development transforms a society's culture, politics and social norms in coherent, roughly predictable ways. Massive empirical evidence indicates that this happens.

# Evolutionary Modernization theory

- **Economic development brings increased economic and physical security and reduced vulnerability to disease. This is conducive to increased cultural openness, which leads to less hierarchical, more democratic institutions.**
- Growing **existential security** → changing values → growing tolerance of gays, gender equality; more participatory behavior; democracy
- Changing values and cultural norms interact with rising education and information access to produce more open, tolerant, and creative societies

- **Existential insecurity** leads to:
  - Xenophobia;
  - Strong in-group solidarity; and,
  - Rigid adherence to traditional cultural norms.
- **A growing sense of security is conducive to**
  - Interpersonal trust;
  - Tolerance of foreigners and other out-groups;
  - Support for gender equality;
  - Openness to social change;
  - A diminishing role for religious authority;
  - Democratic political institutions

- Throughout most of their history, humans have lived at the edge of starvation. Population rose to meet the food supply and was then held constant by starvation, disease and war.
- Hunting and gathering societies were relatively egalitarian
- As agrarian societies developed, a growing gap between elites and masses emerged, and **human freedom declined**
- Industrialization, urbanization, mass education and rising existential security have brought a trend toward **growing human freedom**

## **GROWING EXISTENTIAL SECURITY → CHANGING VALUES → MORE OPEN SOCIETY**

The best available measure of this syndrome's cultural component is “self-expression values,” which emphasize autonomy from external authority

(a more recent version is called “emancipative values”)

---

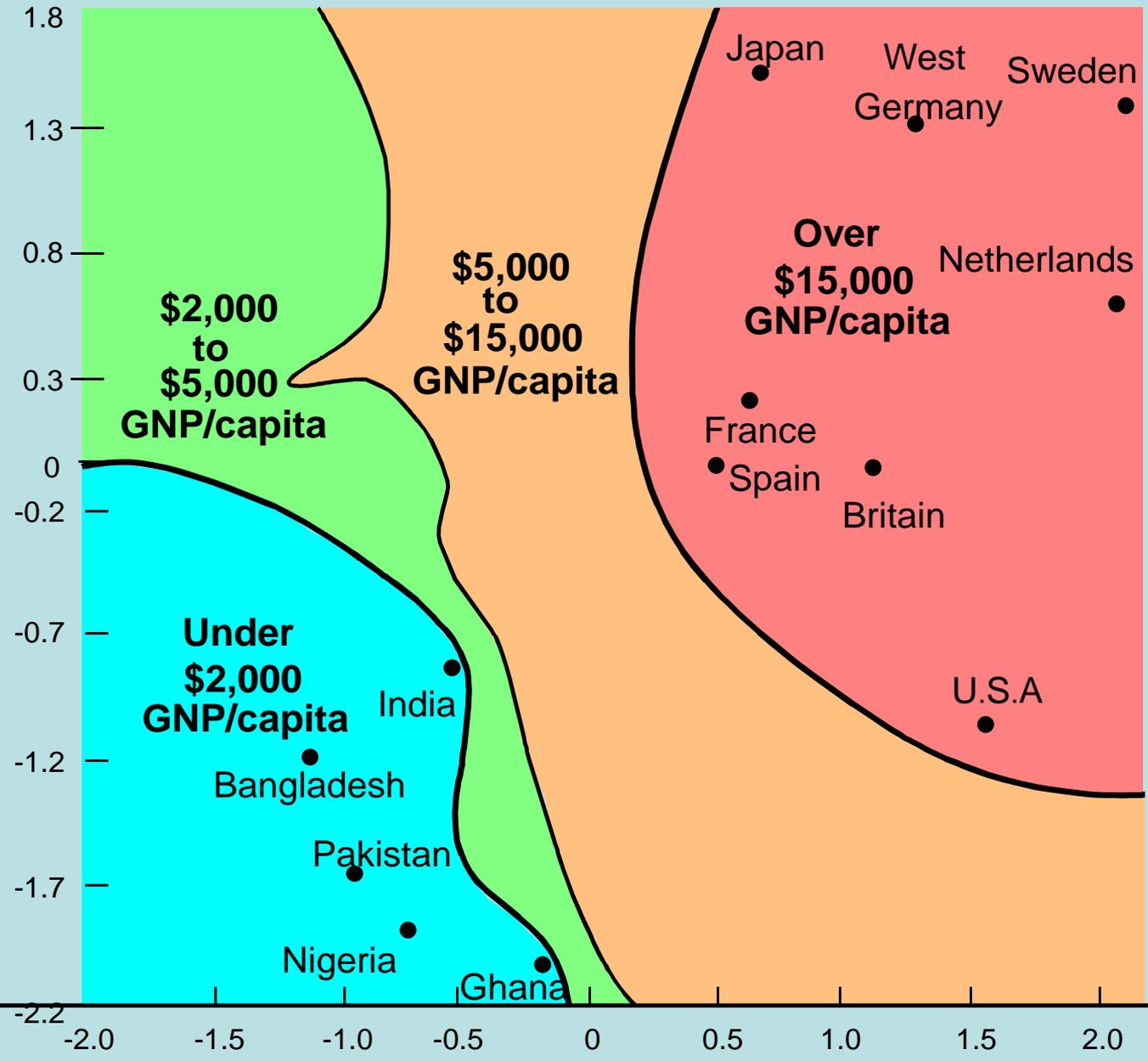
## **SURVIVAL VALUES emphasize the following:**

<b>Materialist/Postmaterialist Values</b>	<b>- .87</b>
Men make better political leaders than women	.86
R. is not highly satisfied with life	.84
A woman has to have children to be fulfilled	.83
R. rejects foreigners, homosexuals and people with AIDS as neighbors	.81
R. has not and would not sign a petition	.80
R. is not very happy	.79
R. favors more emphasis on the development of technology	.78
Homosexuality is never justifiable	.78
R. has not recycled something to protect the environment	.76
R. has not attended a meeting or signed a petition to protect the environment	.75
A good income and safe job are more important than a feeling of accomplishment and working with people you like	.74
R. does not rate own health as very good	.73
A child needs a home with both a father and a mother in order to grow up happily	.73
When jobs are scarce, a man has more right to a job than a women	.69
A university education is more important for a boy than for a girl	.67
Government should ensure that everyone is provided for	.69
Hard work is one of the most important things to teach a child	.65
Imagination is not of the most important things to teach a child	.62
Tolerance is not of the most important things to teach a child	.62
Leisure is not very important in life	.61
Scientific discoveries will help, rather than harm, humanity	.60
Friends are not very important in life	.56
You have to be very careful about trusting people	.56
R. has not and would not join a boycott	.56
R. is relatively favorable to state ownership of business and industry	.54

**SELF-EXPRESSION VALUES take opposite position on all of above**

Survey data covering most of the world's population demonstrate that, today, a society's value system is strongly correlated with its level of development

TRADITIONAL vs. SECULAR-RATIONAL AUTHORITY



SURVIVAL vs. SELF-EXPRESSION



The relative positions of given countries on this cultural map are extremely stable

<b>RELATIVE STABILITY OF VARIOUS ATTITUDES, from earliest available survey to latest survey</b>	
<b>Importance of religion in your life</b>	<b>.93</b>
<b>Survival/Self-expression values</b>	<b>.89</b>
<b>Materialist /Postmaterialist values (12-item index)</b>	<b>.85</b>
<b>Overall life satisfaction</b>	<b>.78</b>
<b>Believe in God</b>	<b>.72</b>
<b>Left-Right Self placement on political scale</b>	<b>.68</b>
<b>Private vs state ownership of business</b>	<b>.63</b>
<b>Reject as Neighbors: People of a different race</b>	<b>.55</b>
<b>Favor more or less Income equality</b>	<b>.39</b>
<b>Favor more/ less Government responsibility</b>	<b>.22</b>
<b>Do you live with your parents?</b>	<b>.08</b>

The survival-self-expression values dimension taps an even broader underlying dimension of cross-cultural variation (loadings on 1<sup>st</sup> principal component)

Survival/Self-expression values	.93
Hofstede Individualism/Collectivism	.89
Schwartz Autonomy/Embeddedness	.87

# National-level correlations with mean scores on Survival-Individualism dimension

<b>% with A allele on COMTval158Met gene</b>	<b>.61</b>
<b>1st Principal component, 79 gene markers</b>	<b>.79</b>
<b>GDP/capita at time of survey</b>	<b>.76</b>

Working independently, and largely without awareness of converging findings from other disciplines, evolutionary biologists, anthropologists, psychologists, and neuroscientists have been developing theories of cross-cultural differences that are strikingly similar to evolutionary modernization theory.

# Related theories

- Other disciplines have developed theories that are strikingly similar to evolutionary modernization theory.
- Evolutionary biologists:
  - Thornhill, Fincher et al. (2009, 2010)
- Anthropologists:
  - Peltó (1968)
- Psychologists:
  - Gelfand et al. (2011)

Thus, biologists Thornhill, Fincher et al. (2009, 2010) find that societies that are vulnerable to infectious disease tend to have collectivist attitudes, low levels of support for gender equality, and xenophobia—all of which hinder the emergence of democracy. Conversely, relatively low vulnerability to disease has the opposite effects.

These traits are strikingly similar to those linked with Self-expression values or Emancipative values.

In anthropology, Peltó (1968) introduced the concept of “tight” cultures (having strong norms and low tolerance of deviant behavior) and “loose” cultures (having weak social norms and high tolerance of deviant behavior), demonstrating wide cross-cultural variation in adherence to social norms.

Building on this, Gelfand et al. (2011) distinguish between cultures that are “tight” versus “loose” in terms very similar to the distinctions between “Traditional vs. Secular-rational values” and “Survival vs. Self-expression values” developed in evolutionary modernization theory.

Gelfand et al. argue that tightness vs. looseness is shaped by the ecological and human-made threats that societies historically encountered. These threats increase the need for strong norms and punishment of deviant behavior, in order to deal with resource scarcity, defend against internal or external violence and contain the spread of disease. Since many of these threats to survival are closely linked with a society's GNP per capita, they tend to vary with a society's level of economic development, in accordance with evolutionary modernization theory.



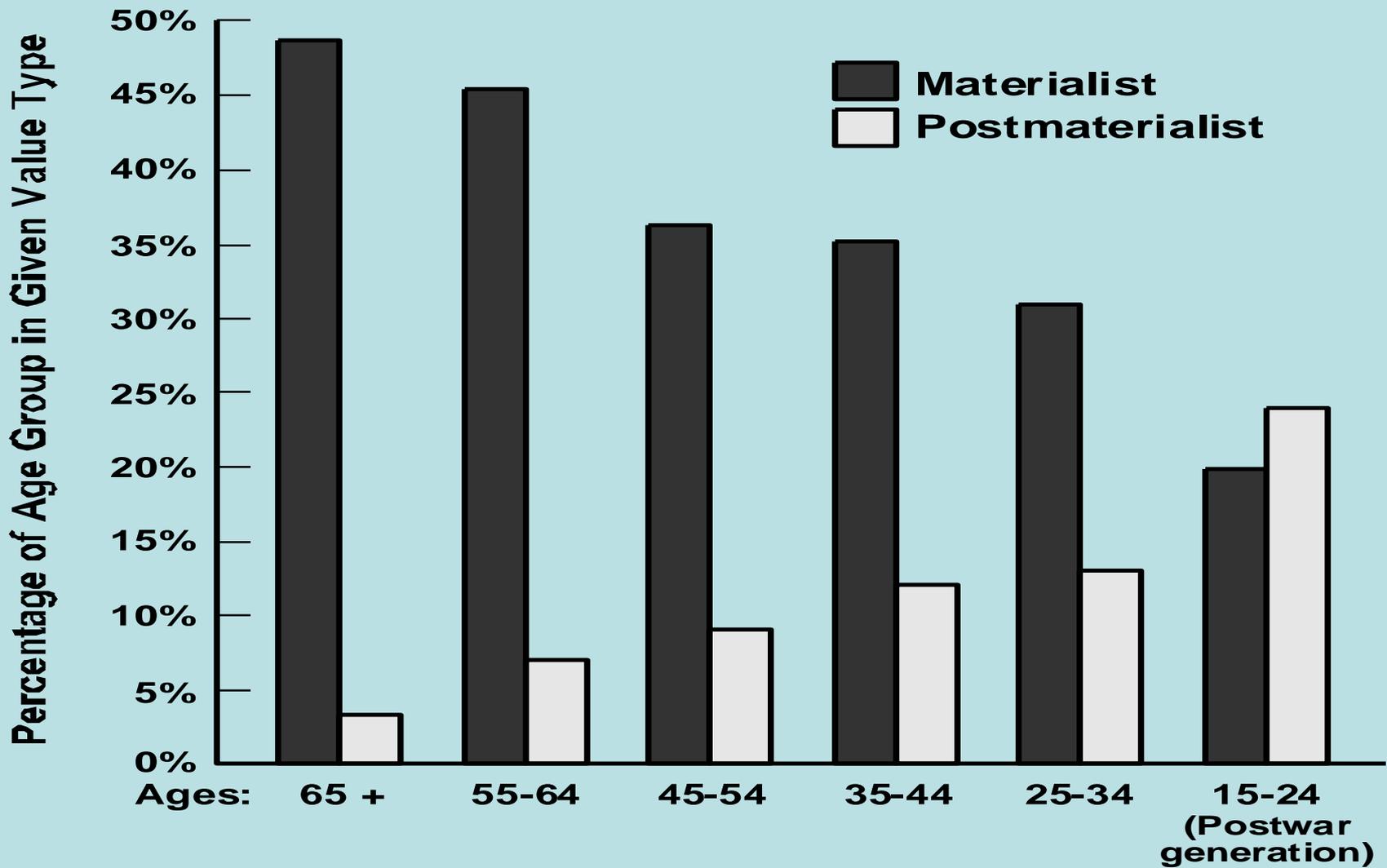
# World Values Survey

The World's Most Comprehensive Investigation of Political and Sociocultural Change



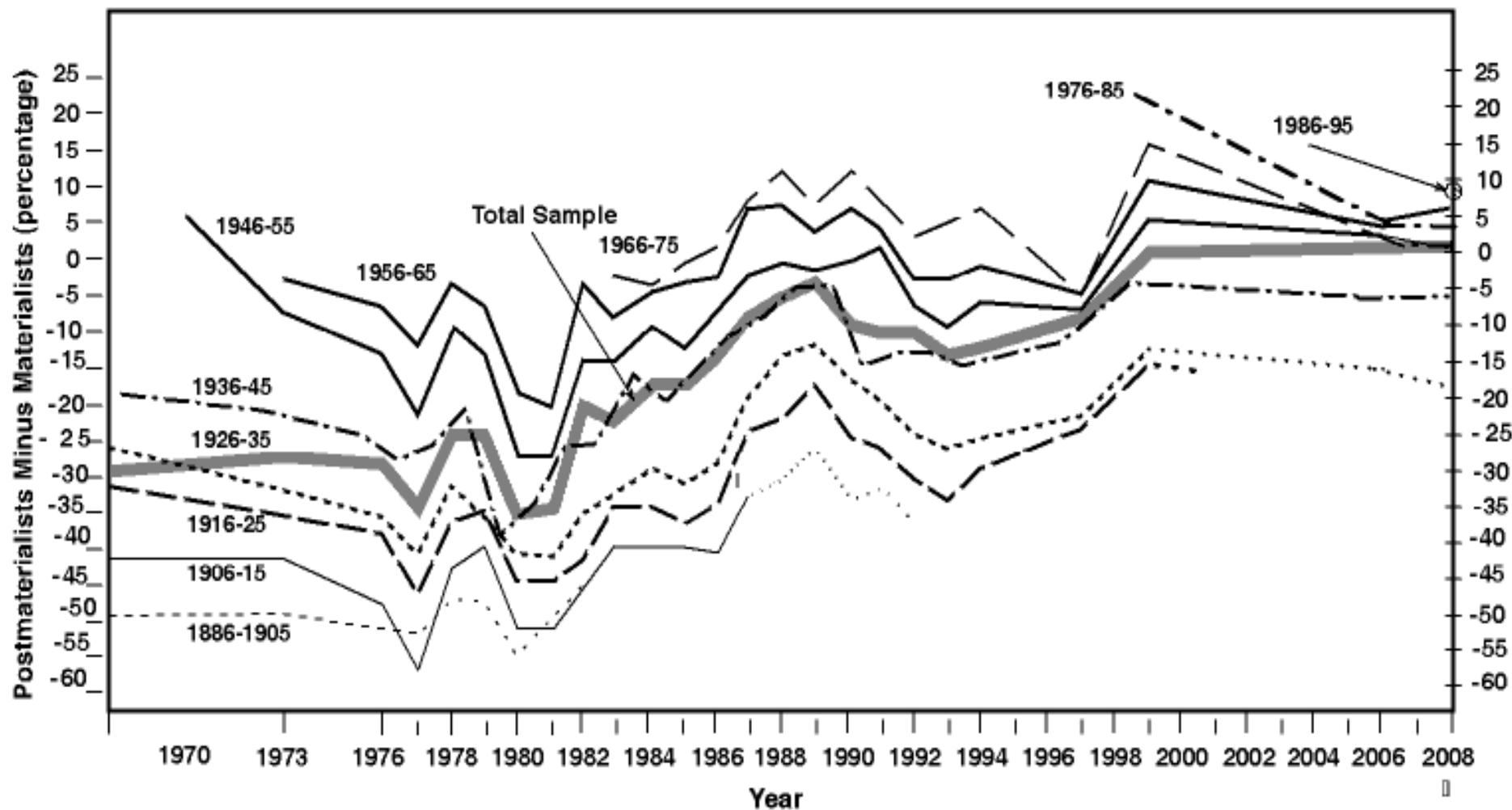
**WE NOW HAVE FOUR DECADES WORTH  
OF DATA ON HOW RISING EXISTENTIAL  
SECURITY SHAPES MASS VALUES.  
WHAT HAS HAPPENED SINCE 1970?**

In 1970, a six-nation survey tested the thesis of intergenerational value change. It found large differences between the extent to which younger and older generations emphasized Materialist or Postmaterialist values.



**Figure 1. Value type by age group, among the Publics of Britain, France, West Germany, Italy, Belgium and The Netherlands in 1970.**

Source: European Community survey of February, 1970; based on original 4-item Materialist/Postmaterialist values battery.  
 Reprinted from Inglehart, 1990: 76.



**Figure 2. Percentage of Postmaterialists Minus the Percentage of Materialists in Six West European Societies, 1970-71 to 2008-09, by Years of Birth**

The results from 1970-71 through 1997 are based on Euro-Barometer surveys.

Results from 1999, 2006 and 2008-2009 are based on the World Values Survey and European Values Study.

Based upon weighted samples from Britain, France, West Germany, Italy, The Netherlands, and Belgium.

In 1970, Materialists outnumbered Postmaterialists in these 6 West European countries by 14:1 among the oldest cohort—

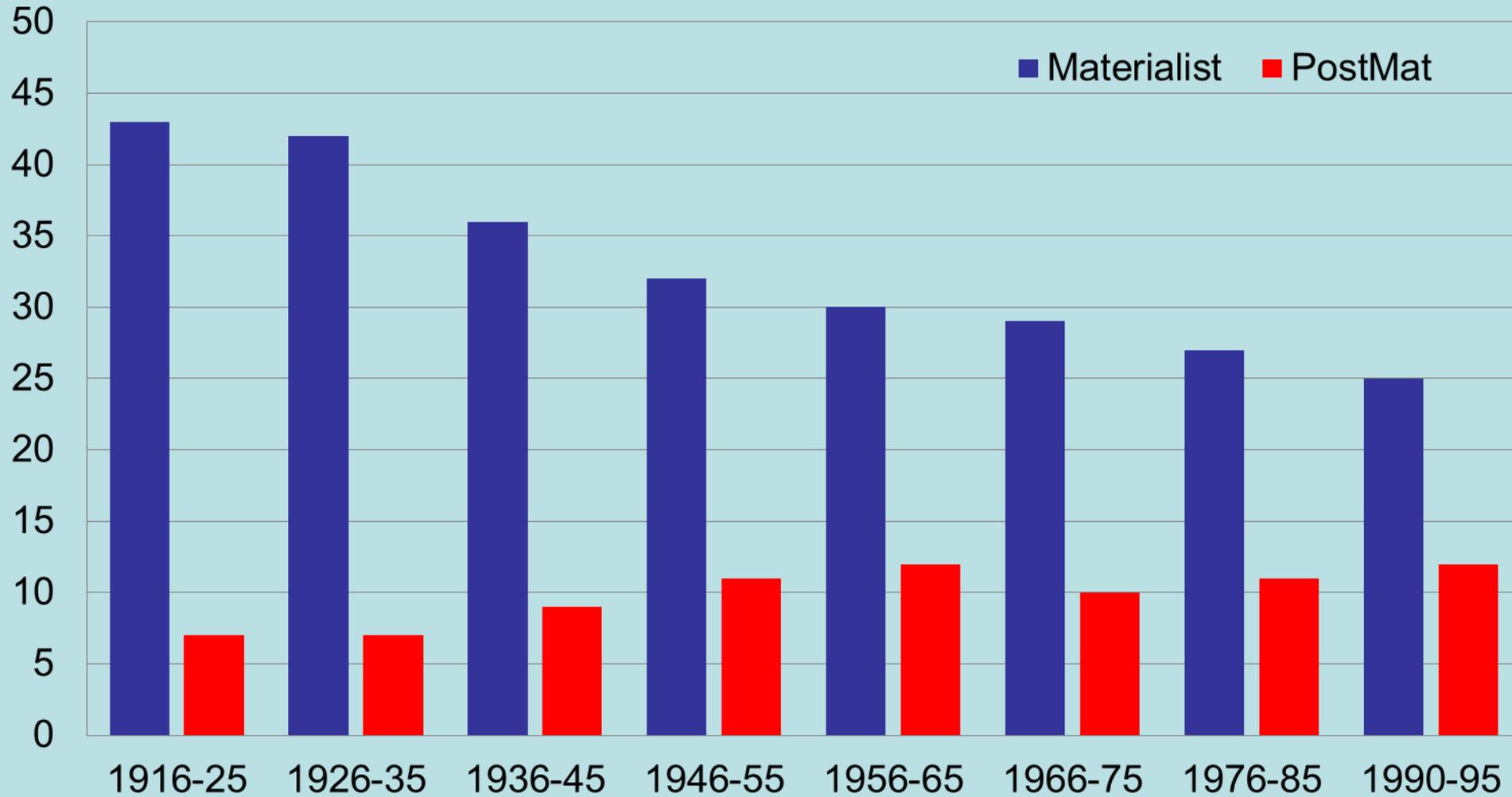
and by 4:1 among the population as a whole.

By 2000, Postmaterialists were more numerous than Materialists.

This value shift has stagnated in Western Europe in recent years. Younger cohorts are no longer substantially more Postmaterialist than the next older ones in these countries.

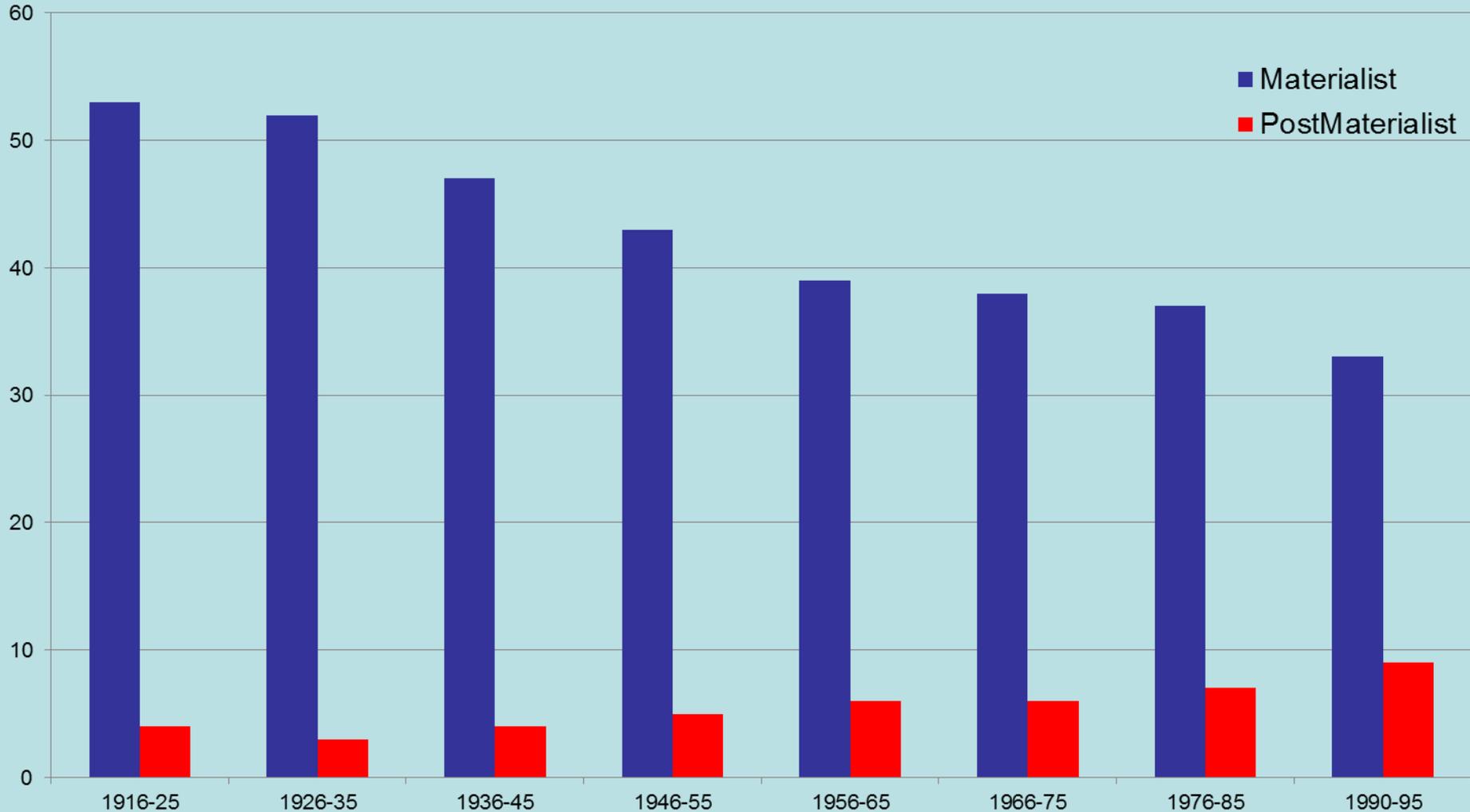
But the value shift has begun to reshape other parts of the world.

# Post-materialism by birth cohort in 45 European and West Asian countries in 2008-2009



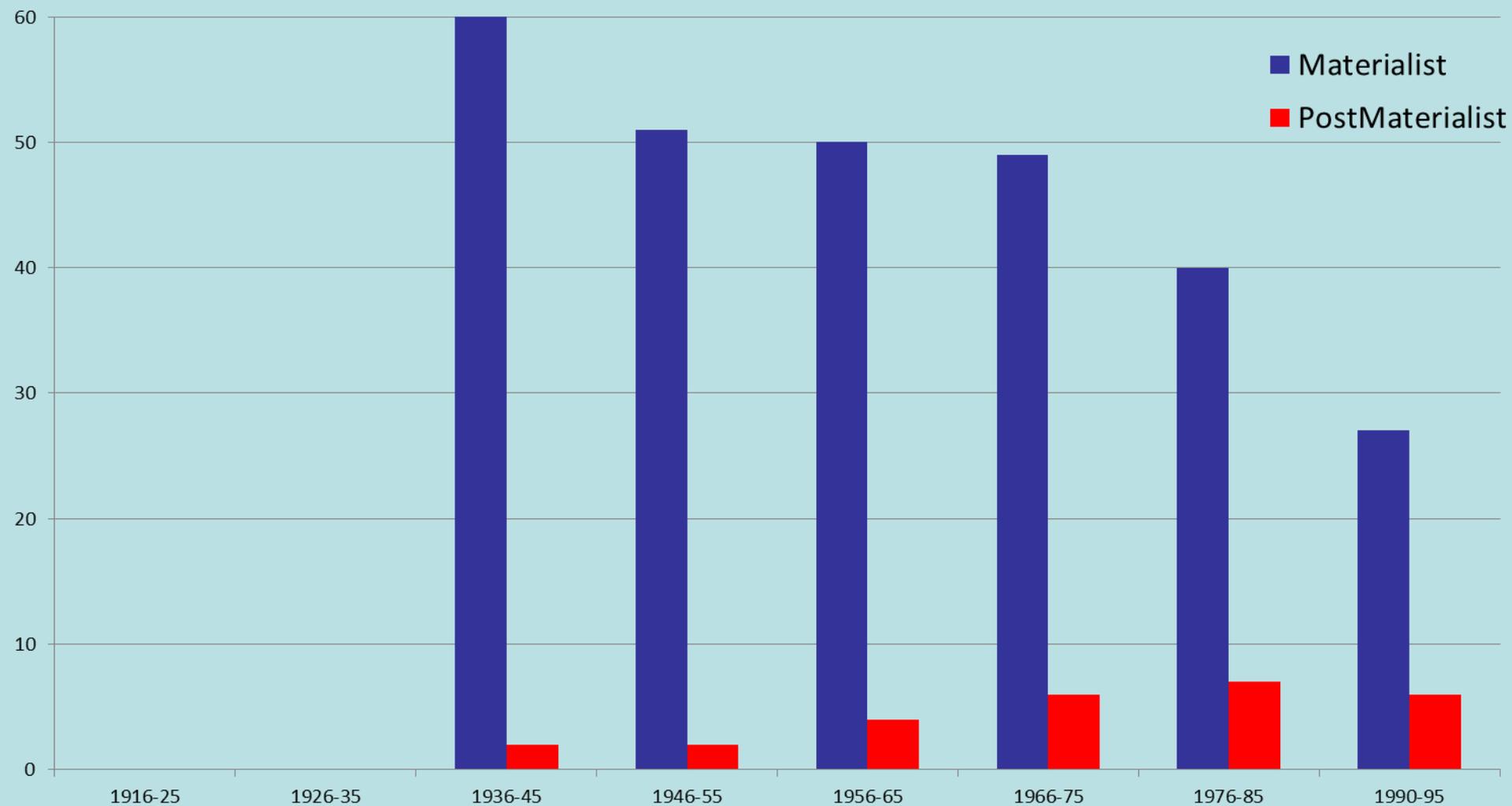
Source: World Values Survey

# Post-materialism by birth cohort in 24 ex-Communist countries in 2008-2009



Source: World Values Survey

# Post-materialism by birth cohort in **China**, 2007



Source: World Values Survey

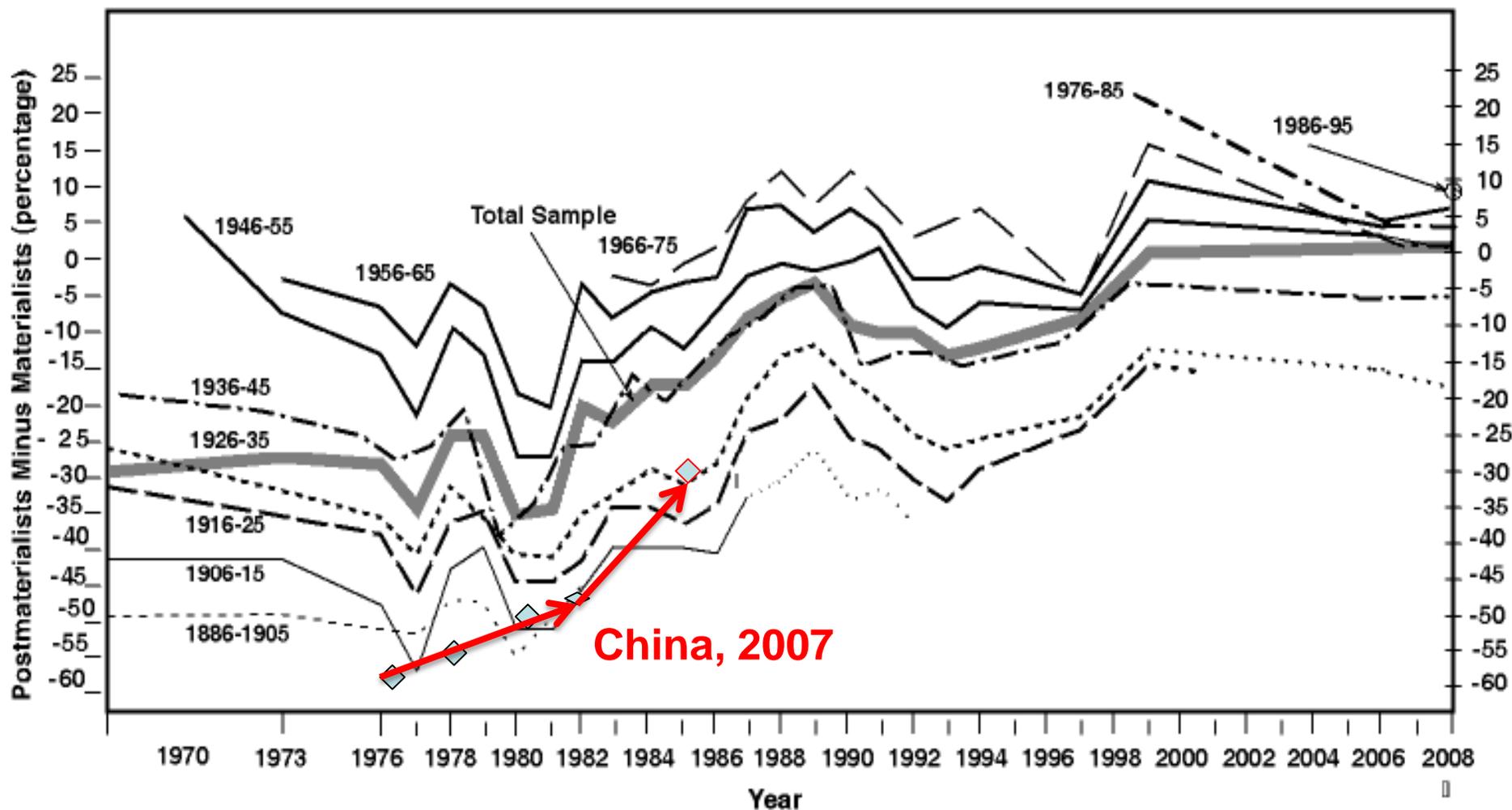


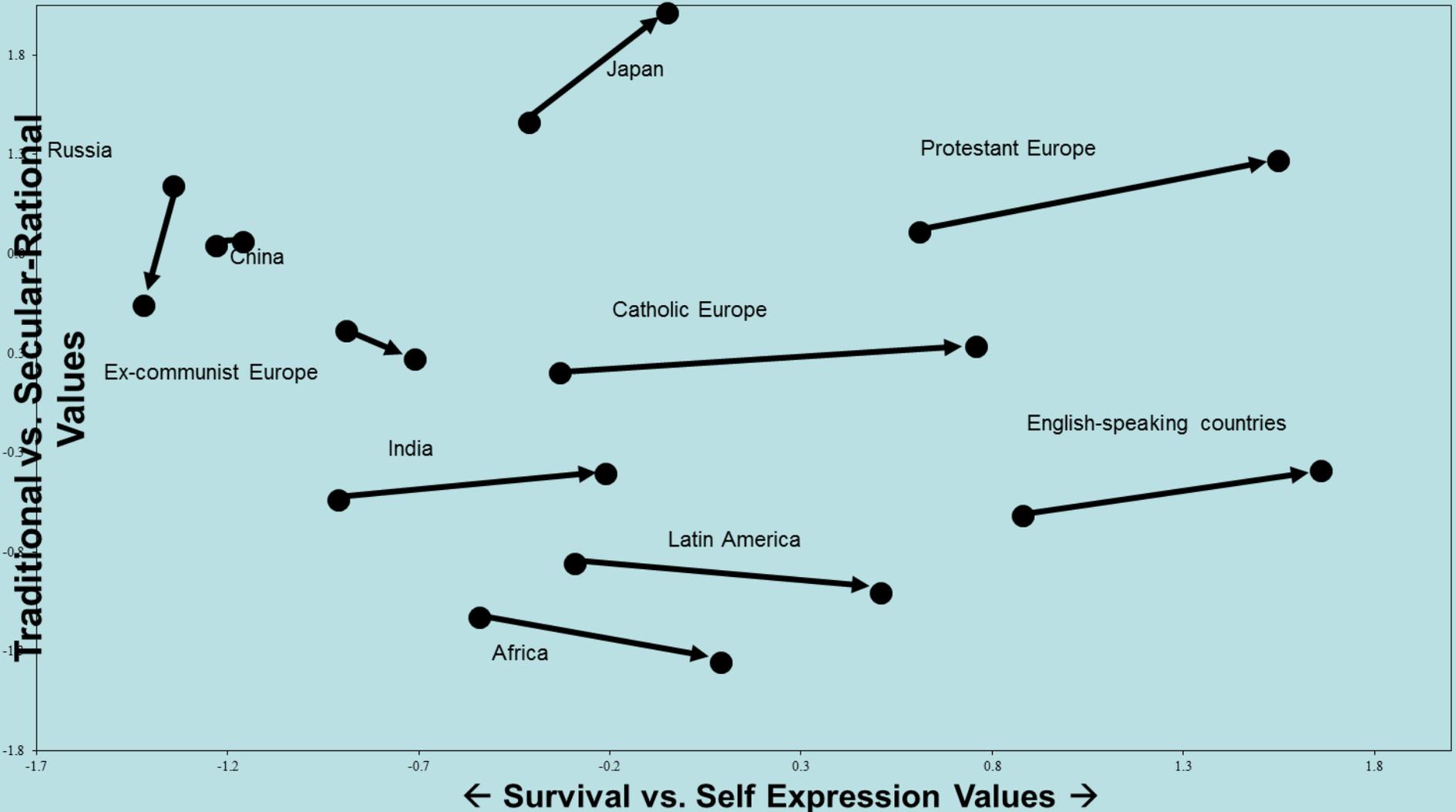
Figure 2. Percentage of Postmaterialists Minus the Percentage of Materialists in Six West European Societies, 1970-71 to 2008-09, by Years of Birth

The results from 1970-71 through 1997 are based on Euro-Barometer surveys.

Results from 1999, 2006 and 2008-2009 are based on the World Values Survey and European Values Study.

Based upon weighted samples from Britain, France, West Germany, Italy, The Netherlands, and Belgium.

# Changes over time, 1981-2007



Despite the impact of development, a society's religious and historical traditions are remarkably persistent. Cultural change is path-dependent.

About 2006



Source: World Values Survey

**measuring** the values that reflect  
existential security:  
an evolutionary process

**Postmaterialist values** (1970) →  
**Self-expression values** (1993) →  
**Emancipative values** (2011)

Emancipative values correlate with:

Materialist/Postmaterialist (4) values	$r=.71$
Materialist/Postmaterialist (12) values	$r=.74$
Survival/Self-expression values	$r=.82$



# **CONSEQUENCES FOR TOLERANCE, GENDER EQUALITY, RELIGION AND SOCIAL TRUST**

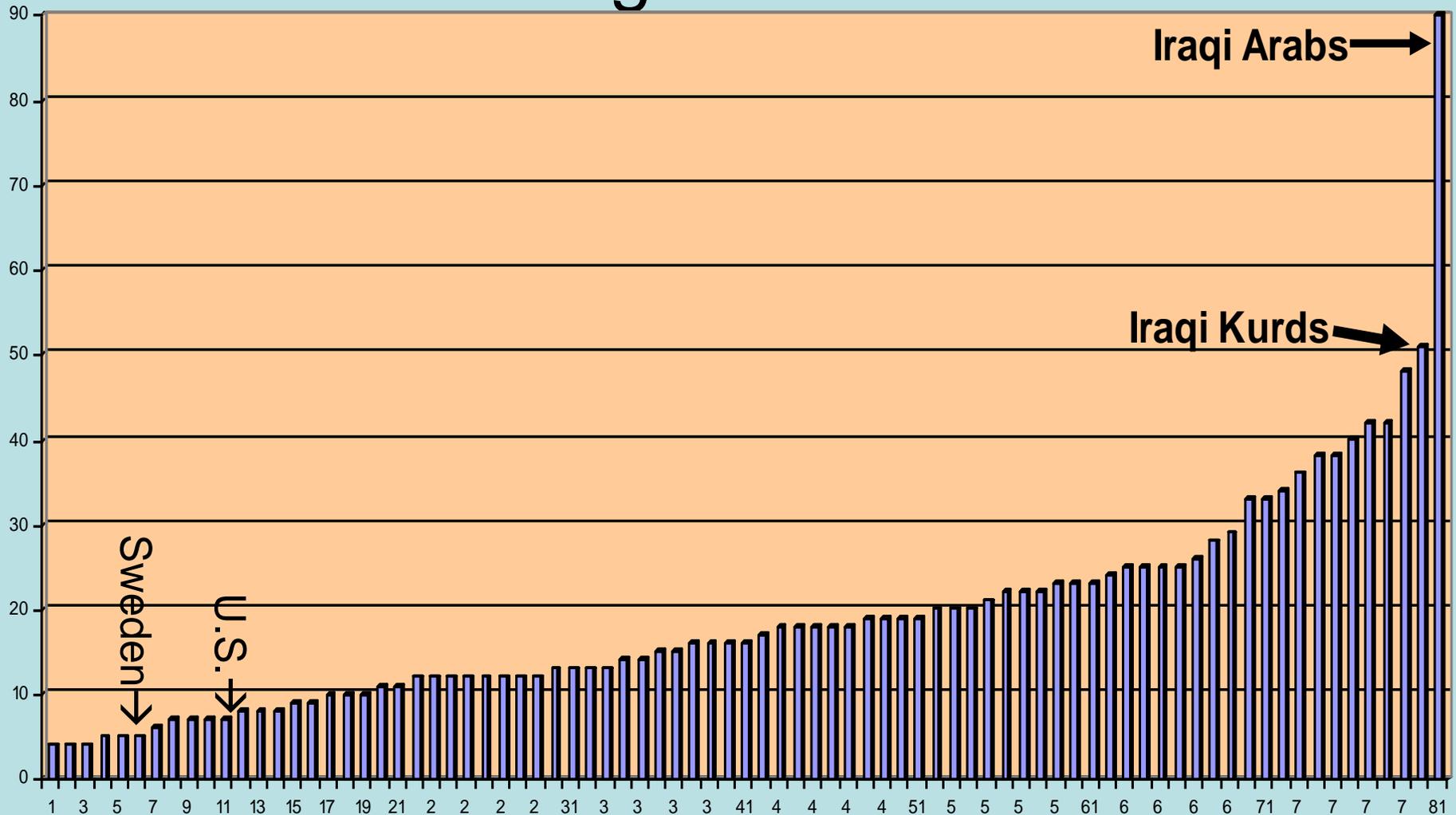
Tolerance is strongly related  
to a society's level of  
existential security

The rise of the knowledge society brings  
rising tolerance of diversity –  
conversely, xenophobia has become  
increasingly widespread in insecure  
societies such as much of the former USSR  
and Iraq



- Iraq experienced a reign of terror under Saddam, followed by military occupation and daily suicide bombings
- xenophobia is currently far higher in Iraq than in any other society for which data are available

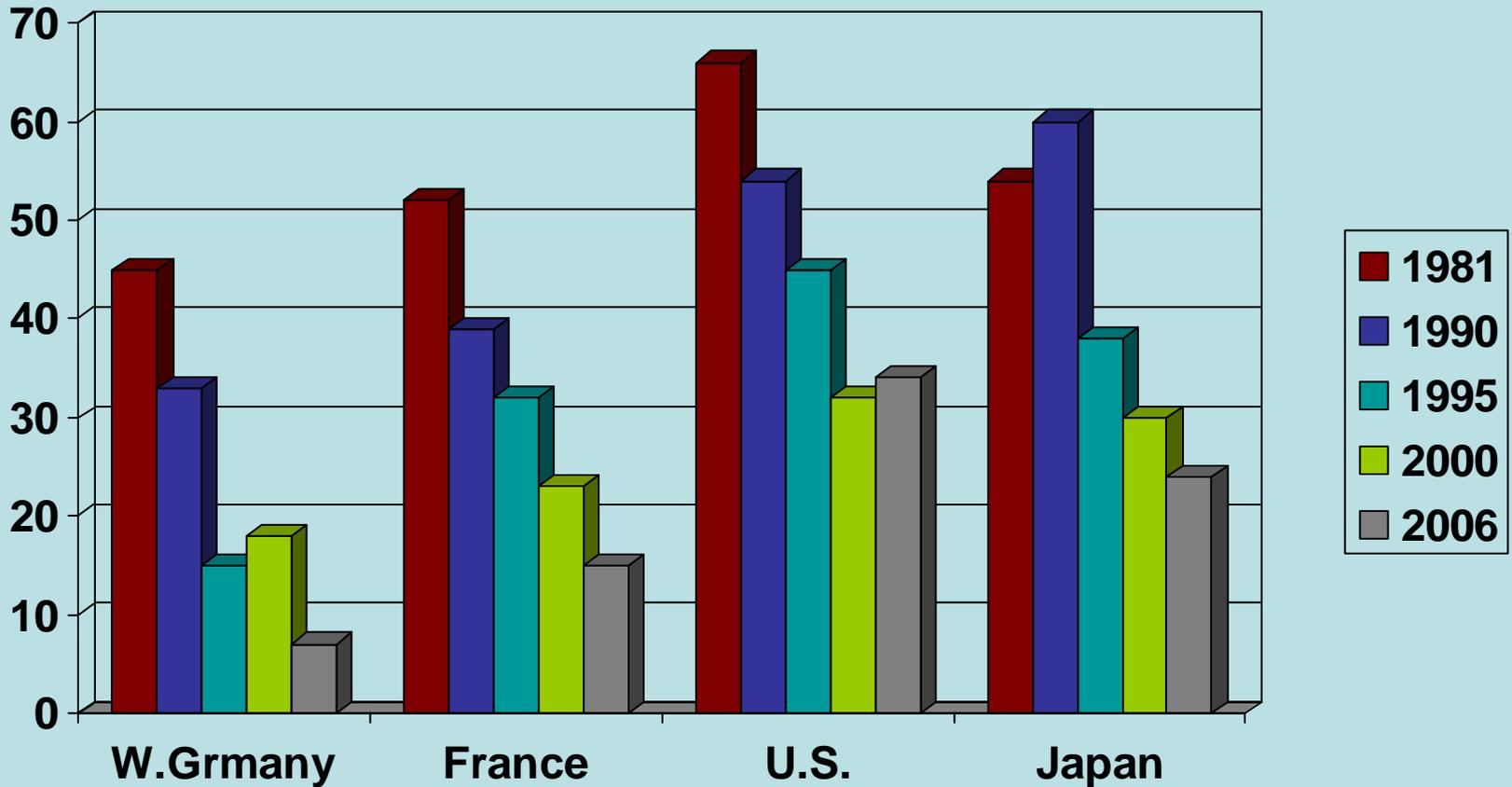
# % who would not want foreigners as neighbors among 80 societies



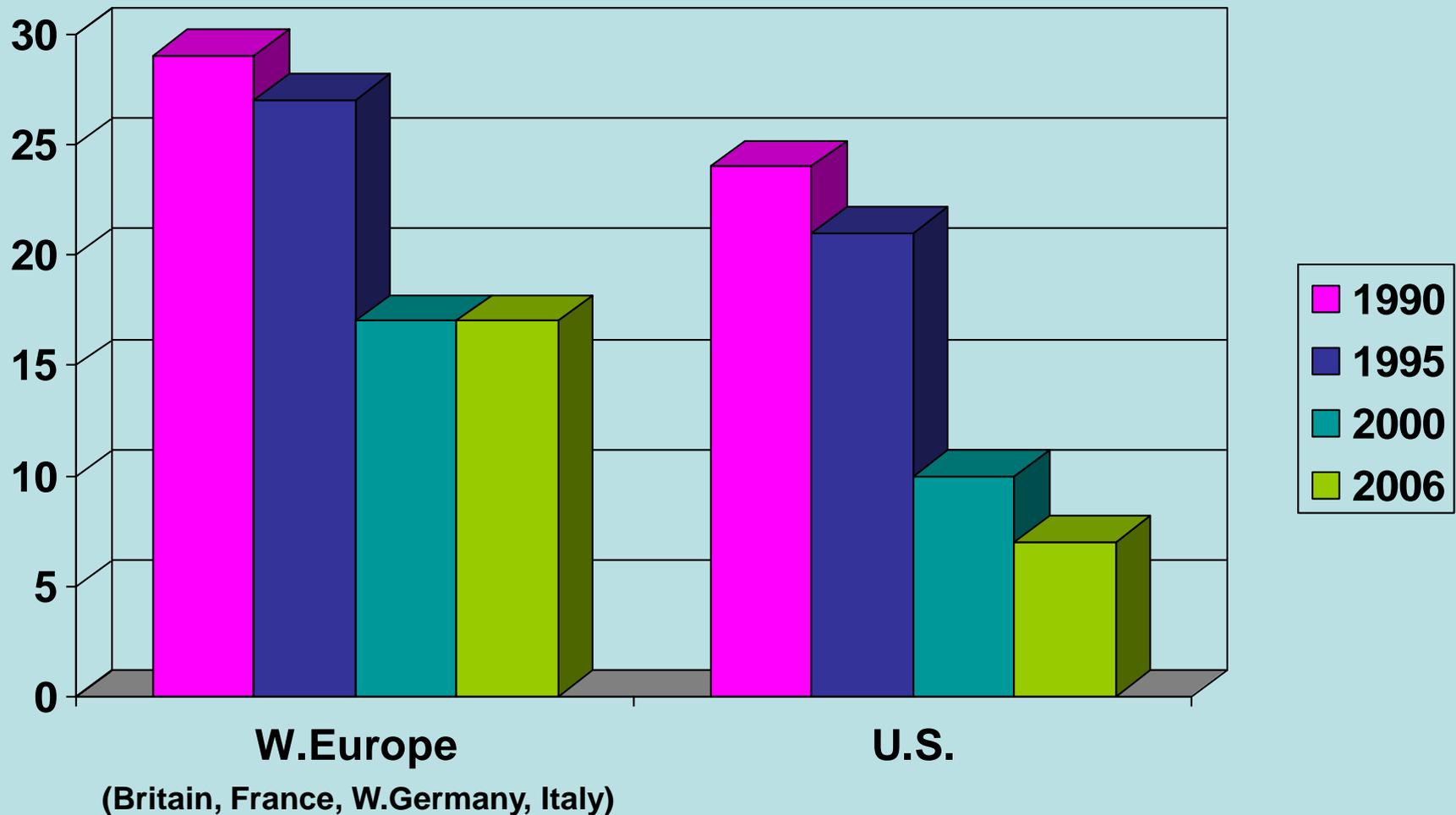
# Conversely, high levels of existential security →

- Rising support for gender equality
- Increasing tolerance of gays and lesbians

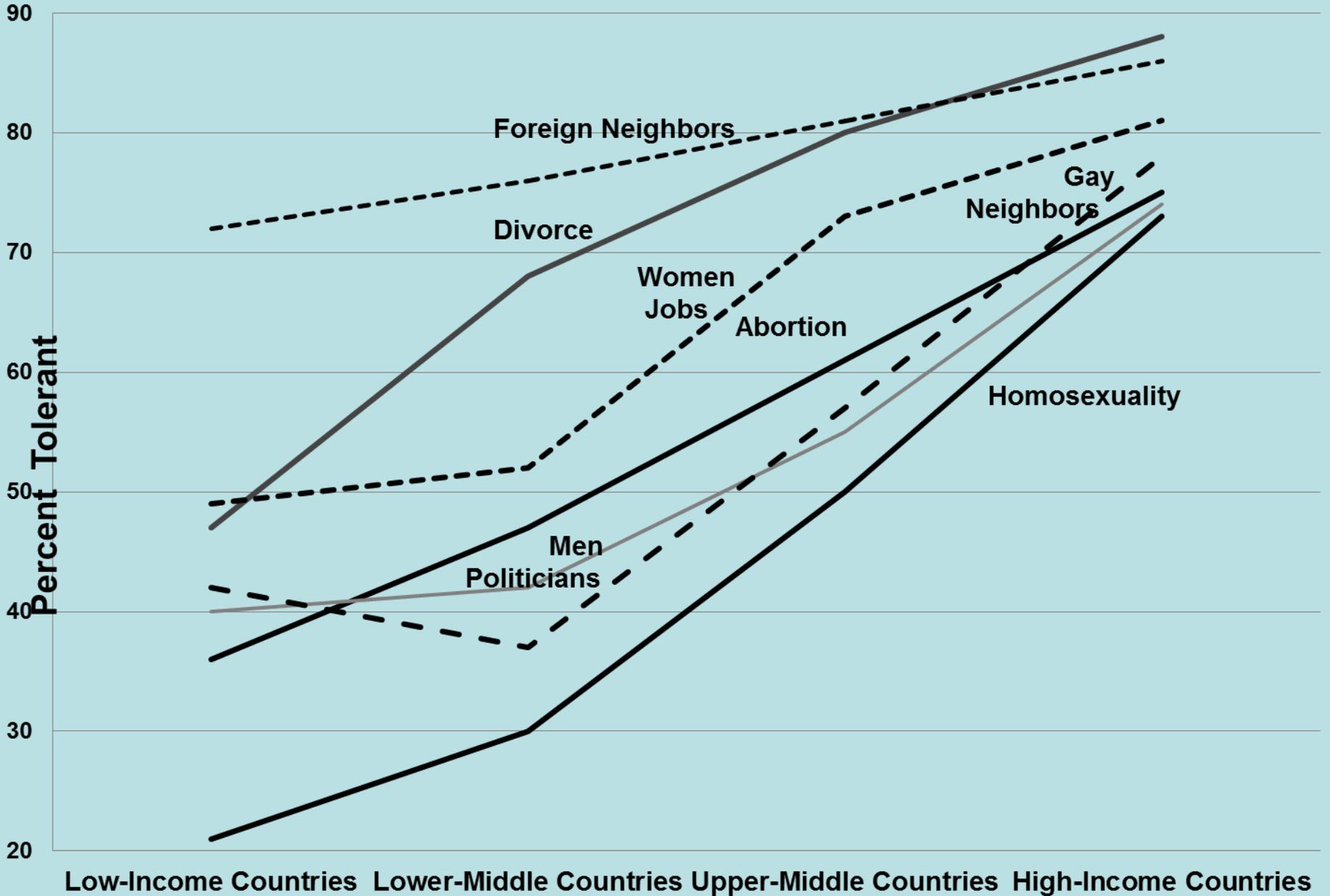
# Percentage saying “Homosexuality is NEVER acceptable”



% saying “When jobs are scarce,  
men have more right to a job than women”

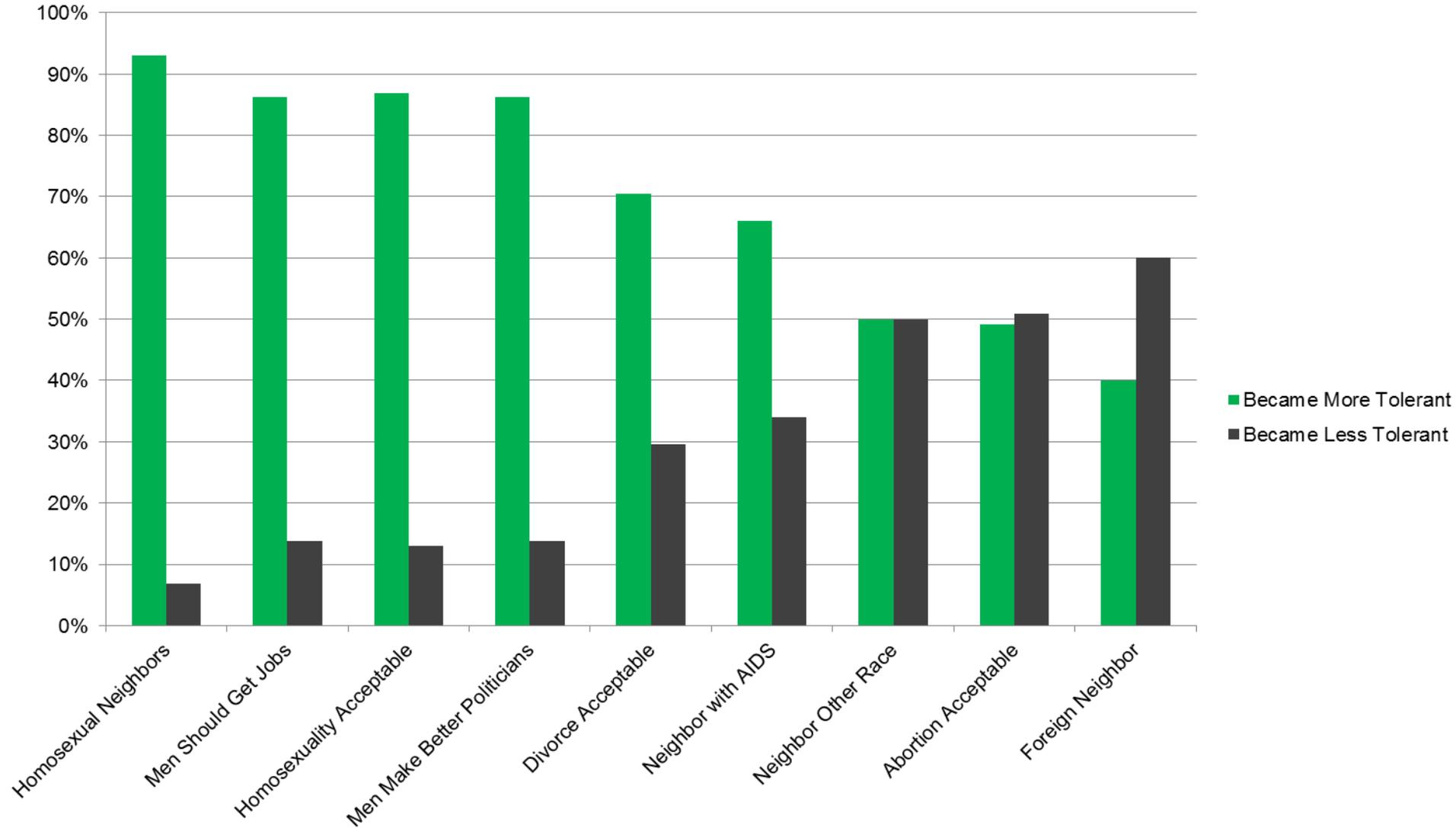


# Tolerance by Level of Economic Development



# Trends in Tolerance of Various Groups, 1981-2009

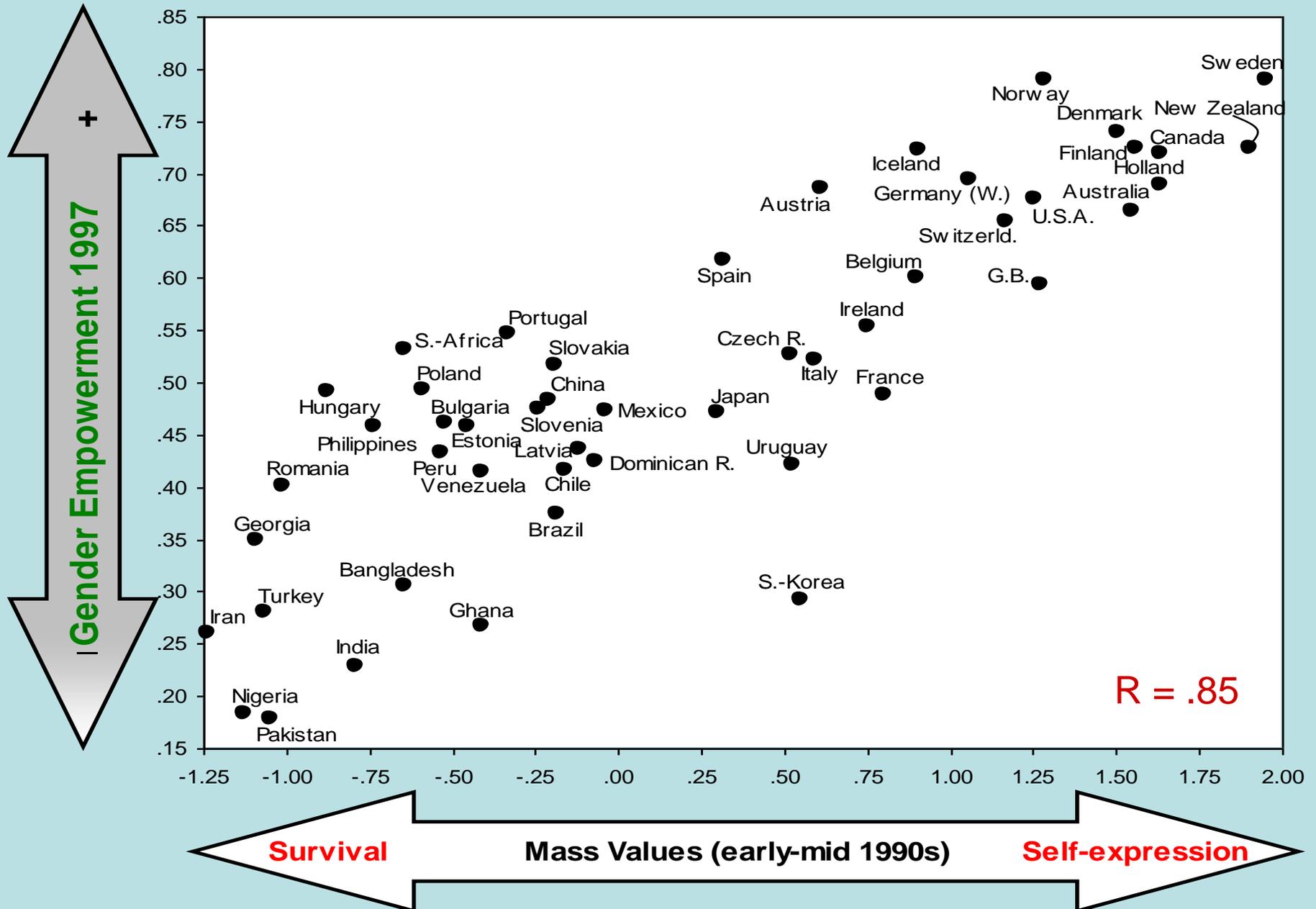
(Percentage of countries in which the public became more tolerant, vs. percentage that became less tolerant)



rising emphasis on Self-expression  
values is strongly linked with  
**gender equality**

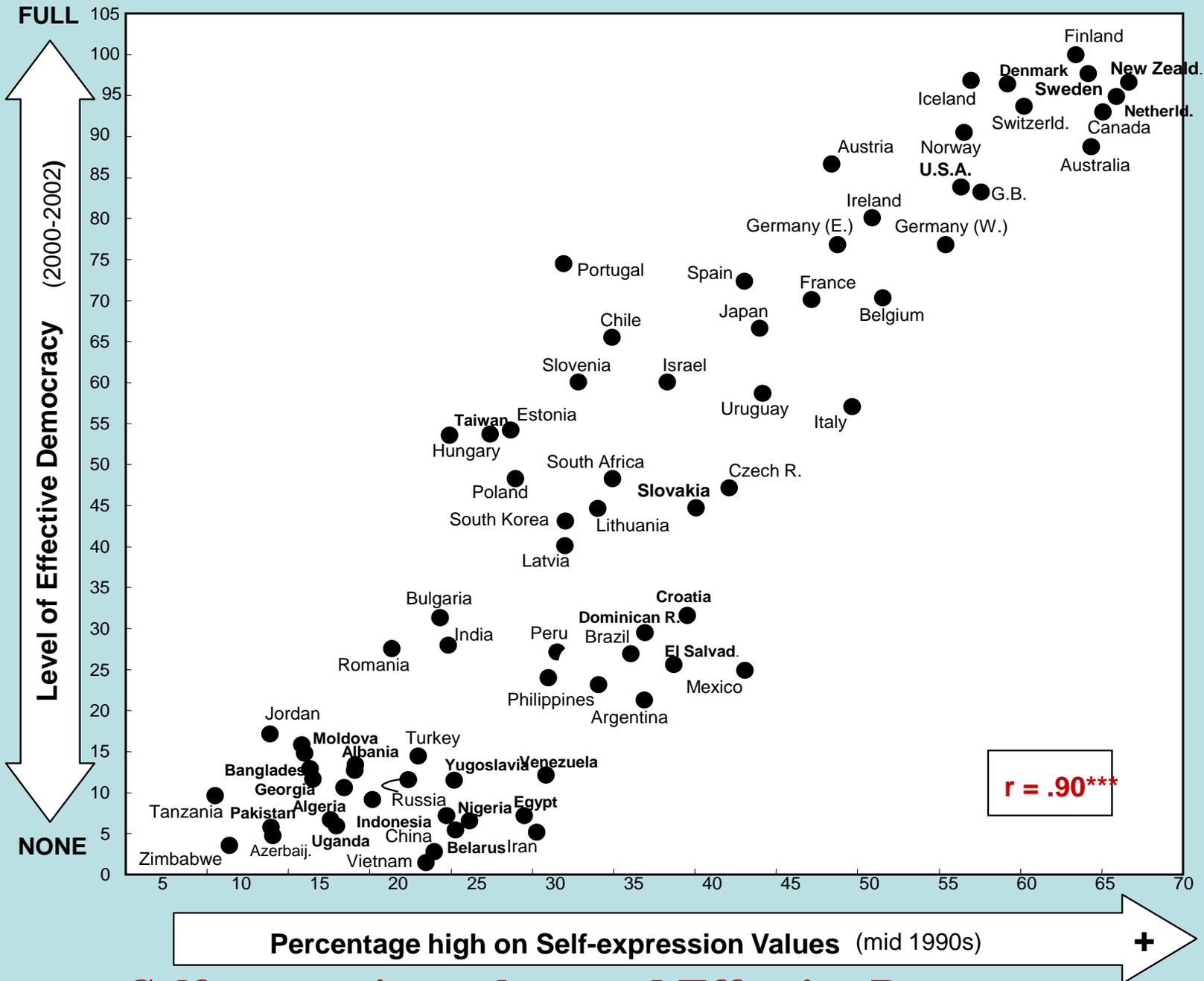
(as indicated by the  
UN Gender Empowerment Measure)

# Self-expression values and gender equality





A society's relative emphasis on survival vs. self-expression values is also strongly linked with how **democratic** it is



**Self-expression values and Effective Democracy.**



**END**